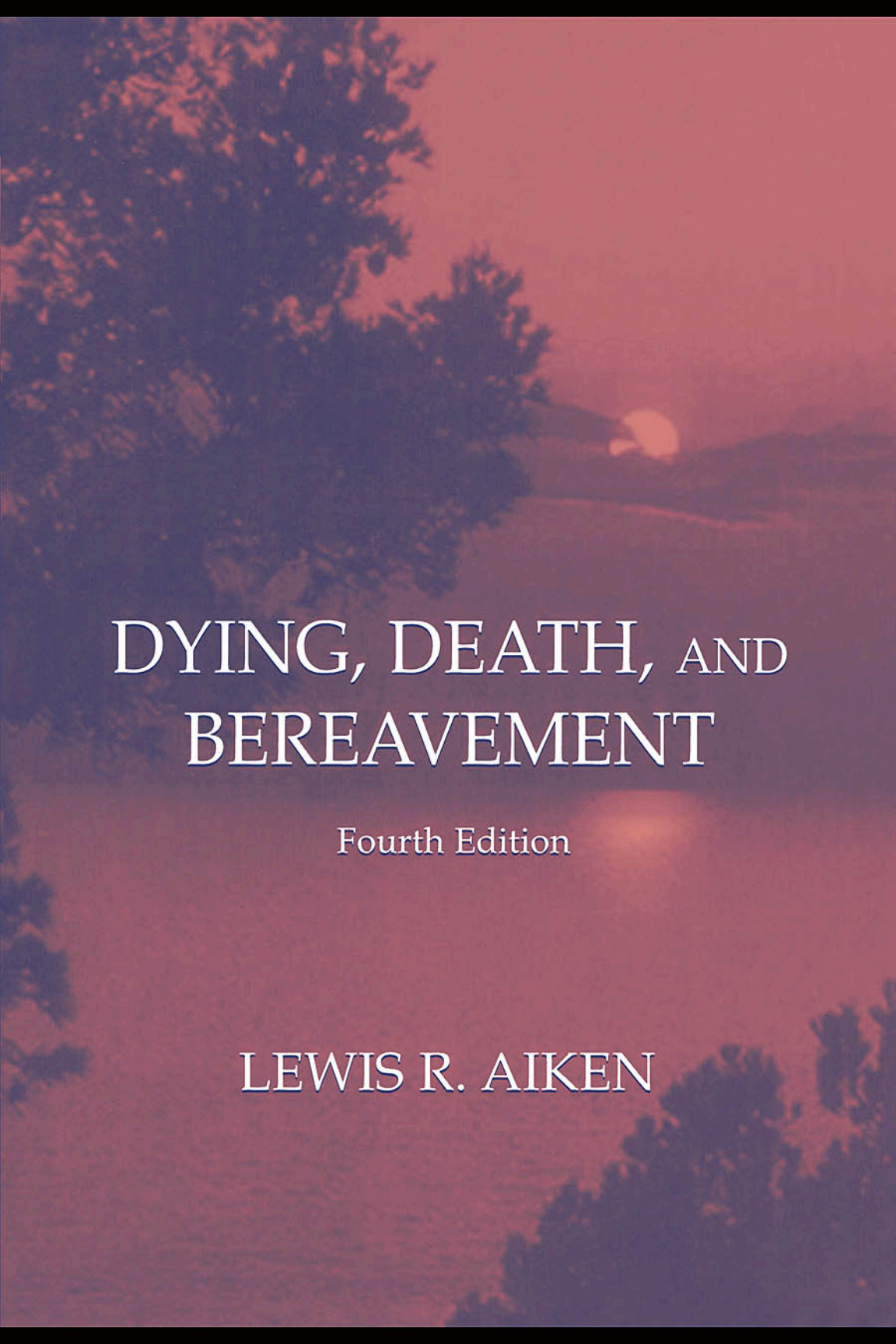
DYING, DEATH, AND BEREAVEMENT
Fourth Edition
LEWIS R. AIKEN

DYING, DEATH, AND BEREAVEMENT

FOURTH EDITION

DYING, DEATH, AND BEREAVEMENT

Lewis R.Aiken
Pepperdine University

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CONTENTS

Preface

Thanatology, the study of death and dying, has experienced significant growth since the 1950s, when Herman Feifel's *Meanings of Death* introduced the field to behavioral scientists. Before that time, death and dying were principally the concerns of poets, clergymen, and mystics. Death was viewed as a subject to be avoided as much as possible by physicians, and as a somewhat taboo topic even by psychologists. Since that time the research and writings of Robert Fulton, Geoffrey Gorer, Richard Kalish, Robert Kastenbaum, Elisabeth Kübler-Ross, and Edwin Shneidman, among others, have helped to make thanatology a legitimate area of scientific discussion and research. Some of the events that have prompted research and writing in thanatology are the growth of the elderly population, the increased use of medical technology to extend life, the decline in infant mortality, political issues such as abortion and euthanasia, and continuing violence on both the domestic and international scenes. Descriptions of genocide, mass and serial murder, and AIDS and other epidemic diseases, as well as news stories and dramatizations concerned with death and dying have also contributed to interest in this field.

During the past four decades, hundreds of articles and books dealing with the results of medical, psychological, anthropological, and sociological studies of death and dying have been published. In addition to reports of empirical investigations, the number of theoretical and other speculative writings concerned with death, dying, and bereavement has increased substantially since the 1950s. Moreover, creative works of literature and art pertaining to the topic have not diminished. Media reports and features on dying and death, including many excellent television documentaries and films, are now almost commonplace.

Courses devoted exclusively to the topic of death and dying have become increasingly popular since Robert Fulton introduced the first regular course on the subject at the University of Minnesota in 1963. Workshops, units, courses, and entire academic programs on dying, death, and bereavement are now offered in various schools and departments of colleges and universities, including psychology, sociology, social work, nursing, religion, education, physical education, medicine, counseling, and human development. Graduate schools in many American universities have followed the lead of Brooklyn College, which in 1982 began offering a master's degree in thanatology. Readings and other materials concerned with death and dying are also widely used in elementary and secondary schools.

This book was designed to fill what the author perceived to be a need for a compact but comprehensive interdisciplinary survey of research, writings, and professional practices concerned with death and dying. As was true of preceding editions of the book, the fourth edition is sufficiently complete to serve as the principal text in a one-semester course on the topic but also appropriate as a supplementary text in other courses. The focus of the book is holistic and eclectic: medical, psychological, religious, philosophical, artistic, and demographic matters concerned with dying, death, bereavement, and widowhood are all considered. Because the author is a psychologist, the psychological aspects of death and dying are emphasized. Be that as it may, a variety of viewpoints and research findings on topics subsumed under thanatology receive thorough consideration in individual chapters.

In addition to inevitable changes in the rates and demographics of human mortality, the rapid pace of events and new emphases on the national and international stages necessitate periodic revisions of the book. The first two editions of the book were much the same in form and substance, but the third edition was somewhat longer and more varied in content. Recent material on moral issues and court cases concerned with abortion and euthanasia, the widespread problem of AIDS and other deadly diseases, the tragedies occasioned by epidemics, starvation, war, and the resumption of capital punishment in many states was included. The fourth edition deals with these same topics, but has a more multi-cultural or cross-cultural emphasis. The increased economic, social, and physical interdependency among the nations of the world has made the concerns of other countries and cultures our concerns. Although the Cold War and the accompanying threat of nuclear annihilation are apparently over for the time being, the problems of war and famine are of international scope and continue to demand attention. Today, more than ever, it is apparent that no person is an island; to some extent, everyone must accept the responsibility of being his or her brother's or sister's keeper.

As in the first three editions of this book, I have tried to write the fourth edition in an informative, factually correct style. In addition to including a wide range of empirical findings and theoretical viewpoints, this edition has been designed with the emotional needs of students and other readers in mind. The motives for taking the kinds of courses for which this book is designed vary from person to person, not the least of which is the need to acquire some understanding of the death of a close relative or friend and to come to grips with the inevitability of one's own demise. Questions, activities, and projects are included at the end of each chapter to enhance reflection and to make the material personal and realistic. An *Instructor's Manual* is available for instructors who adopt the text for their courses.

—Lewis R.Aiken

PART I
INTRODUCTION

1
Mortality and Thanatology

TOPICAL OUTLINE OF THE CHAPTER:

Denial and acceptance of death
- *Familiarity with death*
- *Denial of death*

Definitions and determination of death
- *Multiple meanings of death*
- *Determination of death*
- *Traditional indicators of death*
- *Contemporary indicators of death*

Demography, death rate, and life expectancy
- *Demography*
- *Life expectancy*
- *Time and death*
- *Place and death*

Age and Other individual differences
- *Age and cause of death*
- *Gender differences*
- *Ethnic group differences*
- *Socioeconomic status*
- *Marital status*
- *Social support*

Public and professional interest in thanatology
- *Events promoting an interest in thanatology*
- *Organizations concerned with death, dying, and survival*
- *Research on death and dying*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *How familiar are people with death, and why do so many of them deny its inevitability?*
- *How is death defined and determined?*
- *What are the causes of death and how common is each?*
- *What are the various meanings of death rate, and how are they used?*
- *How do rates and causes of death differ for different demographic groups?*
- *How is the factor of social support related to mortality?*
- *Why has public and professional interest in death and dying increased during the past few decades?*
- *What professions and organizations are concerned with the topic of death and dying and in what activities are they engaged?*
- *What methods are used in conducting research on death and dying, and where and by whom is it done?*

Death eventually comes to everyone—poet and peasant, saint and sinner, the wise and the foolish. It is a fate that people share not only with each other but with all living things. The inevitability of death and the shortness of life have been expressed frequently in anonymous folklore, for example:

> *Doctor, Doctor shall I die,*
> *Yes my child, and so shall I,*

as well as in literature:

> *No man can be ignorant that he must die,*
> *nor be sure that he may not this very day.*
> *(Cicero, De Finibus Bonorum et Malorum, 45 BC, VII, 28, 176)*

> *Art is long, and Time is fleeting,*
> *And our hearts, though stout and brave,*
> *Still, like muffled drums, are beating*
> *Funeral marches to the grave.*
> *(Henry Wadsworth Longfellow, in Canby, 1947, p. 302)*

Depressing though these sentiments may appear, they emphasize the certainty of death, and consequently the importance of not squandering the time one has on earth. Sooner or later, everyone must face his or her own vulnerability and the inevitability of death. Distraction and denial may postpone the realization and acceptance of the inevitable, but no matter how physically fit or informed one may be, that day will surely come.

DENIAL AND ACCEPTANCE OF DEATH

Humans are presumably the only living creatures who realize that they will die some day. How do they cope with this knowledge? How does it shape their attitudes, beliefs, and actions?

Attitudes toward death are not completely positive or negative; rather, they are on a continuum. At one end of the continuum is the perception of death as humanity's mortal enemy, a fearsome Grim Reaper armed with a scythe for harvesting lives. Shaped by this perception is the idea of death as a mortal enemy that must be energetically combated with whatever heroic measures are necessary and available. Some religions and medical science have promoted the idea of death as an enemy, an enemy that is ultimately victorious but that can be avoided for a while if one is alert, capable, and persistent. As seen in the biblical query "Grave where is thy victory? Death where is thy sting?", death need not be permanent if one believes in an afterlife.

At the other end of the attitude-toward-death continuum is accepting and even welcoming death as a passage to a more blissful state of being. Such an attitude allows

the dying person, who is "sustained and soothed by an unfaltering trust" to "approach thy grave like one who wraps the drapery of his couch about him and lies down to pleasant dreams." (*Thanatopsis,* Bryant) Somewhere in the middle of the attitude-toward-death continuum, and perhaps characteristic of most people, is a feeling of mystery or bewilderment in the face of death, as Shakespeare's Hamlet describes it: "the undiscovered country from whose bourne no traveler returns."

Such a realm may be considered beyond human experience, a place of uncertain character that cannot be described in words.

Familiarity With Death

To a great extent, fear and acceptance of death vary with its familiarity. Such familiarity with death does not necessarily breed contempt for it, but it can promote a kind of anesthesia and lead to other ways of coping.

During the Middle Ages and the Renaissance, death and dying were more visible in the Western world than they are today. Publicly viewed executions, mortal skirmishes involving ordinary people, and mass epidemics that claimed the lives of thousands were common occurrences before the 19th century. No one knew when death might strike or even if it might happen before the day was over. It has been estimated, for example, that the Black Plague killed approximately 25% of the population of Europe during the 14th century. And travelers to 16th-century London might very well have been greeted by the sight of severed human heads displayed on London Bridge.

Prior to the 19th century, dying people frequently organized rituals in their own bedrooms. These rituals were attended by family members, physicians, priests, and perhaps legal representatives clustered around the bedside of the dying person. During these rituals, which could last for days, grief was expressed, and personal, religious, and legal matters were discussed. This encouraged dying persons to put their worldly affairs in order so they could then die in peace with the knowledge that their last wishes would be honored. During the 1800s, deathbed rituals were largely replaced by postmortem rituals, and by the middle of the 20th century even these postmortem activities had been minimized (Aries, 1974). A typical funeral in the United States at the end of the 20th century was a rather cut-and-dried affair, often noted more for its efficiency than for its ritualism or expression of grief for the dear departed. In addition, because most people now die in institutions rather than at home or in public, personally witnessed death has become an uncommon event in many Western countries.

Denial of Death

The decline of public dying and death during the 20th century not only reflects but also promotes the denial of death. Attempts to deny the reality of death, however, have not been completely successful. People today may not think much about death, but they are clearly aware of it. How could it be otherwise with the constant barrage of pictures, reports, and stories of violence, disease, and deterioration vividly displayed and portrayed in the media? Millions of deaths during the 20th century have been caused by war, which was viewed in previous times as a noble, glorious, and even romantic human enterprise. But two world wars, the Korean War, the Vietnam War, and various "operations" and

regional conflicts throughout the world have dampened public enthusiasm for war and dimmed the perception of it as a heroic and glorious enterprise.

Graphic depictions of violent death on television and in motion pictures have horrified some people but anesthetized many others to the reality of dying. Furthermore, the viewer can simply turn off the set, leave the theater, or toss away the newspaper or magazine when the pictures become too disturbing. Without dwelling on these second-hand experiences with death, or even thinking about them at all, one can maintain the illusion of personal invulnerability and even exemption from the curse of mortality. Death becomes something that happens to others but not to oneself, at least not for a very long time. It is a subject that can be thought about tomorrow without spoiling today. Sigmund Freud's assertion that no one can truly imagine his or her own death is not even an issue for the chronic denier of death: He or she simply never tries to imagine it.

Understanding what it will be like when one is no longer living is particularly difficult for young children. There is a story about a 3-year-old boy who asked his parents if he could be alone for a while with his newborn baby brother. The parents were puzzled but finally agreed. They were startled and somewhat amused to overhear the little boy, on approaching the crib, ask the baby: "What's heaven like? I don't remember; it's been so long!"

Adolescents comprehend death better than children, but to a typical teenager it is still a distant and perhaps dreamy, romanticized event. Recently, however, murders and associated threats of violence in high schools throughout the country, air disasters in which hundreds of people and celebrities are killed, and other deadly events featured on television have made adolescents more aware of the reality of death and, to many, its personal nature. Of course, the reality and imminence of death become clearer as one ages and experiences the demise of friends and relatives. Then it is more difficult to maintain the illusion of personal invulnerability and invincibility.

The tendency to deny or overlook death does not keep it from occurring. It has been estimated that well over 100 million deaths during the 20th century resulted from unnatural causes. At least 50 million deaths occurred from violent acts and more than 60 million from starvation and deprivation. In fact, every year over 50 million people throughout the world, over 2 million of whom are residents of the United States, die from all causes (Hoyert, Kochanek, & Murphy, 1999; Population Reference Bureau, 1999).

DEFINITIONS AND DETERMINATION OF DEATH

Most people tend to think of death as a unique event, but there are many definitions of the term. According to the dictionary, death is "the act of dying; the end of life; the total and permanent cessation of all the vital functions of an organism This definition is closest in meaning to *biological death,* the irreversible breakdown of respiration in an organism and the consequent loss of the ability to use oxygen. When respiration and heartbeat cease, oxygen is no longer inhaled and diffused by the lungs into the blood; when the heart fails, the flow of oxygenated blood through the blood vessels stops.

When the body dies, cells in the higher brain centers, which are very susceptible to oxygen deprivation, die first. This usually occurs within 5 to 10 min after the supply of oxygen is cut off. Next to die are cells in the lower brain centers, including those in the

medulla oblongata, which is the regulator of respiration, heartbeat, and other vital reflexes.

Thus, the death of a person does not occur all at once. Certain body structures, such as the thymus gland, deteriorate before the individual is fully mature. Old cells are constantly dying and being replaced by new cells, even before a person is born. The buildup and breakdown of body cells and structures, known as *anabolism* and *catabolism,* respectively, are complementary metabolic processes. As a person ages, the breakdown rate begins to exceed the buildup rate, a point reached earlier in some body structures than others.

Cessation of heartbeat is a natural result of brain death, but the brain is not necessarily dead when the heart stops. In fact, the pumping action of a stopped heart can be restored before the vital centers of the brain are affected. Restoration of the heartbeat by electric shock *(countershock)* is a common procedure in modern hospitals. Unfortunately, when the heart has stopped beating for too long or for other reasons the blood supply to the brain has been interrupted, the higher brain cells are deprived of oxygen and their functioning is disrupted. As a consequence, the sensorimotor and cognitive skills of the person may deteriorate to some extent.

The cells of certain glands and muscles die only after the medulla has stopped functioning, but cutaneous and bone cells may remain viable for some time, depending on temperature, level of functioning of the cell, and nutrient requirements. However, the apparent ability of the hair and nails to continue growing after the person has died is probably due to the settling of body fluids, the loss of fluid from the cells, the atrophying of tissues, and the retraction of those tissues from the hair and nails that were already there. The combined effect of these processes is to cause the hair and nails to protrude through the tissue as if they have grown when they actually have not. Nevertheless, certain body processes, such as the conversion of glycogen to glucose by the liver and the digestive actions of intestinal tissues, have been observed after the person has been pronounced clinically dead. In fact, by being placed in a special chemical solution or freezing them, some body tissues can stay alive for years after the donor has died.

Multiple Meanings of Death

Biological death is the most common meaning of the term death, but psychological death, social death, legal death, civil death, spiritual death, and certain other kinds of death have also been described. A person is said to be *psychologically dead* when his or her mind (the seat of conscious experiencing and knowing) ceases to function. This could happen in a severe brain disorder or in an extreme case of mental illness. A person is *socially dead* when other people act as if he or she were dead. An example of the distinction between biological, psychological, and social death is seen in catatonic stupor, an extreme form of withdrawal in which a person becomes immobile and unresponsive. On coming out of the stuporous state, a catatonic patient often reports that, while in that state, he or she had been aware of remarks and other events occurring in the immediate environment but simply could not react to them. It was as if the patient were paralyzed or restrained yet wide awake. During this condition, the patient was biologically and perhaps psychologically alive, but was treated by others as if he or she were not present or as dead (socially dead). Furthermore, a person may be biologically dead and yet be

talked about as if he or she were socially alive. For example, many people continue to talk to (and even argue with!) a friend or relative who has long been biologically dead and yet continues to exist in the mind of the speaker. Rather than reacting to the actual presence of the deceased, the speaker is responding to an internal representation (an *introject*) of the person.

The idea of *legal death* refers to a judgment by a legal authority that a person is dead and therefore that his or her possessions may be distributed by the survivors or beneficiaries. In such instances, the individual may or may not be biologically dead, as when a person who is missing in combat or cannot be found for other reasons is declared legally dead after a period of 7 years. For example, many soldiers who served in the Vietnam War and failed to return from combat or captivity were declared legally dead.

Related to legal death is *civil death,* a term no longer in use but which in Old English common law referred to a person who was not biologically (naturally) dead but had lost his or her civil rights. Persons who either joined a religious order or were convicted of a serious crime, declared insane, or banished from the state or nation could be declared legally dead.

Determination of Death

The definition and determination of biological death are not exclusively medical matters; ethical, legal, and economic considerations also enter the picture. In certain legal cases, an exact moment of death must be established, difficult though it may be. Furthermore, legal, ethical (moral), and economic factors are involved in deciding when to "pull the plug" or stop treating a critically brain-damaged patient who is in an irreversible coma, or when to attempt a costly heart transplant that may prolong life for a year or less. Physicians and medical researchers are concerned primarily with the biological or medical aspects of death and dying, but they must also be sensitive to the legal, ethical, and economic ramifications of the treatments they provide.

Traditional Indicators of Death

Among the traditional clinical indicators of death are cessation of heartbeat and respiration; unresponsiveness of the eyes to light and of other sense organs to sound, touch, and pain; and bluing of the extremities, particularly the mouth and lips. Signs of further progression in death include purplish-red discoloration of the skin *(livor mortis),* stiffening of the muscles *(rigor mortis),* and a gradual decline in body temperature to that of the external environment *(algor mortis)*.

Loss of sensorimotor functions in a dying person begins in the legs and spreads gradually to the arms. Sensitivity to pressure remains, but pain and other cutaneous sensations diminish. The decline in peripheral circulation often produces a drenching sweat, followed by a cooling of the body surface. A dying person, who may be conscious until the end, characteristically turns his or her head toward the light. Rigor mortis sets in about 2 hr after death and continues for about 30 hr ("Death," 1997).

Methods used in previous times to determine death (no fogging of a mirror when placed near the mouth, no response to a feather placed on the nose, no constriction of the pupils to light, no reaction to a pinprick, etc.) were imperfect indicators and occasionally

led to premature burial. Premature burials were more likely to occur during epidemics or wartime, when, for hygienic reasons, there was a greater urgency to bury the dead and the determination of death was often a slipshod affair. As a result, stories from the 19th century describe the fear and potential danger of being buried alive. A famous example is Edgar Allan Poe's fictional account of "The Premature Burial" (see Box 1.1). The fear that one might accidentally be buried alive led to the practice of not burying a dead body until it began to putrefy, an indicator that was accepted during the last century as the only true test of death.

There are, of course, many cases in which a patient has been pronounced clinically dead but has "come back to life" before being buried. Furthermore, some people believe that a resurrection of the physical body is possible, even when a deceased person is not immediately restored to life. For example, occasionally there is a newspaper story about a body that was deep-frozen in liquid nitrogen shortly after death *(cryonics)* and is being kept in a special aluminum capsule. An article of faith of the American Cryonics Society is that a body preserved in this manner can be thawed and restored to life at some time in the future when a cure for the disease that caused the person's death is discovered. Whether those few bodies that are preserved in this manner can be revived with any semblance of the former self is debatable, but most biomedical authorities are dubious. Additional information about cryonics may be obtained from ALCOR Life Extension Foundation and the American Cryonics Society (see Appendix B).

Contemporary Indicators of Death

Although cessation of heartbeat and respiration are traditional medically accepted indicators of death, they are no longer considered sufficient. Emergency measures such as cardiopulmonary resuscitation (CPR) and countershock are frequently successful in restoring these functions, while artificial pacemakers, mechanical respirators, and heart-lung machines sustain them.

BOX 1.1 • A Premature Burial

The wife of one of the most respectable citizens—a lawyer of eminence and a member of Congress—was seized with a sudden and unaccountable illness, which completely baffled the skill of her physicians. After much suffering she died, or was supposed to die. No one suspected, indeed, or had reason to suspect, that she was not actually dead. She presented all the ordinary appearances of death. The face assumed the usual pinched and sunken outline. The lips were of the usual marble pallor. The eyes were lusterless. There was no warmth. Pulsation had ceased. For three days the body was preserved unburied, during which it had acquired a stony rigidity. The funeral, in short, was hastened, on account of the rapid advance of what was supposed to be decomposition.

The lady was deposited in her family vault, which, for three subsequent years, was undisturbed. At the expiration of this term it was opened for the reception of a sarcophagus;—but, alas! how fearful a shock awaited the husband, who personally threw open the door! As its portals swung outwardly back, some white-appareled object fell rattling within his arms. It was the skeleton of his wife in her yet unmoulded shroud.

A careful investigation rendered it evident that she had revived within two days after her entombment; that her struggles within the coffin had caused it to fall from a ledge, or shelf to the floor, where it was so broken as to permit her escape. A lamp which had been accidentally left, full of oil, within the tomb, was found empty; it might have been exhausted, however, by evaporation. On the uttermost of the steps which led down into the dread chamber was a large fragment of the coffin, with which, it seemed, that she had endeavored to arrest attention by striking the iron door. While thus occupied, she probably swooned, or possibly died, through sheer terror; and, in falling her shroud became entangled in some ironwork which projected interiorly. Thus she remained, and thus she rotted, erect.

Note. From *The Complete Stories of Edgar Allen Poe* (vol. 1, p. 532), by A.H. Quinn and E.H.O'Neill, 1976, New York: Alfred A.Knopf.

According to the laws of most states, a person is alive as long as a heartbeat and respiratory movements, no matter how they are maintained, can be detected. In states that have not passed legislation defining death, the definition is based on hospital policy. However, because different hospitals may follow different procedural definitions, it is conceivable that a resident of a particular state could be pronounced dead in one hospital and not in another.

During the past 30 years the concept of *brain death,* defined as the irreversible cessation of all functions of the entire brain and brainstem, has gained acceptance. Brain death has now joined loss of circulation, cessation of breathing, and unresponsiveness to external stimuli as a criterion of death. Though most states have passed legislation linking legal death to brain death, the usual definition of death centers on the loss of all vital functions. Furthermore, the importance of indicators other than the loss of brain functioning varies from state to state.

BOX 1.2 • The Living Dead

The idea that people can exist in a state of suspended animation without actually being dead has fascinated popular writers and the general public for many years. Cases of *catalepsy,* in which partial or complete paralysis and loss of sensation occur, have been observed in certain physical and mental disorders (e.g., *catatonic schizophrenia*). Perhaps even more intriguing are so-called *zombies,* or the living dead. Belief in zombies, which originated in Africa, is a part of the Haitian voodoo religion. A candidate for "zombification" is reportedly administered a mixture of particular substances by a voodoo priest, or *bocor*. The candidate then apparently lapses into a state of low metabolic activity and appears to be clinically dead. Next, he or she is buried for 2 days or so in a shallow grave, exhumed at night, administered a hallucinogenic paste, and deprived of salt. The "soulless body" may then be sold into slavery, to work on a sugar plantation, for example.

Stories of zombies abound in Haiti, but with the possible exception of a few instances, such as that of Clairvius Narcisse, who was the subject of documentaries on the BBC and ABC, most of these tales have not been authenticated. Some anthropologists and biochemists have conducted research on the nature of the *poud zombi,* the powder that is made by the bocors and fed to or rubbed on the skin of the person being made into a zombie. The powder may contain a mixture of extracts from the dried bodies of bufo frogs, extracts from the organs of blowfish and puffer fish, and various other substances such as a fatal cucumber, a pepper from the Orinoco, a snake from the Amazon jungle, stinging nettles, and even the fresh remains of a human cadaver! Although controversial, research conducted by the anthropologist Wade Davis (1983, 1988) has focused on the chemical tetrodotoxin, a poison that exists in small amounts in the liver and reproductive organs of puffer fish and in the fugu fish of Japan. The amount of tetrodotoxin, which blocks the sodium channels between nerve endings and can cause paralysis and even death, is critical. One in a dozen successes in producing a zombie is presumably sufficient to convince people in believing cultures that the bocors can create zombies.

The following four clinical indicators, known as the *Harvard criteria,* are accepted by the medical profession throughout the world in the determination of death or irreversible coma (Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death, 1968):

1. Unreceptivity or unresponsivity to touch, sound, light, and even the most painful stimuli that it is ethical to apply.
2. Absence of movements, notably those of spontaneous respiration, for at least 1 hr. Patients on respirators must not breathe by themselves for at least 3 min when the respirator is turned off.
3. Absence of reflexes, that is, no pupillary constriction to light; no blinking; no eye movements when ice water is poured into the ears; nonmuscular contractions when the biceps, triceps, or quadriceps tendons are tapped; no gagging or vomiting when back of throat is touched; no yawning or vocalizing.
4. A flat electroencephalogram (EEG) for at least 10 min.

As pointed out by several commissions established to study and make recommendations pertaining to the determination of death, however, these four signs are not foolproof. Some of these official signs of death can be produced by cold-water drowning, head injury, or drugs, from which the patient may experience a complete recovery. In patients who have severely overdosed on barbiturates or who are markedly hypothermic (body temperature below 90 °F), depression of both brain waves and respiration may be present. And drowning in water under 50 °F (10 °C) slows metabolism so effectively that the victim can be revived even after a half hour under water. In any event, it is recommended that the four clinical indicators listed previously should be present for at least 24 hr

before a final diagnosis is made (Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death, 1968). Furthermore, determination of the irreversibility of death should be made by at least two physicians. Because this is an era in which heart, liver, and kidney transplants are commonplace, it is important that neither physician is a member of a transplant team that is considering the deceased as a potential organ donor. Although the likelihood is remote, it is possible that a physician may be so eager to obtain a viable transplant organ that the donor-patient is prematurely declared dead.

In cases of irreversible coma the Harvard criteria are met, and by equating irreversible coma with death the application of heroic, lifesaving measures may be suspended. Irreversible coma is indicated by a lack of responsiveness to external stimuli and a loss of normal reflexes that are controlled by the spinal cord and brainstem.

Certain states have adopted the concept of brain death—a flat EEG for at least 10 min—as the legal definition of death and a condition for the removal of donated organs for transplant purposes. Most states, however, still use the traditional definition of death as the cessation of all vital functions. In an attempt to provide some legal uniformity throughout the 50 states, the President's Commission for the Study of the Ethical Problems in Medicine and Biomedical and Behavioral Research (hereafter, President's Commission), in collaboration with the American Medical Association, the American Bar Association, and the National Conference of Commissioners on Uniform State Laws, developed a Uniform Determination of Death Act. According to this act:

> *An individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of functions of the entire brain, including the brain stem, is dead. A determination of death must be made in accordance with accepted medical standards. (President's Commission, 1981)*

The problem of how to determine exactly when a patient has died or when lifesaving measures should be suspended has not been resolved to everyone's satisfaction. All states of the United States and, with the exception of Denmark and Japan, all jurisdictions throughout the world, have adopted a definition of death as the "total and irreversible cessation of brain function." However, New Jersey does permit a certain amount of individual discretion in defining death (Veatch, 1995).

The central recommendation of a 1988 report by the Hastings Center ("Guidelines on the Termination of Life-Sustaining Treatment and the Care of the Dying") was that the patient or a representative of the patient has the right to refuse or halt life-sustaining treatment (feeding tubes, blood transfusions, antibiotics, dialysis machines, ventilators, etc.) that simply postpone death. Even so, the individual physician continues to bear a heavy responsibility for the final decision. To protect themselves, physicians should consult with the family of the dying person and obtain legal counsel before making a decision to suspend treatment.

DEMOGRAPHY, DEATH RATE, AND LIFE EXPECTANCY

One of the most important items of information on a death certificate is the cause of death. This item may be the primary cause, it may be one of many factors that contributed

to the death of a person, or it may not be a cause at all. One factor that contributes to the death of many people is the gradual, intrinsic deterioration of cells and tissues with aging and trauma. Other, more extrinsic, factors include severe accidents, homicide, and suicide. In certain cases the causes of death are clear, but in many instances there are multiple complex, interacting causes that may or may not be understood. Whether singular or plural, the causative factors in the death of a person may or may not be known. This is more likely to be true of the death of a very old person, for whom it is often difficult to identify a single, specific cause of death. Furthermore, a less stigmatizing or less basic condition, such as pneumonia rather than AIDS, may be reported as the cause of death. In any event, the causes of death vary with age, sex, nationality, socioeconomic status, and other demographic variables.

Demography

Before discussing the various causes of death in detail (specifically in chaps. 2–4), it may be helpful to provide some information of the terminology and methods of *demography*. This science, which began with the work of John Graunt in the mid-17th century, is concerned with examining both the structural (distributions by age, sex, marital status, etc.) and dynamic (births, deaths, migratory patterns, etc.) factors in human populations. The *mortality table* (life table), a listing of the number of deaths occurring between successive birthdays in a group of people born in the same year, was introduced by Graunt. Other people in the 18th and 19th centuries also contributed to the science of demography. Sir Edmund Halley, a famous 18th-century astronomer who was immortalized by having a comet named after him, was the first person to conduct scientific analyses of life expectancy. In the 19th century, the Belgian scientist Adolphe Quetelet conducted statistical studies of death rates and suicides and their relationships to chronological age. A statistical concept known as the *Gompertz law,* which holds that mortality rates increase exponentially with age, was proposed by British actuary Benjamin Gompertz in 1825.[1] The efforts of these men and other pioneers led gradually to the establishment of civil registries of births, deaths, marriages, and other demographic events. The availability of this information, especially mortality tables, was important in the growth of life insurance companies during the 19th century. Today, most nations of the world have a bureau of demography or a center for health statistics that is assigned the task of keeping track of the vital statistics in the population.

Civil Registries. Until the early 19th century, there were no central governmental registries for recording births, deaths, and marriages. Such information was usually kept by local church registries and was often highly inaccurate. More accurate centralized registration of vital statistics began earlier in France, Britain, and other European countries than in the United States, which was a rapidly changing nation with many sectional and religious differences. A "Death Registration Area," comprising 10 states, the District of Columbia, and a few major cities was constituted in 1900, but it did not

[1]Actuarial data on humans, whose chances of dying double roughly every 8 years during most of adulthood, seemed to offer support for the Gompertz law. Subsequent data indicated, however, that the law does not hold for very old people, who seem to die in smaller numbers each year than predicted by the Gompertz law (Barinaga, 1992).

include the entire nation until 1933 ("Vital Statistics," 1998). During the past 60 years, such registration has provided valuable information concerning population trends to government officials and other interested parties and has helped guide national policy on public health and other civil matters.

Crude Rate. As practiced today, demographic analysis is concerned with the quantitative analysis of vital statistics and census information. Birth, death, marriage, and divorce rates are determined from certificates prepared locally and submitted to state and federal governments. An important unit in demographic analysis is the *crude rate,* which is the ratio of the number of events occurring in a given year to the total population size. The crude rate of a given event is stated in terms of so many events per 1,000 or 100,000 population. Crude rates for marriages, divorces, births, and deaths, are of particular interest to social scientists. The crude death rate represents the average chance of dying during a specified period in the entire population.

The overall estimated crude death rate in the United States in 1997 was 864.7 per 100,000 population, which was approximately 1% lower than in 1996 (Hoyert et al., 1999). The overall crude death rate is not the only way of describing the rate of occurrence of death in a specified population during a given year. In fact, by failing to take into account the age structure of a population, it can be misleading. Crude death rates, for example, are often higher in more highly developed countries with large numbers of elderly people.

Age-Specific and Age-Adjusted Rates. One way of taking the age distribution of the population into account in mortality statistics is to determine *age-specific death rates*. Age-specific death rates are crude rates computed separately for each of several designated chronological age groups, and they depict how death rate varies with the age of a population. The computation of *age-adjusted death rates,* which take into account the dependency of death rate on chronological age, is more complex than the computation of crude rates or age-specific rates. Age-adjusted death rates are computed by multiplying the age-specific death rates for different age groups by numerical weights based on the proportions of the 1940 standard population in the respective age groups. Age-adjusted rates are considered more useful than crude rates in analyzing the rate of change in a dynamic characteristic (births, deaths, marriages, divorces, etc.) of a population from one year to the next. The age-adjusted death rate for the United States was 479.1 deaths per 100,000 standard population in 1997 (Hoyert et al., 1999).

Life Expectancy

Another important demographic index is *life expectancy,* the average life span in years of people born in the same calendar year. Life expectancy may be computed at birth, at age 65, or at any other age. For example, life expectancy at birth is the average number of years that all individuals born in a particular year can be expected to live, assuming that they are subjected to the age-specific death rates existing in the year of their birth. This assumption is risky, but life expectancy projections are fairly accurate over a span of a few years. The projections become more tentative as the time period over which they are projected increases. Life expectancy may be determined for the population as a whole or separately for different demographic groups (e.g., males vs. females, Blacks vs. Whites,

the poor vs. the affluent). The estimated life expectancy of a person born in the United States in 1997 reached a record 76.5 years (73.6 years for males and 79.4 years for females; Hoyert et al., 1999).

Time and Death

The decline in infectious diseases in the United States has led to a steady reduction in the death rate and an increase in life expectancy. The life expectancy at birth for an average American increased from approximately 47 years for someone born in 1900 to 76.5 years for one born in 1997. Going even further back in time, life expectancy is estimated to have been around 22 years during the time of the Roman Empire, 33 years in England during the Middle Ages, and only 36 years in the 13 colonies at the time of the American Revolution. The sharp rise in life expectancy during the 19th and 20th centuries is attributable not only to the conquest of infectious diseases but also to significant improvements in food supply, housing, sanitation, a less hazardous lifestyle in general, and to a decrease in infant and child mortality. Advances in technology and improvements in production, distribution, and transportation are major reasons for the longer life expectancy and safer living conditions of today. Unfortunately, modern technology has liabilities as well as benefits. The effects of air, water, and ground pollution on the environment and on the health of human beings are a heavy price to pay for a more comfortable, predictable existence. It might be concluded that modern humans have traded early death from infectious diseases for later death from cardiovascular diseases and cancer. But it is doubtful if anyone who has suffered through the epidemics of bubonic plague, cholera, influence, poliomyelitis, and mass starvation of former times would view the exchange as unfair.

Monthly Mortality. Time in a more restricted sense is also related to mortality. The death rate in the United States is higher during the cooler months of winter and early spring than in the warmer months of summer and early fall. One reason for the monthly variation in death rate is the greater incidence of influenza and other cold-weather diseases during cooler periods, a change that may account in part for the mass exodus of the U.S. population to the Sunbelt states.

Ceremonial Occasions. Holidays and ceremonial occasions are often associated with overeating, overdrinking, and other strenuous, self-indulgent activities. But there is some evidence that birthdays and other significant events in a dying person's life may actually retard rather than hasten the time of death. For example, Phillips (1975; Phillips & Feldman, 1973; Phillips & Smith, 1990) found evidence of fewer deaths than expected before three ceremonial occasions: presidential elections, the Jewish Day of Atonement, and the person's birthday. It was suggested that some people literally postpone dying until occasions of great personal significance to them are over. It is noteworthy that both Thomas Jefferson and John Adams died on the fourth of July (in the same year!)[2] and that Mark Twain died on the eve of the arrival of Halley's Comet—the date on which he had predicted he would die. The reasons for these occurrences are far from clear, and the findings of Phillips and others have been criticized on methodological grounds

[2]During the night when they both died, Adams reportedly kept asking whether Jefferson had died. Whether this should be interpreted as indicating continuing animosity or sympathetic concern for a lifelong rival is anybody's guess.

(Schultz & Bazerman, 1980). Attitude or state of mind is unquestionably an important factor in the progress of an illness, but whether a dying person can actually delay his or her death by an act of will has not been demonstrated conclusively.

Place and Death

Life expectancy and death rate also vary with geographical location. Recent estimates of crude death rate, infant mortality rate, and life expectancy in various regions of the world are given in Table 1.1. These three indices are related in that, more often than not, a high death rate is accompanied by a high rate of infant mortality and a shorter life expectancy. High death rates and low life expectancies are more typical in the less-developed nations of Africa and southern Asia, and less typical of the highly developed, technologically based nations of Europe and North America. The lowest life expectancies in 1999 were in Malawi (36 years), Zambia (37 years), and Swaziland (39 years). Life expectancy was much higher in the United States (77 years), but higher still in Japan (81 years), the world leader (Population Reference Bureau, 1999).

Variations in death rate among different areas or sections of a particular country are perhaps less impressive that those among different countries, but they are still interesting. The age-adjusted death rate in the United States during the mid-1990s was highest in the South Central Division and lowest in the Mountain, Pacific, West North Central, and New England Divisions (National Center for Health Statistics, 1998a). Alaska was the state with the lowest death rate by state, whereas the rate for the District of Columbia was higher than that for any state (U.S. Census Bureau, 1999). The reasons for these differences in death rate are complex, involving interactions among age distribution, culture, climate, socioeconomic status, and other demographic and situational variables.

Place of death can be narrowed further to exactly where people within a particular locality die. In the early years of the 20th century, most people in the United States died at home. But the number of home deaths had fallen to 50% by 1949, to 40% by 1958, and to less than 25% by 1980 (Lerner, 1984; Veatch & Tai, 1980). Today, the majority (56%) of Americans die in hospitals, clinics, or medical centers; 19% die in nursing homes, and 21 % at home (National Center for Health Statistics, 1998b).

AGE AND OTHER INDIVIDUAL DIFFERENCES

Longevity and life expectancy vary not only with geography but with other demographic variables such as gender, ethnicity, marital status, personality, heredity, and differences in lifestyle (exercise, diet, occupation, etc.).

TABLE 1.1 Mortality Statistics for the World Population in 1999

Geographical Region	*Crude Death Rate*[a]	*Infant Morality Rate*[b]	*Life Expectancy at Birth (Years)*[c]
Africa	14	88	51/54
Northern	7	51	63/66
Western	14	86	51/53
Eastern	18	105	43/45
Middle	16	104	48/51
Southern	12	55	54/58
Asia	8	56	65/68
Western	7	54	66/70
South central	9	74	60/61
Southeast	7	46	63/67
East	7	29	70/74
Europe	11	9	69/78
Northern	10	6	74/79
Western	10	5	74/81
Eastern	13	15	63/74
Southern	9	7	74/80
Latin America and Caribbean	6	35	66/73
Central America	5	34	68/74
Caribbean	8	41	67/71
South America	6	35	65/72
North America	8	7	74/79
Oceania	7	29	71/76
Entire world	9	57	64/68

From Population Reference Bureau (1999).

[a]Per 1,000 population.

[b]Per 1,000 live births in a given year.

[c]Numbers are ratios of life expectancy for males to life expectancy for females.

Age and Cause of Death

Both the rate and cause of death vary with chronological age. In 1997, the death rate per 100,000 children under 1 year old was 738.7, falling to 20.8 for children aged 5–14 years. From this low, it rose gradually from late adolescence to the beginning of middle age, subsequently accelerating to 15,345.2 after age 84 (see Fig. 1.1). Despite their high death rate, the *oldest old* Americans, those aged 85 years and over, are the fastest-growing age

group in the population of the United States. Women in this age group outnumber men by 2 to 1 (Hoyert et al., 1999).

The age distribution of deaths in the United States has changed dramatically since the founding of this country in 1776. At that time, most deaths occurred in children under age 15, and only about 20% of Americans survived to old age. Two centuries later, approximately 80% of newborn Americans could expect to reach age 65. With improved obstetrical care and breakthroughs in combating infectious diseases, the infant mortality rate per 1,000 live births in the United States has continued to decline from 29.2 in 1950 to 26 in 1960, 20 in 1970, and 7.2 in 1997. The last figure was the lowest rate of infant mortality ever recorded in this country. Accompanying the lower rate of infant mortality has been a lowering of the death rate among women during pregnancy and childbirth. Despite declines in mortality, life expectancy is higher and infant mortality rate is lower in several European (e.g., Finland, Norway, Sweden) and East Asian (e.g., Japan, Singapore, Hong Kong) countries than in the United States. In contrast, infant mortality is highest in East African countries (e.g., Sierra Leone, Guinea).

As indicated in Table 1.2, the most common cause of death among the estimated 2,314,245 people who died in the United States in 1997 was heart disease, followed in frequency by malignant neoplasms (cancer) and cerebrovascular diseases (stroke). Because of the declines in infant mortality and infectious diseases during childhood, dying in the United States is now more characteristic of the very old than of the young and middle-aged. The major killers of yesteryear—infectious diseases such as influenza, pneumonia, and tuberculosis—affected all age groups, but especially children. These

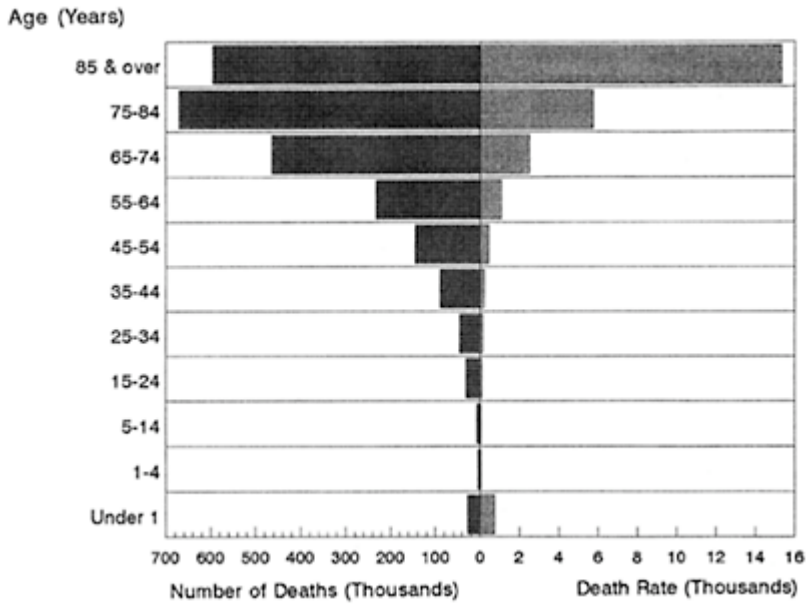

FIGURE 1-1 Number and rate of deaths in the United States population in 1997

(based on data from Hoyert, Kochanek, & Murphy, 1999).

TABLE 1.2 Number, Rate, and Percentage for the 15 Leading Causes of Death in the United States in 1997

Rank	*Cause of Death*	*Number*	*Death Rate*	*% of Total*
1	Diseases of heart	726,974	271.6	31.41
2	Malignant neoplasms	539,577	201.6	23.31
3	Cerebrovascular diseases	159,791	59.7	6.91
4	Chronic obstructive pulmonary diseases and allied conditions	109,029	40.7	4.71
5	Accidents and adverse effects	95,644	35.7	4.13
6	Pneumonia and influenza	86,449	32.3	3.74
7	Diabetes mellitus	62,636	23.4	2.71
8	Suicide	30,535	11.4	1.32
9	Nephritis, nephrotic syndrome, and nephrosis	25,331	9.5	1.09
10	Chronic liver disease and cirrhosis	25,175	9.4	1.09
11	Alzheimer's disease	22,475	8.4	0.97
12	Septicemia	22,396	8.4	0.97
13	Homicide and legal intervention	19,846	7.4	0.86
14	Human immunodeficiency virus infection	16,516	6.2	0.71
15	Atherosclerosis	16,057	6.0	0.69

[a]From Hoyert, Kochanek, and Murphy (1999).

conditions have given way to chronic disorders such as heart disease, cancer, and stroke as the leading causes of death (Table 1.3). Because of advances in the treatment and prevention of the last three disorders, which attack older people more often than younger people, smaller percentages of older people are dying of heart disease, cancer, and stroke than ever before. Nevertheless, these three disorders remain the leading causes of death among the elderly. Teenagers and young adults, on the other hand, are now more likely to die from accidents, especially accidents involving motor vehicles. Suicide and homicide, although not epidemic, are also significant causes of death in young people.

The following is a list of the four leading causes of death (in rank order) by age in the United States during 1997:

Infancy (0–1 years): congenital anomalies, disorders relating to short gestation and unspecified low birth weight, sudden infant death syndrome, respiratory distress syndrome.

Early childhood (1–4 years): accidents and adverse effects, congenital anomalies, malignant neoplasms, homicide.

Middle and late childhood (5–14 years): accidents and adverse effects, malignant neoplasms, homicide, congenital anomalies.
Adolescence and early adulthood (15–24 years): accidents and adverse effects, homicide and legal intervention, suicide, malignant neoplasms.

TABLE 1.3 Leading Causes of Death in the United States in 1900,1940, and 1997

Rank	*1900*	*1940*	*1997*
1	Influenza and pneumonia	Heart diseases	Heart diseases
2	Tuberculosis	Cancer	Cancer
3	Gastrointestinal disease	Stroke	Stroke
4	Heart diseases	Accidents	Chronic obstructive pulmonary diseases
5	Stroke	Kidney diseases	Accidents
6	Kidney diseases	Pneumonia and Influenza	Pneumonia and influenza
7	Accidents	Tuberculosis	Diabetes
8	Cancer	Diabetes	Suicide
9	Diseases of early infancy	Altherosclerosis	Kidney diseases
10	Diphtheria	Syphilis	Chronic liver disease and cirrhosis

From Population Reference Bureau (n.d.) and Hoyert, Kochanek, and Murphy (1999).

Young adulthood (25–44 years): accidents and adverse effects, malignant neoplasms, diseases of heart, suicide. Human immunodeficiency virus (HIV) infection was the third leading cause of death in this age group in 1996, but the rate of death due to HIV infection fell dramatically from 1996 to 1997.
Middle adulthood (45–64 years): malignant neoplasms, diseases of heart, accidents and adverse effects, cerebrovascular diseases.
Older adulthood (65 years and older): diseases of heart, malignant neoplasms, cerebrovascular diseases, chronic obstructive pulmonary diseases

Gender Differences

Death rate declined and life expectancy rose steadily for both sexes during the 20th century, but the increase was more pronounced for women than men. The age-adjusted death rate per 100,000 U.S. population in 1997 was 602.8 for males and 357.7 for females. The age-specific rate was higher for males than for females in every age category, and was most pronounced in late adolescence and early adulthood. Similarly,

life expectancy at birth for White Americans, which was 51.1 years for females and 48.2 years for males in 1900, had increased to 75.6 for females and 68.0 years for males by 1970, and to 79.9 for females and 74.3 years for males by 1997. The corresponding figures for non-White Americans of all races were not available for 1900 but were 69.4 years for females and 61.3 years for males in 1970 and 76.7 years for females and 69.8 years for males by 1997 (Hoyert et al., 1999; see Fig. 1.2).

There has been much speculation and some research on why females have a lower death rate and a longer life expectancy than males. Fewer women die in childbirth than ever before, but this circumstance alone cannot account for the magnitude of the gender difference in mortality. It is also true that, compared with men, women usually have greater resistance to infectious diseases and degenerative conditions such as atherosclerosis. The major killer diseases of today—heart disease, cancer, and stroke—are also more common in men than in women. One possible explanation for these and other factors associated with sex differences in longevity is that, because they have two X chromosomes whereas males have only one in their cells, females can offset the effects of a defective X chromosome and hence are less susceptible to birth defects and genetic diseases carried by defective X chromosomes.

Hormonal differences may also contribute to the greater susceptibility of males to certain physical disorders. For example, the female hormone estrogen may provide women with some protection against hardening of the arteries in old age. It is interesting that women who have borne children tend to live longer than childless women, an association that has been attributed to increased secretion of estrogen in the former (Woodruff, 1977). Another sex hormone, testosterone, is secreted in far greater amounts by males than females. Although testosterone contributes to the clotting of the blood when a person is injured, it can also cause clotting in coronary arteries.

Lifestyle differences may also contribute to differential longevity of the sexes. Some of these differences, such as the tendency of men to smoke more than women, are decreasing. As the lifestyles of women become more like those of men, one would expect sex differences in mortality to decline (see Fig. 1.2). For example, a statistical study of residents of Erie County, Pennsylvania found that after eliminating those people who died because of accident, suicide, or homicide, life expectancy figures for nonsmoking men and women were almost identical (Miller & Gerstein, 1983). However, compared with men, women consult physicians and follow their advice more often, experience less exposure to industrial pollutants and hazards, handle stress more effectively, and have better social supports. All of these factors presumably contribute to a longer life expectancy (Bosco & Porcino, 1977; Green & Pope, 1999; National Center for Health Statistics, 1995).

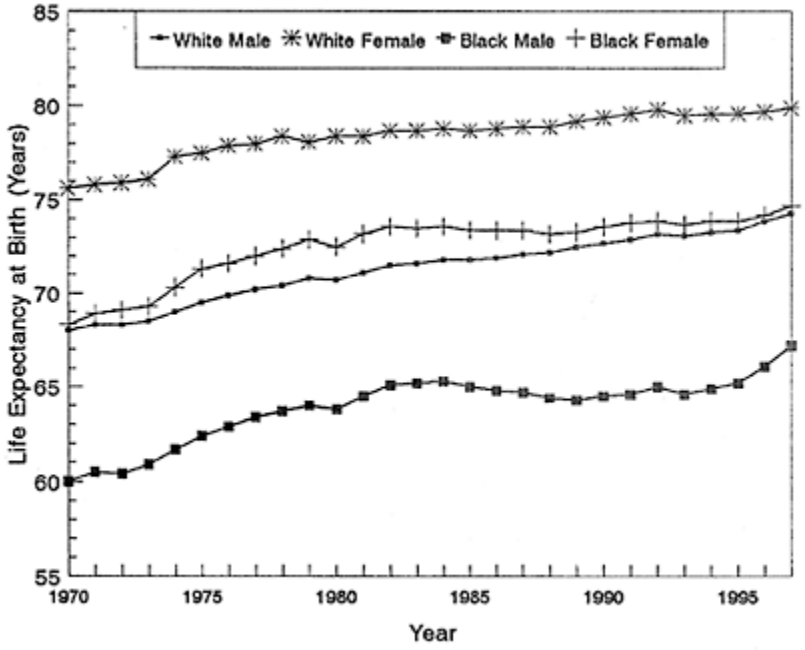

FIGURE 1–2 Life expectancy at birth in the United States from 1970–1997 in Black and White males and females

(based on data from Hoyert, Kochanek, & Murphy, 1999).

Gender differences in lifestyle cannot, of course, explain why the death rate for males is greater than that for females during infancy and even before birth. More male fetuses than female fetuses die before term, and more boys than girls die during the first year of life. Before it became medically possible to determine the sex of an unborn child, some enterprising gamblers allegedly found it profitable to wager that the sex of a newborn would be male. This was a safe bet, considering that the odds of having a baby boy are approximately 105 to 100. Because boys are more susceptible than girls to diseases in infancy, this ratio declines to about 1:1 by the end of childhood. A further drop in the ratio of males to females occurs during middle and late adulthood, resulting in there being at least twice as many elderly women than elderly men.

Ethnic Group Differences

Another important demographic variable that is related to life expectancy is ethnicity. A White baby born in the United States in 1997 could expect to live 77.1 years, compared with a life expectancy of 73.4 years for all other races and 71.1 years for Blacks. The difference of 6 years between the life expectancies of Whites and Blacks at birth decreases gradually with age until by age 85 the life expectancy of Blacks exceeds that of Whites (Hoyert et al., 1999; see Fig. 1.3).

Among the reasons for the shorter life expectancy of Black Americans until very late in the lifespan are poorer health care, inadequate nutrition, and poorer living conditions in general. In addition, hypertension, HIV infection, and diabetes are substantially higher among Black than among White Americans. The life expectancies of several other minority groups, but by no means all, in the United States are also significantly lower than that of Whites.

The differences between the life spans of Whites and most minorities in the United States are due primarily to environmental factors. This can be seen in the relationship of improved nutrition and medical care to greater gains in the life expectancies of non-Whites than of Whites. Poverty, poor education, inadequate housing, and unsanitary living conditions, malnutrition, lack of health care or failure to use available services, and hazardous working conditions are all more common among non-White than White Americans.

Socioeconomic Status

As the socioeconomic status of minority groups in the United States increases, more nourishing food, better housing, improved medical care, and a higher educational level result and create a narrowing of the longevity gap. Socioeconomic status is related to life expectancy and death rate in all ethnic groups. Two important contributing factors to socioeconomic status are education and income.

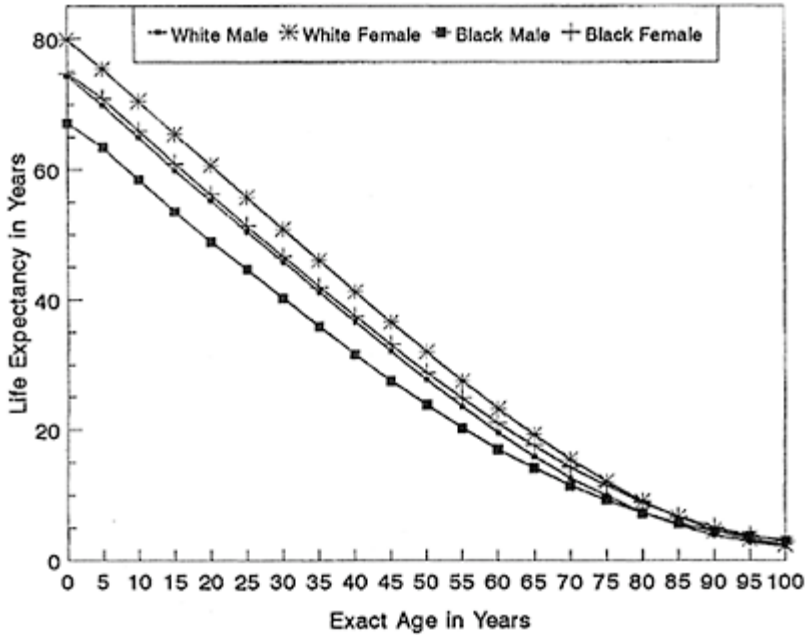

FIGURE 1-3 Life expectancy from birth to age 100 in the United States in Black and White males and females in 1997

(based on data from Hoyert, Kochanek, & Murphy, 1999).

As illustrated in Fig. 1.4, death rate is inversely related to educational level; the age-adjusted death rate is highest for Americans with less than 12 years of education, intermediate for those with 12 years of education, and lowest for those with 13 or more years of education. The figure also shows that the increase in death rate with chronological age is steeper for persons with less schooling, and for males in particular (Hoyert et al., 1999).

Sometimes the reason for the relationship between death rate and socioeconomic status is patently obvious, as when the supposedly unsinkable steamship *Titanic* struck an iceberg on the night of April 14–15, 1912. Only 705 of the 2,200 persons on board survived, and most of these were women and children. The official casualty lists showed that only 4 first-class female passengers out of a total of 143, 3 of whom voluntarily chose to stay on the ship, were lost. Among the second-class passengers, 15 of the 93 females drowned. Among the third-class passengers, 81 of the 179 female passengers went down with the ship (Lord, 1955). As in wartime, it was the less affluent who bore the brunt of the disaster.

Although mass production, modern technology, and modern medicine have done much to reduce social class differences in mortality, such differences persist. The differences are greater when mortality rates are high, as in underdeveloped countries. Social class differences

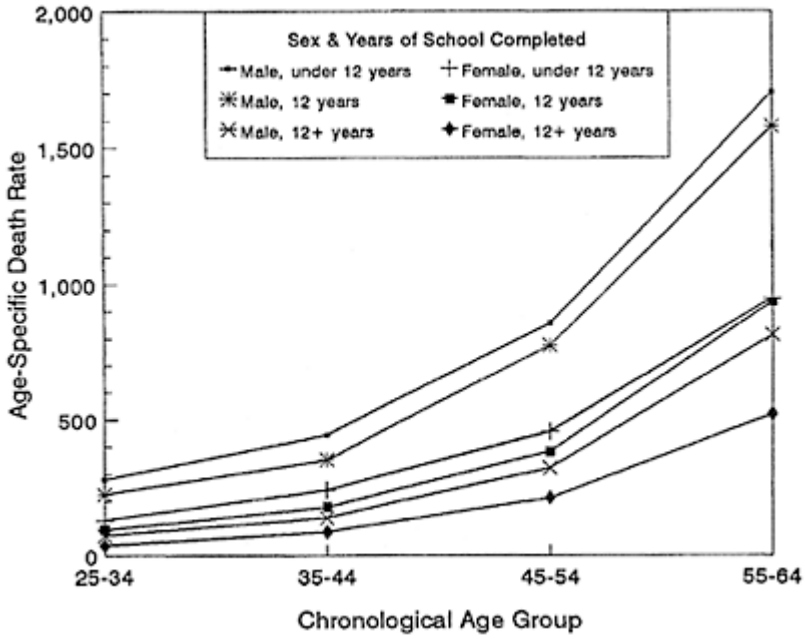

FIGURE 1-4 Age-adjusted death rate as a function of years of schooling completed and Sex in 1997

(based on data from Hoyert, Kochanek, & Murphy, 1999).

in mortality tend to rise until the middle years, reach a peak during the 30s and early 40s, and decline thereafter. The death rates for infants, children, and young adults are all higher in lower-class groups. This is because communicable diseases such as influenza, pneumonia, and other infectious conditions are more common in infancy, childhood, and young adulthood and among poor people. For example, mothers living in poverty have smaller babies, and smaller babies are more likely to die in infancy. This is reflected in the fact that the infant mortality rate in the United States in 1997 was 603.4 per 100,000 births for Whites and 1,416.2 for Blacks, who tend to be of lower social status than Whites (Hoyert et al., 1999).

The results of large-sample surveys in the United States and other countries have shown that self-reported health is inversely associated with socioeconomic status (Cohen, Kaplan, & Salonen, 1999; Stronegger, Freidl, & Rasky, 1997). Although the inability to afford good health care is an important cause of this relationship, another factor that can have an effect on the health of lower class people is differential treatment by medical personnel. For example, a study conducted by the National Cancer Institute found that impoverished Americans lacking access to qualified health care were more likely than other Americans to die needlessly from cancer because of inadequate diagnoses (Cimons, 1989). It has also been reported that efforts made by medical personnel to resuscitate victims of cardiac arrest varied with the apparent socioeconomic status of the victim: Efforts at resuscitation were less energetic with lower than middle and upper class victims (Simpson, 1979). Other factors, such as the perceived moral character and age of the victim, also appear to affect the extensiveness of resuscitation efforts.

Marital Status

As shown in Fig. 1.5, the age-adjusted death rate is lower for married persons than for those who are widowed, divorced, or never married. In 1997, Americans who were never married had the highest death rate, followed by those who were widowed, divorced, and married. This was true for both men and women, Whites and Blacks, and for all age groups 15 years and over. A number of explanations for these statistics have been offered, including the fact that physiologically and psychologically healthier individuals—factors that in themselves are associated with longevity—have more opportunities to marry and remain married for longer periods of time. Another explanation for the lower death rate and greater longevity of married people is that they are more likely to have adequate nutrition and much-needed emotional support than widowed, divorced, and never married persons. This appears to be especially true for men. Because these factors have positive effects on physical health, married men tend to recover from illness more quickly than single men and widowers (Atchley, 1996; Gove, 1973). Another possible reason for the greater longevity of married men is that unmarried men usually have fewer social ties than married men and consequently less social support in time of need (Gove, 1973).

Compared with the roles of married men, those of married women are more confusing and potentially frustrating. In contrast to their male counterparts, widows, divorcees, and single women have as many interpersonal ties as married women. Unattached single women may enjoy even higher social status than married women because they have larger incomes and are not subjected to the physical and psychological demands of married life. From a psychological viewpoint, women are viewed as benefitting less from marriage and suffering less than men from being single.

By studying records on a national sample of people who died between the ages of 35 and 74, Kobrin and Hendershot (1977) tested Gove's (1973) thesis concerning the relationship between social ties and longevity. A complex interaction between mortality rates and sex, marital status, and living arrangements was discovered. Among men, those who were heads of families lived longest, followed by those who were living in families but not as heads. Among women, those who were heads of families also lived longest, but in contrast to men, women who lived alone had the second-highest longevity. Lowest of all women in average longevity were those who lived in families but not as heads.

The above findings are generally consistent with those of Gove (1973). Close social ties and higher social status, which are more likely to occur within marriage than outside of it, favor greater longevity. However, this is truer for men than for women. Unmarried men usually have fewer social ties and lower social status than married men, but unmarried women usually retain their interpersonal ties and may have even higher social status than they would as dominated members of families.

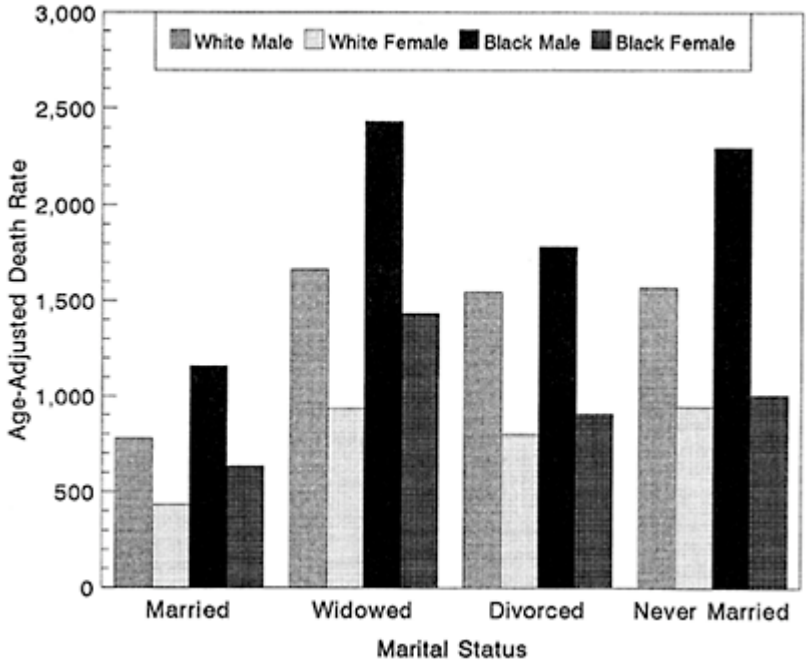

FIGURE 1-5 Age-adjusted death rate as a function of marital status, sex, and ethnicity in 1997

(based on data from Hoyert, Kochanek, & Murphy, 1999).

Social Support

Whether a person is married or not, the results of certain studies suggest that loneliness can have as great an impact as diet, alcohol consumption, smoking, or exercise in contributing to long life. The findings of studies conducted in Alameda County, California, for example, suggest that the relationship of social isolation to mortality is at

least as strong as that of cigarette smoking and lack of exercise to morality (Berkman & Syme, 1979). Further evidence for the importance of social interaction in fostering longevity was obtained in a study conducted in Tecumseh Community, Michigan (House, Robbins, & Metzner, 1982). These researchers found that married men who were involved in active rather than passive leisure activities and women who attended church often but rarely watched television had lower mortality rates than less socially active people.

The results of both the Alameda County and Tecumseh Community studies are consistent with the notion that social support is beneficial and social isolation is det-rimental to good health (see also Cohen et al., 1999; Horsten et al., 1999). Nevertheless, the precise reasons for the relationship between social support and health emain unclear. One possible explanation is that social support includes advice concerning good health practices. Incorporated in such advice is that a sick person should go to the doctor, comply with medical advice by taking appropriate medication, and watch his or her diet. Interactions with other people can also provide encouragement, give a person a greater sense of personal control, and serve as a buffer against stress (House, Robbins, & Metzner, 1982; Satariano & Syme, 1981). Which of these factors, or others, contribute most to health and survival is, however, not entirely clear.

PUBLIC AND PROFESSIONAL INTEREST IN THANATOLOGY

Research and writing on demographic variables related to death and dying are only one indicator of the death awareness movement of the past four decades. What was formerly something of a taboo topic has become the subject of extensive study and debate. Death is now a popular topic of discussion, not only among physicians, clergy, and psychologists, but among specialists in many other disciplines, professional writers, and laypersons. Spurred by documentaries and fictional accounts in the media concerned with death and dying, interest in the topic has grown substantially since the 1950s. Hundreds of articles and books dealing with the results of medical, psychological, anthropological, and sociological studies of death and dying have been published. Responding to this growing volume of literature, a number of professional journals devoted exclusively to death, dying, and bereavement, including *Omega: The Journal of Death and Dying, Advances in Thanatology,* and *Death Studies,* are now published (see Appendix A).

In addition to reports of empirical investigations, there has been an increase in theoretical and other speculative writings on matters related to death and dying. Creative works of literature and art pertaining to the topic are also numerous. The demand for academic courses and course units devoted exclusively to the topic, not only at the college level but also in elementary and secondary schools, has increased. At some universities courses on death and dying are almost as popular as those on human sexuality! Students who enroll in such courses read and talk about death, listen to recordings made by dying people, view films and video recordings concerned with the topic, draw pictures or write poems illustrating their ideas about death, plan their own funerals, write their own obituaries and epitaphs, and take field trips to funeral homes, cemeteries, hospices, nursing homes, and special care units within hospitals for critically ill children and adults. These activities not only provide information but also help students become more aware and accepting of their own mortality and more sensitive to the needs of the dying.

Events Promoting an Interest in Thanatology

What factors are responsible for the growing interest in a seemingly rather depressing topic such as death? To begin, it should be pointed out that *thanatology,* the study of death and dying, is an interdisciplinary field. In addition to medicine, nursing, and other health professions, it involves the biological sciences, the social sciences, the humanities, and even business. The contributions of each of these disciplines to an understanding of death are considered in various chapters of this book.

Impetus for the death awareness movement has come from cooperative efforts and interchanges among specialists in many disciplines. Especially noteworthy in medicine and psychology are the research and writings of Elisabeth Kübler-Ross. Kübler-Ross's 1969 book, *On Death and Dying,* which introduced her conception of psychological stages in the dying process, has been particularly influential in stimulating interest in the field. The popularity, in both professional and lay circles, of Kübler-Ross's writings suggests something about the social climate in the United States during the 1960s and 1970s. This was a time of nightly newscasts depicting the gore of war and describing it in terms of "body counts" of people who were "wasted," It was a time when students were interested in subjectivism, Eastern religions, holocaust (genocide) studies, and the dangers of nuclear war. There was wider public acceptance of freedom of individual expression in behavior and alternative lifestyles, as well as social and legal concerns with the civil rights of ethnic groups and women. The elderly population was growing, the average age of the American population was increasing, and scientists were beginning to understand the biology of aging and dying. It was a time when Karen Ann Quinlan and other victims of irreversible coma prompted the medical profession to reexamine its definition of death. All of these events, collectively and interactively, contributed to an increased interest in death, dying, and bereavement.

Organizations Concerned With Death, Dying, and Survival

Many professional, governmental, and lay organizations are concerned in part or exclusively with death and dying. The names and addresses of many of these organizations are listed in Appendix B. Most of the organizations publish some kind of newsletter or professional journal (see Appendix A), and some hold annual meetings or conventions.[3]

Certain professional and lay organizations focus on a special topic or issue, such as cancer, capital punishment, euthanasia, grief, hospice care, near-death experiences, pain control, suicide, or widowhood. National organizations may also have local chapters, and there are many independent local societies as well. For example, locally run cryonics

[3]Internet addresses are provided for most of the organizations listed in Appendix B and for some of the journals in Appendix A. In addition, the student is encouraged to log on to Thanatolinks *(www.lsds.com/death),* which links to some of the best sites related to death and dying on the internet. Research information on death, dying and bereavement may also be obtained from the web sites of the American Psychological Association *(www.apa.org),* the American Sociological Association *(www.asanet.org),* the American Anthropological Association *(www.ameranthassn.org),* and the American Historical Association *(web.gmu.edu/chnm /aha/index.html)*.

societies preserve dead bodies by freezing them to the temperature of solid carbon dioxide. It is possible, but rather unlikely, that the frozen corpses will be thawed and restored to life sometime in the future when cures for the terminal illnesses from which the persons died have been discovered.

There are also organizations concerned with the commercial and political aspects of death and dying. Associations of nursing homes, funeral homes, and other business establishments deal with matters related to death and dying. Almost every American municipality has at least one funeral home, and there are thousands of nursing homes and hospices throughout the United States. As a result, national organizations of these commercial establishments are quite effective in influencing legislation pertaining to their affairs.

Research on Death and Dying

Much of the research and training associated with death and dying is conducted at university-based centers. These activities are financed by private foundations and by state and federal government agencies. The research and educational activities of publicly and privately funded organizations concerned with death, dying, bereavement, and widowhood are considered in greater detail in appropriate chapters of this book. This research has been conducted by medical scientists, psychologists, sociologists, and other specialists. The medical aspects of diseases that lead to death are, of course, primarily the province of physicians and other medical specialists. However, research on the role of psychological factors in dying, how to help dying people in their efforts to cope with death, and grief therapy for the survivors, requires the skills of psychological scientists. Epidemiological studies of lifestyles and other social factors that contribute to disease and death, in addition to cross-cultural studies of the causes of death in different countries and cultures, require the participation of sociologists, anthropologists, psychologists, and medical researchers. Other research concerned with the causes, progress, and outcomes of various disorders that lead to death may require the efforts of a team of specialists.

Many methods have been used in scientific investigations of death and dying. The *experimental method,* in which certain variables are manipulated in a controlled manner to determine their effects on respondents, is used less often than observational, interviewing, correlations, and survey methodologies. Only the experimental method can be relied on to provide cause-effect information, but other methods are useful in suggesting causes or at least connections between variables. Both experimental and nonexperimental procedures may be used in longitudinal and cross-sectional studies. In a *longitudinal study,* a group of people is followed over a period of time to determine the effects of some manipulated or naturally occurring variable on the behavior or condition of the group members. In a *cross-sectional study,* people of different ages are compared at a certain point in time to yield information on age or cohort[4] differences in behavior and other characteristics. Combinations of the longitudinal and cross-sectional approaches, by separating the effects of time and cohort differences, can provide even more useful information than either approach alone.

A distinction is also made between prospective and retrospective studies. In a *prospective study,* people who are exposed to certain conditions or influences or who

[4]A *cohort* consists of a group of people of the same age, social class membership, or culture, such as all people born in a particular year or in a similar cultural or social environment.

possess certain behaviors or characteristics at one point in time are reexamined at a later time to see how they may have changed or developed. Thus, in a prospective study, children or young adults with certain characteristics are identified and then kept track of for the remaining years of their lives to see what happened to them. In a prospective study concerned with death and dying, for example, researchers might identify certain characteristics in a population and then follow up the targeted individuals to determine what relationships, if any,there are between those characteristics and the time and conditions of their demise. On the other hand, in a *retrospective study* the personal histories of a group of people, that is, their past experiences or the conditions and influences to which they were exposed, are examined and related to their present behavior and circumstances. Thus, researchers might compare the past histories of a group of sexagenarians dying of cancer with a comparable healthy group of their age-mates to determine what background factors may have contributed to differences in the conditions or characteristics of the two groups.

All of these approaches require some form of measurement or assessment, which may include observations, interviews, questionnaires, and tests. An acute observer or sensitive interviewer can obtain much information about a person's experiences, feelings, attitudes, and behavior related to death and dying and other matters. In addition, carefully constructed questionnaires and attitude or opinion scales can make the process of information gathering more efficient. For example, attitudes toward or fears of death have been examined not only by observing people but also from responses to questionnaires, rating scales, and paper and pencil inventories and tests (see Box 1.3).

Research on matters pertaining to death and dying has been conducted in a variety of settings, including laboratories, hospitals, nursing homes, classrooms, residences, playgrounds, and even in the streets. Although it is desirable to have as much control as possible over extraneous variables when conducting such investigations, tightly controlled research in this field is seldom possible. Researchers must often make their observations and measurements in naturally occurring situations rather than in a controlled context such as a laboratory or a classroom. It is hoped that the richness of the information obtained in this way makes up for its lack of precision.

SUMMARY

Human beings realize the inevitability of death, but they often find it difficult to apply this understanding to themselves. Death has become less visible today than in former times, and this very fact supports the avoidance or denial of its inevitability. Direct experiences with death are unusual for most people, although vicarious exposure through news stories and motion pictures is common.

The term *death* has multiple meanings—biological, psychological, social, legal, and spiritual. Reference to the death of a human being, however, usually implies biological (somatic or natural) death, the irreversible breakdown of respiration and the consequent loss of the body's ability to use oxygen. The medical determination of death has become more complex in recent years and now includes not only the traditional signs (unresponsiveness to sensory stimuli, absence of respiration, absence of reflexes), but also a more recently adopted indicator—a flat EEG (a sign of brain death). The indicators must be verified by two physicians before a judgment of death is rendered. In cases of

deep coma, certain signs of death are present for a time, but the patient may eventually revive. Consequently, the presence of the above indicators must be redetermined after 24 hr in order to make a diagnosis of death.

The computation of death rates (crude, age-specific, age-adjusted), life expectancy, and similar vital statistics is the business of demographers. The crude death rate in a population is the average number of deaths per 1,000 or 100,000 people during a given year. Life

BOX 1.3 Inventory of Attitudes and Beliefs About Death

Part I: Indicate the extent to which you approve or disapprove of each of the following. Use the following scale:

Sa=Strongly Approve
A=Approve u=Undecided
d=Disapprove
Sd=Strongly Disapprove

__ 1. Aborting a fetus because the mother does not want the child
__ 2. Aborting a fetus to preserve the mother's life or health
__ 3. Assisting a sick person to die if he or she wants to
__ 4. Committing suicide when life becomes unbearable because of continual pain and suffering
__ 5. Disposing of a dead body by cremation
__ 6. Executing a person who has committed first-degree murder
__ 7. Big, expensive funerals
__ 8. Extending the life span of human beings indefinitely
__ 9. Holding a memorial service rather than a funeral
__10. Killing an enemy soldier during wartime combat
__11. Taking care of a dying person at home rather than in a hospital
__12. Teaching older children about death and dying
__13. Teaching younger children about death and dying
__14. Using extraordinary medical measures to keep a dying person alive
__15. Withholding life support from a newborn baby who is mentally and/or physically disabled

Part II: Indicate the extent to which you believe or disbelieve in each of the following. Use the following scale:

SB=Strongly Believe
B=Believe
U=Undecided
D=Disbelieve
SD=Strongly Disbelieve

To what extent do you believe in:

__ 1. A day of reckoning when all souls will be judged
__ 2. A supreme being (God or Allah)
__ 3. A final battle of good and evil at the end of the world
__ 4. An immortal human soul
__ 5. Everlasting bliss for the faithful or righteous in heaven
__ 6. Everlasting punishment for sinners in hell
__ 7. Reincarnation of the soul into another body or form after death
__ 8. Resurrection of the body (rising from the dead) on Judgment Day
__ 9. The spiritual reality of near-death or out-of-body experiences
To what extent do you believe that:
__ 10. God forgives sins and sinners
__ 11. God hears prayers and responds to them
__ 12. Whether one goes to heaven or hell is predestined (preordained)
__ 13. Salvation comes through God's grace
__ 14. Salvation comes through good works or deeds
__ 15. Spirits of the dead communicate with and influence the living

expectancy is the average lifespan in years of people who were born in the same year. The overall crude death rate for the United States in 1997 was 864.7 deaths per 100,000 population, and the average life expectancy at birth was 76.5 years.

Both the rate and causes of death vary with historical period and chronological age. The overall crude death rates in the United States in the late 1990s fell from slightly over 700 per 100,000 persons in infancy to around 20 per 100,000 persons in childhood and early adolescence; it then rose to over 15,000 per 100,000 persons in old age. Nearly three-fourths of the residents of the United States who died in a given year during the late 1990s were over age 65. Compared with the situation that prevailed early in this century, the infant death rate in the United States has become quite low. The major killers of yesteryear were infectious diseases such as influenza, pneumonia, and tuberculosis, which struck both the young and the old. The greatest number of deaths today are attributable to heart disease, cancer, stroke, and other chronic disorders that are more likely to afflict the older adult segment of the population.

Women in the United States, both White and non-White, live longer on the average than men, and married people live longer on the average than single people. The death rate is higher and life expectancy is lower among Black than among White Americans, but the mortality gap between White and Black Americans has narrowed considerably during the past century. Differences among ethnic groups in death rate and life expectancy are related to social class and culture. Social class differences in death rates are greater during infancy, childhood, and young adulthood than during middle and later adulthood.

Though death and dying had previously been somewhat of a taboo topic in Western nations, interest in the subject has grown during the past half century. Academic courses, books, media stories and dramatizations, and research investigations concerned with death and dying have increased substantially since the 1950s.

Thanatology, the study of death and dying, is an interdisciplinary field. Specialists in a variety of natural and social science disciplines, theologians, lawyers, and historians are

interested in the problems of death, dying, and bereavement. The interdisciplinary focus of thanatology is reflected in the content of this book, which deals with biological, psychological, sociological, philosophical, theological, legal, and even commercial matters concerned with death and dying.

Many research and educational projects dealing with death, dying, and grief are supported by private foundations and governmental agencies. These foundations, agencies, and other organizations composed of professional people, public officials, and laypersons usually focus on one or more specific issues concerning death and dying. Among these matters are methods of treating and curing cancer, cardiovascular disorders, and other serious illnesses, the pros and cons of capital punishment, legal and ethical aspects of abortion and euthanasia, the advantages of hospice care and other methods of caring for terminally ill patients, the meaning of near-death and out-of-body experiences, cryonics, the use of addictive drugs for controlling pain in terminal patients, the prevention of and intervention in suicide, and problems of bereavement and widowhood. A variety of methods and materials are used in research on death and dying. Non-experimental procedures such as correlational techniques and surveys are more common than experimentation. Longitudinal and cross-sectional, prospective and retrospective research designs are all used. Methods for assessing dependent or outcome variables in these studies include observations, interviews, questionnaires, rating scales, inventories, and tests.

QUESTIONS AND ACTIVITIES

1. Describe a time when you came close to losing your life. Did your whole life flash before you? What emotions did you experience? How did you feel afterward?
2. Have you ever experienced the death of a close friend or relative? What did the person mean to you, what reactions did you have to the death, and what do you miss most about him or her?
3. Would you like to live a long life? Do you expect to do so? What exercise, diet, or other regimens do you follow in order to increase your chances of living a long time?
4. Can you imagine your own death? What do you think it will be like? Imagine you own funeral. Who will be there? What will be said and done?
5. Describe the happiest death you can imagine, and then compare it with the saddest death you can think of. What makes a death happy or sad? Is it happy or sad to the dying person, the survivors, or both?
6. To what age would you like to live? To what age do you expect to live? How do you account for any discrepancy between these two ages?
7. What factors, both controllable and uncontrollable by you, are likely to shorten or lengthen your life compared with the average life expectancy?
8. Describe the relationships of gender, race, age, marital status, geographical area of residence, and socioeconomic status to life expectancy, death rate, and cause of death.
9. Complete the Inventory of Attitudes and Beliefs About Death in Box 1.3, and compare your answers with those of your classmates.
10. Web exercise: Would you like to have your body, after you die, deep-frozen and preserved in liquid nitrogen in a special aluminum capsule? Cryonics organizations

maintain that a body preserved in this manner can be thawed and restored to life at some future date when a cure for the disease that caused the person's death is discovered. Log on to the following web sites and make notes on their claims and services. Then see if you understand the following joke: Q: Do you know the way you can tell that you got a really bad suspension? A: You know you got a bad suspension if the fellow sitting next to you at the reanimation party tells you his name is King Tut.

Alcor Life Extension Foundation: *www.alcor.org*
American Cryonics Society: *www.jps.net/cryonics*
Cryonics Association of Australia: *www.pricom.com.au/caa*
CryoCare Foundation: *www.cryocare.org*
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PART II

CAUSES AND CIRCUMSTANCES OF DEATH

2
AGING, DISEASE, AND STARVATION

TOPICAL OUTLINE OF THE CHAPTER:

Aging and longevity
- *Age-related changes*
- *Individual differences in aging*
- *Premature aging*
- *Factors affecting aging*

Theories of aging
- *Breakdown theories*
- *Substance theories*
- *Hormonal theories*
- *Aging clocks*

Fatal diseases
- *Demographic variables*
- *Cardiovascular diseases*
- *Demographics and lifestyle factors in cardiovascular diseases*
- *Care and treatment of heart attack victims*
- *Cancer*
- *Other potentially fatal diseases*
- *Diseases in young children*

Epidemics and starvation
- *HIV infection and AIDS*
- *Other epidemic diseases*
- *Starvation*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *What structural and functional changes occur in the human body with aging?*
- *How and why does the rate of aging vary with the individual, and what environmental and behavioral factors affect it?*
- *According to various theories, what processes cause aging?*
- *What are the most fatal diseases, what are their dynamics, and how do they vary with time and place?*
- *What lifestyle variables and psychological factors are related to fatal diseases ?*
- *What factors have been responsible for epidemics and famine, both from a historical perspective and on the contemporary scene?*
- *What are the physical and psychological effects of starvation, and how are they treated?*

As any health professional should know, approximately 75% of the more than 6,000 people in the United States who die on an average day are 65 years old or older. The deaths of these people are not caused by old age per se; that is, no genetically programmed clock within them automatically stops because their allotted time on earth

has expired. Approximately two-thirds of those who die do so because of heart disease, cancer, or stroke—the three leading causes of death in older Americans. Many others die accidentally or violently, but the great majority die of one or more illnesses.

Although death in highly industrialized countries is more common in old age, it is no stranger to youth and middle age. In the United States, one-fourth of those who die are under age 65. However, the causes of death vary dramatically from childhood through old age. Accidents are the leading cause of death among American children and young adults, malignant neoplasms are the major cause of death in middle-aged adults, and heart disease kills more older adults than any other disorder.

This chapter focuses on aging and disease, so-called natural or *intrinsic* causes of death. Unnatural or *extrinsic* causes of death—accidents and suicide—are dealt with in chapter 3, and two others—murder and war—are considered in chapter 4. Natural causes of death—aging and disease—would seem to be purely physical in origin, but, like accidents, homicide, and suicide, they also have psychological components. In fact, almost all fatal conditions, and the process of dying in general, are influenced by a complex interaction of biological, psychological, and social factors. This chapter and the next two are concerned with the influences of these factors on human mortality.

AGING AND LONGEVITY

Only a handful of people live to what scientists consider the maximum life span for human beings. The 1998 *Guinness Book of World Records* lists the greatest authenticated age as 122 years, a lifespan attained by a French woman, Jeanne Louise Calment, at the time of her death in 1997. The gradual deterioration of body tissues and organs with aging, known as *senescence,* is accelerated by disease processes, physical trauma, inactivity, psychological stress, and other conditions. Many people appear to die of old age, but their deaths are usually the result of an interaction between the natural processes of aging, which increase vulnerability to disease and accidents, and the more direct effects of illness, trauma, or both.

Despite the difficulty of separating the specific effects of aging from those of disease, gerontologists make a distinction between primary aging and secondary aging. *Primary aging refers* to a genetically regulated set of biological processes that occur over time and result in a decline or leveling off in size and efficiency. *Secondary aging,* on the other hand, consists of decrements in structure and functioning of the body caused by disease, trauma, and other environmental events that are not directly related to heredity.

Age-Related Changes

Aging involves more than the acquisition of gray hair and wrinkles. As a person ages, decrements in structure and functioning occur at many different levels. Physiological changes occur in the cardiovascular, respiratory, nervous, musculoskeletal, immune, and sensory systems of the body. At the structural level, lean body mass, muscle tissue, bone density, and brain size all decrease. At the functional level, basal metabolic rate, heart rate, breathing rate, and kidney functioning decline, while blood cholesterol level increases. Age-related decrements occur in the functioning of cells, systems, and

combinations of systems. The number of neurons and neural cell dendrites in the brain decreases, and the neural transmission rate slows down. The little tubules and filaments of neural tissue in the brain become entangled, giving a spaghetti-like appearance to this organ. There is an increase in *lipofuscin* (the tiny yellow-pigmented granules in neurons) and an accumulation of the fatty, calcified material known as *plaque* at neuronal synapses. Changes also occur in neurotransmitters, chemical substances that are responsible for transmitting nerve impulses across synapses.

Hardening of the arteries *(arteriosclerosis)* in old age affects circulation of the blood, and changes in the structure of collagen influence the functioning of the heart, lungs, kidneys, and other visceral organs. Strands of *collagen,* a fibrous protein material found in connective tissue, bones, and skin, become linked together and less elastic with age; this leads to slower responsiveness and slower recovery of vital systems. These structural changes with aging are accompanied by reductions in basal metabolic rate, mean heart rate, and kidney filtration rate. Muscular strength also declines, and all five senses become less acute. A common sign of aging is the formation of a cloudy ring, called *arcus senilis,* around the cornea of the eye.

Age-related changes in collagen promote *osteoarthritis* (inflammation of the joints) and less flexible skin. Besides having a wrinkled appearance, the skin of older adults is rougher, dryer, more easily bruised, less hairy, and more inclined to develop pigmented areas that may be malignant. These changes, coupled with a thickening of the eyelids and a hollowing of the eye sockets, can greatly alter one's facial appearance in old age. Behavior and appearance are also affected by the stiffening of hip and knee joints and compression of the spinal discs. This compression, which results from a loss of collagen between the spinal vertebrae, causes a stooped posture and makes older people look shorter.[5] Thus, aging involves a breakdown in several systems within the body, ultimately resulting in death when a sufficient number of the cells comprising these systems are altered.

Because aging produces losses in all body systems, actions that require the cooperation of several systems are most likely to be affected. For example, complex motor skills involving the coordination of sensory, neural, and motor systems manifest a greater age-related decrement than simple, well-learned, automatic responses. However, older people usually do everything more slowly (or perhaps more deliberately) than when they were young. It has been said that the most characteristic thing about being older is being slower, a process manifested in a wide range of physical and mental activities.

Individual Differences in Aging

Despite significant changes in body structure and functioning with aging, parallel changes in behavior do not necessarily occur. People can compensate for disabilities by

[5]In a sense, all upright people are taller (longer) than they appear to be. Because of the effect of gravity, people are longer in a prone position than in a standing position. However, the fact that objects are perceived as longer in the vertical than in the horizontal plane (the horizontal-vertical illusion) may compensate for the effect of this physical change on what is actually observed.

exercising good judgment about their health and capabilities and pacing themselves accordingly. Many older victims of serious disease or disability bounce back and continue functioning effectively for years after the onset of illness.

In a sense, the structural and functional changes accompanying old age can be viewed as simply another source of stress in a person's life—stress that some people can cope with quite effectively but that may devastate others. Regardless of how well they are able to meet the assaults of the environment and the natural aging process, for most people the combined effects of aging, disease, and trauma begin to take their toll by the eighth decade of life. However, many people continue to feel lively and cheerful and to function well even into their ninth and tenth decades. These individuals do not profess to have any magic formula for survival, but they offer various explanations for their long and fairly healthy lives. Many claim that the key to good health and longevity is moderation in all things, but somewhat peculiar explanations such as Fanny Thomas's nostrum of eating applesauce three times a day and never marrying (Walford, 1983) or Eubie Blake's prescription of "good cigarettes, good whiskey, and bad women" have also been suggested. But these and many other recipes offered for a long life, such as goat gland surgery, transplanted ape testicles, inhaling the breath of young girls, and imbibing various elixirs, are of highly dubious value. Perhaps less controversial is the claim by Jeanne Calment that an occasional glass of port and a diet rich in olive oil contribute to a long life ("Canadian Said to be Oldest Person," 1997).

Premature Aging

Obviously not everyone lives as long as he or she might like, but some people age much more rapidly than the norm. Children afflicted with *progeria,* a rare disorder that mimics premature aging, may begin to look old as early as age four and die in their teens. One rare form of this disorder that begins in childhood is *Cockayne's syndrome*. Individuals with this condition show signs of premature senescence and appear to die of old age while they are still children or teenagers (see Fig. 2.1). Another variety of progeria is *Werner's syndrome,* a condition of arrested growth that has its onset between the ages of 15 and 20. Individuals afflicted with Werner's syndrome develop signs of aging, such as graying and thinning hair, deteriorating skin, cataracts, tumors, and arteriosclerosis, in early adulthood. Be that as it may, all progeria-type disorders are considered to be caricatures of aging rather than true aging: Victims of the condition develop many of the external indicators but not the age pigmentation and collagen changes of true aging.

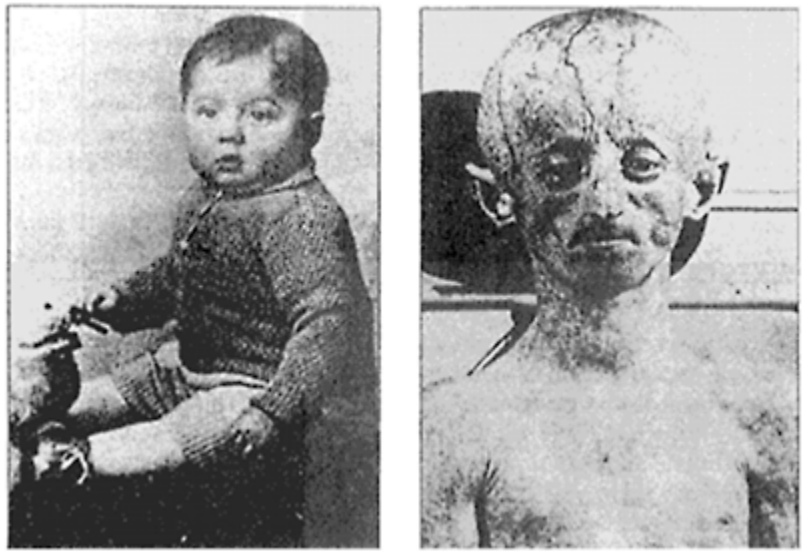

FIGURE 2-1 Development of progeria. At 10 months (left), the child was apparently normal; at 14½ years (right), a late stage of progeria is evident.

(From by F.L.DeBusk, 1972, *Journal of Pediatrics 80;* 697. Copyright 1972 by C.V.Mosby Co. Reprinted with permission.)

Factors Affecting Aging

It is not surprising that many of the same demographic variables that are associated with mortality—gender, ethnicity, marital status, socioeconomic status, and so on—are also related to aging. For example, women tend to age less rapidly than men, and people of higher socioeconomic status age less rapidly than those of lower status. Other variables that seem to have some connection with aging are nutrition (diet), exercise, heredity, and psychological characteristics.

Nutrition. Studies of the effects of nutrition on aging and longevity are concerned with both the amount and type of food ingested. The *McKay effect,* that undernutrition without malnutrition increases longevity, was named after the biologist Clive McKay. Evidence in support of this effect has been obtained with rats and other small animals (Masoro, 1988; E.L.Schneider & Reed, 1985; Walford, 1983), but the effect has not been conclusively demonstrated in humans. Research does seem to show, however, that people of moderate weight live longer than those who are significantly underweight or overweight (Kaplan, Seeman, Cohen, Knudsen, & Guralnick, 1987). To the extent that longevity can be increased by caloric restriction, it is probably the result of lower levels of blood glucose and insulin and the consequent reduction in the ill effects of free radicals that damage cellular DNA (Butler & Fillit, 1998).

Explanations regarding the effects of specific types of food on aging are not entirely clear. It is true that too much salt and too many fatty or sweet foods contribute to a variety of diseases, but nutritionists do not always agree on the best diet for promoting a long life. The results of observational studies of the Abkhasians of the Caucasus region and other long-living peoples suggest the following dietary guidelines for improving the chances of living a long time:

- lower protein intake and more protein from vegetables (grains, legumes, cereals) and less from animal products (red meat, whole milk, eggs);
- less fat, especially animal fat;
- fewer calories—enough to satisfy energy requirements, but no more;
- skim milk instead of whole milk products;
- chicken and fish more often and red meats only three or four times a week; and
- greater portions of whole grains, beans, rice, nuts, fresh fruits, and vegetables to provide essential vitamins, minerals, and fiber. (Gots, 1977, p. 168)

Unfortunately, information concerning the relationship of nutrition to aging and longevity is based mostly on observation and anecdote rather than scientific experiments. Certain researchers have maintained that taking antioxidants, which are substances such as Vitamin E and selenium that neutralize free radicals, can lengthen life (e.g., Weindruch & Walford, 1988).

Exercise. Regular exercise has been found to reduce the severity of system disorders (Hill, Storandt, & Malley, 1993). Walking, swimming, calisthenics, jogging, and other moderate aerobic exercises increase oxygen consumption, ventilation capacity, cardiac output, blood flow, muscle strength and tonus, and the flexibility of joints. Regular exercise also reduces body fats, poisons, blood pressure, the response times of body cells and organs, and nervous tension, in addition to enhancing one's sense of well-being, self-efficacy, control, the ability to cope with stress, and general psychological health (Brown & Siegel, 1988; King, Taylor, Haskell, & DeBusk, 1989). Exercise also has beneficial effects on depression, anxiety, and other symptoms of psychopathology (McNeil, LeBlanc, & Joyner, 1991; Petruzello, Landers, Hatfield, Kubitz, & Salazar, 1991).

Heredity. There is humorous truth in the saying that if you want to live a long time, you should choose your own grandparents. Casual observation and systematic investigation both indicate that the rates of aging and longevity run in families (e.g., Kallmann & Jarvik, 1959). Heredity is certainly one of the most important factors in aging, but it is a post hoc variable from an aging person's viewpoint and not under his or her direct control. Furthermore, even people whose parents' lives were shorter than average can hope to extend their own life spans by following good health practices.[6]

[6]In actuality, most people live longer than necessary to fulfill the biological purpose of their lives—that of reproduction. After one has reached middle age and fulfilled this "purpose," from nature's viewpoint he or she is of no further evolutionary value.

Psychological Factors. Somewhat more controllable than genetic endowment, or at least more subject to personal choice, is one's outlook or attitude toward life. Among the psychological variables that have been found to be related to longevity are personal resourcefulness, conscientiousness, and the degree of control and personal responsibility felt by the individual (H.S.Friedman et al., 1992; Granick & Patterson, 1972). Any sudden change in the lifestyle of an older person—retirement, the death of a loved one, hospitalization, placement in an institution, moving from one place to another—is stressful to some degree. A person can cope more effectively with the stress, however, if the change is voluntary and planned with his or her cooperation. In contrast, a significant change over which the person has no control can lead to a sense of helplessness, hopelessness, and, under certain circumstances, even death (Seligman, 1992).

THEORIES OF AGING

Hundreds of theories have been proposed to explain the aging process, some of them dating back to ancient times. Hippocrates, perhaps the first medical researcher to consider the problem, hypothesized that a decline in body heat is the cause of aging. Other explanations advanced in earlier times were Erasmus Darwin's notion that aging is due to a loss of irritability in neural and muscular tissue and Eli Metchnikoff's concept of *autointoxication* (Wallace, 1977). Current theories attempt to explain aging as the consequence of changes in the body that can be attributed to a variety of factors —hereditary, environmental, developmental, and pathological. Here I touch only a few major ideas, but the reader is encouraged to look elsewhere for more details (e.g., Austad, 1998; Carlson & Riley, 1998; Harman, 1998; Kirkwood, 1998; Kirkwood & Kowald, 1997; Masoro, 1997; Olovnikov, 1996; Pereira-Smith, 1997).

Breakdown Theories

According to breakdown theories, aging is the result of wear and tear, stress, or exhaustion of body organs and cells. Body organs are thought to wear out with use and exposure to various type of environmental stress. An argument against the wear-and-tear explanation is that body tissues and organs rarely wear out through overuse. At least within limits, exercise, which constitutes active use of body organs, enhances physiological functioning and longevity. Hans Selye's (1976) *stress theory,* according to which every individual inherits a certain amount of adaptation energy and that the rate of aging varies directly with how liberally this energy is expended, can be criticized on similar grounds.

Another breakdown explanation of aging is *homeostatic imbalance theory,* which attributes aging to the breakdown of homeostatic, or self-regulatory, mechanisms that control the internal environment of the body. Comfort (1964) viewed aging as the result of an accumulation of homeostatic errors or faults and a consequent loss of the ability to maintain a steady, homeostatic internal balance in the body. Support for this notion is found in the fact that as humans age, they take progressively longer to readjust after physical exertion.

Other examples of breakdown theories are *immunological theory* and *autoimmunity theory*. Immunological theory views aging as caused by the gradual deterioration of the immune system, so the body can no longer protect itself adequately against injury, disease, and mutant or foreign cells. Consistent with this explanation are adult onset diabetes, senile dementia, certain vascular diseases, and the age-related decrease in hormone secretions by the thymus gland that regulate T-cell production (Zatz & Goldstein, 1985). Research has shown that the number of doublings of T cells declines with aging (Walford, Jawaid, & Naeim, 1981). Because animals without immune systems still age, rather than being a cause of aging the decline in functioning of the immune system with aging may be attributable to changes in the endocrine system produced by the aging process.

Autoimmunity theory emphasizes that because the aging body becomes unable to differentiate between normal and abnormal cells it creates antibodies to attack both types of cells and consequently rejects its own tissues. An example of an autoimmune disease that is characteristic of older adults is rheumatoid arthritis, which occurs more often in older than in younger adults. Like changes in the immune system, however, the observed decline in autoimmunity is probably a consequence rather than a cause of aging.

Substance Theories

Substance theories of aging, at the tissue level, emphasize changes in collagen and the proliferation of mutant cells. According to *error accumulation theory,* the accumulation of random errors in the synthesis of new proteins causes cells to malfunction and ultimately die. The number of mutant cells also increases with aging, raising the probability of cancerous growths. Changes with age in the strands of connective tissue protein (collagen) also result in less elasticity or resilience in visceral organs, slower healing, and other changes in the body (see Gallant, Kurland, Parker, Holliday, & Rosenberger, 1997; Holliday, 1996).

Other substance theories attribute aging to *cross-linkages, free radicals,* and *hormones*. Cross-linkage is the inadvertent coupling of large intracellular and extracellular molecules that cause connective tissue to stiffen. With age, molecules of collagen, which is the primary intercellular connective tissue, become linked or coupled. As a result, the skin becomes leathery, wrinkled, and not as pliable as it was in youth, the joints stiffen, and the arteries harden. It has also been suggested that cross-linkages of DNA molecules prevent the cell from reading genetic information properly (Shock, 1977). Consequently, enzymes that are sufficiently active to maintain the body and its functions are not produced. As with changes in the immune system, however, cross-linkage is probably an effect or correlate rather than a cause of aging.

A popular theory of aging at the cellular level emphasizes the accumulation of free radicals as the primary agent (Harman, 1987; see also Ashok & Ali, 1999; Beckman & Ames, 1998). Free radicals are highly unstable molecules or parts of molecules that contain a free electron. They are produced by adverse reactions of body cells to radiation, air pollution, pesticides, and even oxygen. Free radicals are highly reactive, connecting to and damaging normal cells or their DNA, thereby causing mutations and possibly cancer. The damaged cells or DNA are repaired more quickly in younger than in older people (Hart & Stelow, 1982; Walford, 1983). Free radicals are thought to play a role in age-related conditions such as Alzheimer's disease, arteriosclerosis, arthritis, cataracts, osteoporosis, and Parkinson's disease.

Antioxidants such as vitamins C and E and beta carotene, which are found in fruits, vegetables, and other foods; nutrients such as selenium, cystene, and uric acid; and synthetic molecules such as DMSO, BHT, and BHA have a limited effect in inhibiting the destructive (oxidizing) activities of free radicals (Butler & Fillit, 1998).

As a person ages, waste products of body metabolism, many of which are poisonous and can interfere with normal cell functioning, build up. Cell deterioration also occurs when there are failures in the delivery of oxygen and nutrients to the cells. Within the cytoplasm of the cell are thousands of little energy packets known as *mitochondria,* which are composed of highly unsaturated fats combined with sugar and protein molecules. According to one theory, aging is caused by an accumulation of mutations in mitochondria, interfering with the energy-releasing function of these structures. As a cell ages, the mitochondria become more defective, producing fewer energy molecules and more free radicals. Eventually, the mitochondria produce little energy and more free radicals, causing the cell to "run out of steam" (Westphal, 1999). Recently, this theory, which lay dormant for a number of years, has gained new research support (Michikawa, Mazzucchelli, Bresolin, & Scarlato, 1999; also see Galadeta, Cormio, Pesce, Kezza, & Cantatore, 1998).

Hormonal Theories

Certain animals (e.g., Pacific red salmon) release massive amounts of hormones that lead to their death, a finding that has stimulated the development of hormonal theories of aging. According to one such notion (Denckla, 1974), aging is due to the action of blocking hormones such as antithyroid hormones released by the hypothalamus or decreased oxygen consumption hormones secreted by the pituitary gland that keep cells from using thyroid hormones. It has been hypothesized that within the hypothalamus is a kind of aging clock, which in later life alters the level of hormones in the brain in such a way as to deregulate the functioning of the body and thereby cause death.

Aging Clocks

Noting the great similarity in longevity among genetically related persons, many researchers in gerontology have become convinced that there is an aging clock—a prewired, genetically based aging program—somewhere in the body. This clock presumably dictates the rate and time, barring physical mishap, at which a person can expect to age and die. Some researchers believe that the aging clock is in the brain, perhaps in the hypothalamus. Others interpret the evidence as pointing to the existence of aging clocks in individual body cells.

A proponent of the individual cell aging clock theory is Leonard Hayflick (1980), whose experiments have demonstrated that there is a built-in limit to the number of times that individual body cells can divide before dying. Tortoise cells divide 90–125 times, human cells 40–60 times, and chicken cells 15–35 times. Hayflick estimated that, because of genetically determined limits on cell division, the maximum life expectancy obtainable in human beings is somewhere between 110 and 120 years. If cardiovascular disorders, cancer, and all other diseases were eliminated, this limit would be reached by a large portion of the population.

All theories of aging have their proponents, but the various explanations are not mutually exclusive. This is not necessarily a shortcoming, because there is evidence for multiple sites or causes of aging. Aging can occur at the tissue level, the cellular level, or in the cell nucleus. At the tissue level, aging is related to a decrease in collagen, at the cellular level to a deterioration in mitochondria, and at the nuclear level to mutations in DNA and the cross-linkage of molecules within the cell nucleus.

In addition to multiple sites, evidence points to at least two kinds of aging processes: (a) accidental damage to the molecules, membranes, or parts of the body, and (b) a prewired, genetically programmed aging clock. This clock presumably consists of a series of special on-off gene switches, which, when the organism has reached maturity, turn off certain cell activities while turning on new cells that cause the destruction of the body's protein building blocks. Belief in the existence of such a genetic program has resulted in research directed at the DNA and RNA molecules responsible for cell replication.

BOX 2.1 Deathway

Last night I dreamed a ghost came by;
It looked at me and then
Said, "You decide how you will die,
But not precisely when."

Although it now seems strange to me,
I really felt no fear,
But spoke right up quite thoughtfully,
As I relate it here.

"I don't desire a heart attack
Or cirrhosis in my liver.
Courage I clearly do not lack,
But 'cancer' makes me quiver.

"I really do not wish to see
Myself die from the flu,
And if pneumonia's offered me,
I shall reject it too.

"I guess I'll not get sick to death 'Cause being ill's no fun.
If something has to take my breath,
Let it be quickly done.

"I might be shot in a world war
Or drown out on the sea,
Or fall beneath a speeding car
That's bearing down on me.

"But being killed is too unkind
To me and those I know.
I guess I'll think and try to find
A better way to go.

"If I can die just as I please,
I'll go quite painlessly. Avoiding accidents and disease, I'll
age so gradually.

"And when the knock of death at last
I hear at my life's door,
I'll say, 'Kind sir, forget the past,
And let me live some more!'"

FATAL DISEASES

The previous sections have shown that the complex interaction among biological aging, disease processes, and environmental trauma makes it difficult to isolate the effects of any single factor on the physiological decline of the human body. Most common diseases result from a variety of influences. In terms of their etiology (causation) and pathogenesis (mechanism), diseases may be classified into nine groups—genetic, developmental, metabolic and nutritional, cardiovascular, environmentally induced, infectious, immunological, neoplastic, and idiopathic, but these categories overlap and a disease may belong to more than one category (Damjanov, 1998).

Infectious diseases such as measles, diphtheria, poliomyelitis, and influenza have yielded more readily than many other conditions to the efforts of medical science and consequently declined dramatically during the 20th century. But these disorders have been replaced on the mortality scale by heart disease, cancer, stroke, and other chronic degenerative conditions (see Table 1.2).

Many people have several different diseases at the same time. This is particularly true of older adults, who may suffer from arthritis, rheumatism, heart disease, and influenza simultaneously, and eventually die of pneumonia—the so-called "old man's friend" of yesteryear. The first three of these diseases are chronic conditions of long standing, whereas the last two are acute disorders from which the patient either gets well or dies quickly.

The most common acute disorders among older Americans are respiratory ailments; accidental injury is second, and digestive disorders are third (National Center for Health Statistics, 1991). Acute illness is less common in later life, which is dominated by chronic disorders such as arthritis, rheumatism, heart disorders, and hypertension. Although acute illnesses are more common during childhood, it appears that the high death rates from acute infectious diseases in infants and children are things of the past. Chronic illnesses are not as frequent in children as in older people, but, as seen in the incidence of hay fever and asthma, children are not immune to chronic conditions.

The number of deaths, the death rates, and the percentages of total deaths for the 15 leading causes of death in the United States in 1997 are given in Table 1.2. It should be noted that the death rate is higher after age 65 for every one of the diseases listed in this table.

Demographic Variables

The incidence and types of illness vary not only with chronological age but also with ethnicity, income, geographical region, and lifestyle. In the National Health Interview Survey for 1987–1994, larger percentages of Blacks than Whites, of lower income than upper income persons, and of residents in the South than in other sections of the United States rated their health as only fair or poor (National Center for Health Statistics, 1997). Differences in disease and longevity associated with sex, ethnicity, and socioeconomic status are often the consequences of environmental conditions such as pollution, diet, and poor sanitation rather than heredity. Thus, men are more likely than women to encounter pollution on the job, and poorer people usually eat less nutritious food and have less adequate medical care than their more affluent contemporaries. Other lifestyle or pattern-of-living factors associated with poor health and a high death rate are cigarette smoking, alcohol and drug abuse, insufficient exercise, stress, and a lack of social supports (Brannon & Feist, 1996).

As discussed in chapter 1, the death rate varies from country to country and from state to state within the United States. In addition, the incidence of death attributable to specific diseases is greater in some states than in others. Interstate and interregional differences in death rates are a complex result of differences in chronological age, ethnicity, selective migration, environmental conditions, and differ-ences in lifestyle from one state or region of the country to another. Within the United States, the overall age-adjusted death rate, as well as the rate for the three highest-ranked causes of death—diseases of the heart, malignant neoplasms, and cerebrovascular diseases, is higher in the South Atlantic and South Central geographical areas (Hoyert et al., 1999).

Cardiovascular Diseases

Cardiovascular diseases (heart diseases, hypertension, cerebrovascular diseases, atherosclerosis, etc.) are, as a group, the leading causes of death in the entire world. During 1997, an estimated 726,974 people in the United States alone died from heart disease; 159,791 from cerebrovascular disease (stroke); 16,740 from atherosclerosis; 13,524 from hypertension (with or without renal disease); and 27,792 from other diseases of the arteries, arterioles, and capillaries (Hoyert et al., 1999). Because the heart is the

key organ in cardiovascular diseases, it is important to have some knowledge of its structure and functioning in order to understand these diseases.

The Human Heart. The heart is the pump of the circulatory system, delivering oxygen and nutrients to all parts of the body. Also included in the circulatory system are the arteries, arterioles, and capillaries, which carry blood away from the heart, and the veins that return the blood to the heart. As shown in Fig. 2.2, the human heart is divided longitudinally in half by a band of muscle called the *septum*. On either side of the septum is a lower chamber, or *ventricle,* and an upper chamber, or *atrium*. Blood returning to the heart from various parts of the body flows into the right atrium by way of two large veins, the anterior (superior) and posterior (inferior) *vena cava*. When the right atrium has filled, it contracts and the carbon-dioxide-filled blood is pushed through the interconnecting *tricuspid valve* into the right ventricle. When the right ventricle is full it contracts, the tricuspid valve closes, the *semilunar* (pulmonary) *valve* (between the right ventricle and the pulmonary artery) opens, and blood is pumped through the *pulmonary artery* into the lungs. After being oxygenated in the lungs, blood flows through the *pulmonary veins* into the left atrium, which, when full, contracts and squeezes the blood through the *mitral valve* into the left ventricle. Contraction of the filled left ventricle then forces blood through the *aortic valve* into the *aorta,* the many branches of which carry blood to all parts of the body except the lungs.

The relaxing and filling *(diastolic)* phase of heart action takes place on both sides of the heart simultaneously, as does the contracting and emptying *(systolic)* phase. The alternating diastolic and systolic phases are carefully timed in the normal heart to produce a periodic beating or rhythm. The number of beats per minute (pulse rate) varies with the individual and the body's needs for oxygen, but it is approximately 70 beats per min in an average adult male.

Arteriosclerosis. Heart disease and subsequent heart failure have been known at least since the time of the Pharaohs. Heart disease can be caused by blood clots, holes in the chamber walls of the heart, or defective heart valves. A stationary blood clot *(thrombus)* or a moving blood clot *(embolus)* in an artery is frequently due to *arteriosclerosis,* an abnormal hardening and thickening of the arterial walls caused by deposits of fatty substances and calcium known as *plaque*. Arteriosclerosis usually affects the coronary arteries that carry blood to the heart muscle. The narrowing of arterial channels from plaque deposits increases blood pressure and the likelihood of a blood clot. By making the heart work harder, the narrowed channels can also produce heart pains known as *angina pectoris*.

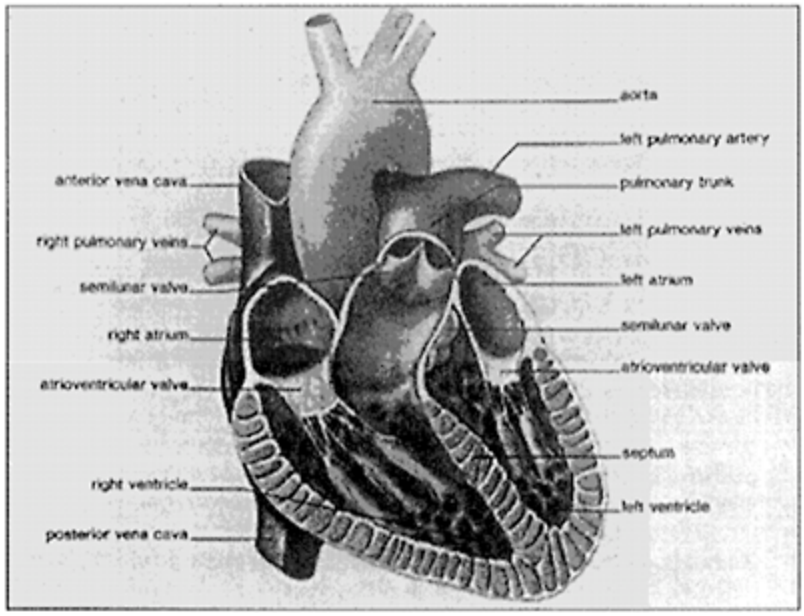

FIGURE 2–2 Structure of the human heart.

From *Human Anatomy* (3rd ed), by Kent M.Van De Graff, 1992, Dubuque, IA: Wm. C. Brown Communications, Inc.. Reprinted with permission of the McGraw-Hill Companies.

Hypertension. Increased blood pressure also results from constriction of the small arterioles, a condition known as *hypertension*. It is called *essential hypertension* when there are no other signs of disease, and *malignant hypertension* when the disease progresses rapidly. Hypertension is sometimes associated with a cardiac problem *(hypertensive heart disease)* or with both heart and kidney problems *hypertensive heart and renal disease)*.

Other Heart Diseases. A leading cause of heart disease in children is *rheumatic fever,* a streptococcal infection. A child may be born with a defective heart *(congenital heart disease),* but death caused by this condition and rheumatic heart disease is not common. Much more frequent, particularly in older adults, is *ischemic heart disease,* the leading cause of death in the United States. Ischemic heart disease is an anemic condition of the heart caused by an obstruction in the arteries, reducing blood flow to the heart. The usual consequence of the ischemic condition is destruction of heart muscle, or *myocardial infarction*.

Heart Attack and Stroke. In advanced cases of cardiovascular disease, the heart fails, resulting in either a heart attack or a stroke (*cerebrovascular accident,* or *CVA*). Whereas heart attacks are almost always caused by clots in coronary arteries, strokes result from clots or hemorrhages in cerebral (brain) arteries. When a person has a heart attack, there

is sudden dull pain and a feeling of heaviness in the center of the chest that lasts several minutes and may spread to the shoulders, neck, and arms. Associated symptoms are unrelieved indigestion, shortness of breath, lightheadedness, fainting, and sweating. The specific symptom picture varies with the age of the victim, severe chest pains being less common in elderly patients. The major symptoms of stroke, which may be even more disabling than a heart attack, are unconsciousness and partial paralysis.

Approximately 30% of the victims of heart attacks die immediately, and another 20– 30% die within 24 hr of an attack. The survival of the remaining 40–50% of the victims depends to a great extent on the severity of the attack and the ability of the victim to cope with the fear and anxiety precipitated by it. The age and general health of the victim are also quite important to the speed of recovery from a heart attack.

Demographics and Lifestyle Factors in Cardiovascular Diseases

The incidence of cardiovascular diseases is related not only to age but also to heredity, sex, race, geography, nationality, and lifestyle. The significance of heredity is suggested by the fact that people with a family history of cardiovascular disorders are more likely to develop a disorder in this category. Regarding sex and ethnicity, the rate of death caused by heart disease and stroke is higher among men than women and higher among Blacks than Whites (see Fig. 2.3). Hypertension (high blood pressure), a frequent accompanier of heart failure and cerebral hemorrhage, is also more prevalent in men and Blacks than in women and Whites.

Among the major risk factors for heart disease are high blood pressure, high LDL cholesterol ("bad" cholesterol), low HDL cholesterol ("good" cholesterol), a sedentary lifestyle, poor nutrition, smoking, diabetes, and obesity (Wilcox & Stefanick, 1999). Physiological responses associated with cigarette smoking, which has been implicated in both heart disease and stroke, include increased heart rate and blood pressure, constriction of peripheral blood vessels, and reduced cardiac output.

Exercise. Moderate exercise is important for optimal physiological functioning, as indicated by a higher resting heart rate and a reduction in the number of arteries and their interconnections in bedridden patients. Exercise by itself does not prevent coronary heart disease, but in moderate amounts it reduces the incidence of cardiovascular disease and improves the prognosis after a heart attack (Blair et al., 1989; Hill et al., 1993).

Culture. Lifestyle is, of course, related to culture. People in Asian and African cultures, where typical diets include higher amounts of vegetables and lower amounts of animal fat, have a lower incidence of heart disease than people with diets typical of most North Americans and Western Europeans. The situation among the Japanese, who eat large quantities of salted fish and little meat, is instructive. The heavy vegetarian diet of the Japanese keeps their blood cholesterol level and hence the incidence of heart disease low, but the high salt intake of the Japanese raises their blood pressure and thereby increases the likelihood of hypertension. The typical French diet, which consists of large meals accompanied by wine and few between-meal snacks, is also interesting. Despite their intake of rich foods, the incidence of cardiovascular disease among the French is significantly lower than among Americans.

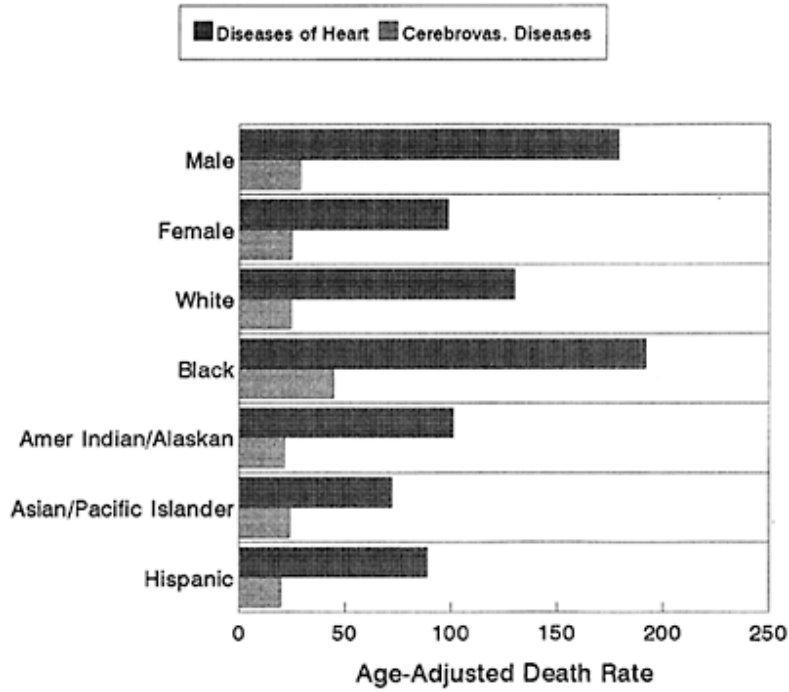

FIGURE 2-3 Age-adjusted death rates for diseases of heart and cerebrovascular diseases by sex and ethnicity, 1996

(based on data from National Center for Health Statistics, 1998a).

Lifestyle is also related to subculture, such as the various religious groups in the United States. For example, a study conducted in California found that high priests in the Mormon church who adhered to the habits of no tobacco, regular exercise, and a good night's sleep had only 14% of the normal death rate from heart and blood vessel disease and 34% of the normal cancer death rate for their age group (Scott, 1989).

Type A Behavior. Although somewhat controversial, the results of research on the relationship of coronary heart disease to a behavior pattern designated as *Type A* have been widely cited (e.g., H.S.Friedman & Booth-Kewley, 1987). Persons with Type A personality are characterized as driven, aggressive, ambitious, competitive, preoccupied with achievement, impatient, restless in their movements, and staccato-like in their speech. The contrasting behavior pattern is that of the *Type B* individual, described as more relaxed, easygoing, and patient, speaking and acting more slowly and evenly. Compared with Type Bs, Type As reportedly have a significantly higher incidence of heart attacks, even when differences in age, serum cholesterol level, smoking frequency, and blood pressure are taken into account (H.S. Friedman & Booth-Kewley, 1987). Reviews of research on Type A and related disease-prone personalities have concluded that a cluster of traits (depression, anger-hostility, anxiety) is a contributor to heart disease (H.S.Friedman, 1990). Perhaps also related to lifestyle and stress is the fact that the risk of a heart attack in the working population is significantly greater on mondays than on other days of the week (Willich et al., 1992).

Care and Treatment of Heart Attack Victims

A heart attack is an anxiety-provoking experience at any age, and it can have profound psychological effects on the victim. As a result, heart attack patients often require not only drugs, a special diet, and an appropriate combination of rest and exercise, but psychological assistance as well. Some heart patients develop a condition known as *angor anima,* a fear of impending death, which can precipitate another attack if it is not treated. In any event, there are important physical and psychological reasons for keeping heart patients relaxed and untroubled. Furthermore, a poorer prognosis is associated with both depression and stress (Frasure-Smith, Lesperance, & Talajic, 1995; Pennix et al., 1998).

Significant advances have been made in the treatment of heart disease and other cardiovascular disorders during the past several decades. Included among these are various surgical and mechanical procedures such as coronary bypasses, heart valve replacements, arterial cleaning, installation of electronic pacemakers and mechanical pumps, and (rarely) heart transplants. These procedures have enabled patients who might otherwise have been condemned to a life in bed to live fairly normal, productive lives. Further information on heart disease may be obtained from the American Heart Association (see Appendix B for addresses).

Cancer

The second leading cause of death in the United States is cancer, a disease process characterized by uncontrolled cell growth resulting in a *neoplasm,* or *tumor*. A tumor is benign if it is restricted to a particular clump of cells, but many tumors are malignant or *metastatic,* and spread not only to surrounding tissue but also to distant parts of the body. Every year over a million new cases of cancer occur in the United States, and over a half-million people die from the disease. However, after increasing for many years, deaths due to cancer now appear to be on the decline (Hoyert et al., 1999; Wingo, Ries, Rosenberg, Miller, & Edwards, 1998). From its status as a virtual death sentence, cancer is now considered one of the most preventable of the major chronic killer diseases.

Cancer is usually classified according to the body organ or organ system in which it occurs. A *carcinoma* originates in the skin; a *sarcoma* in bone, muscle, and connective tissue; *leukemia* in the bone marrow; *lymphoma* in the lymph nodes; *glioma* in the nerve tissue. Not all types of cancer are equally serious. Cancer of the skin, for example, can be treated and is not fatal if it is not metastatic. In recent years, the highest rates of death in the United States caused by malignant neoplasm have been those of the respiratory and digestive organs.

Age Differences. As with cardiovascular disorders, the incidence and type of cancer vary with age, sex, socioeconomic status, and geography. Although older adults are more likely to die of heart diseases than cancer, the death rate for all types of cancer is greater among older adults than among young and middle-aged adults. The rate of death due to cancer increases gradually until middle age and then accelerates rapidly in old age. The incidence of various types of cancer in different age groups is, however, not the same as the age-specific death rate. Though cancer is more common after age 40 and more fatal in later life, it is responsible for

more childhood fatalities than any other disease. Leukemia and brain tumors are more common among children than other types of malignant neoplasms; cervical, lung, and stomach cancer occur more often in the middle thirties; and cancers of the breast, uterus, colon, stomach, and liver occur with the greatest frequency in older adults (Krakoff, 1998)

Sex Differences. Age differences in the incidence of cancer are not the same for both sexes; the frequency of cancer in women is greater during the childbearing years than in men of the same age. It is the second-leading cause of death for all women and the most common cause of death among women aged 25–64 (Hoyert et al., 1999). Another sex difference is in the incidence of lung cancer. Well over 100,000 Americans die of lung cancer every year, and about 90% of the cases result from tobacco use. Most Americans with lung cancer are men, but it is becoming increasingly common in women (Cimons, 1998). The incidence of lung cancer among women has increased dramatically during the past three decades and has surpassed breast cancer as the number-one killer of women. Not only the growing number of women who have lung cancer but also advances in the detection and treatment of breast cancer have contributed to this statistic.

Ethnic Differences. With the exception of breast cancer, Blacks tend to get cancer at an earlier age than Whites. A greater percentage of Blacks than Whites are also affected by and die from cancer. With regard to the relationships between ethnicity and specific types of cancer, death rates for respiratory system, colorectal, prostate, and breast cancer are higher for Blacks than for any other ethnic group in the United States (see Table 2.1). Of all malignant neoplasms, respiratory system cancer is the most common for all ethnic groups. The death rate for breast cancer is second highest for all ethnic groups except Blacks, for whom prostate cancer is second. A study of Californians found that African Americans, Caucasians, Hispanics, and Asian Indians have a higher than average risk of prostate cancer. California men of Chinese ancestry, however, were more likely to develop lung cancer, Japanese were more prone to colon cancer, Koreans to stomach cancer, and Vietnamese to lung cancer (Steinbrook, 1992). Ethnic-group differences that exist in the incidence of different types of cancer are probably the results of socioeconomic or cultural differences in lifestyle rather than race per se. For example, not only are Blacks more likely than Whites to live and work in physically hazardous surroundings, but they are also less likely to seek medical attention and more likely to delay seeing a physician. Even when Blacks obtain medical help, the diagnosis and treatment of these patients is often conducted less competently than for Whites (Cimons, 1989). Despite general progress in the detection and treatment of cancer, racial and ethnic disparities continue. Due in some measure to later diagnosis and barriers to health care access, African Americans and other ethnic groups have benefitted less than Whites from cancer prevention and control efforts (Cimons,1989).

Geographical Region. The frequency and type of cancer also vary with geographical region. Cancer of the stomach, for example, is more prevalent in Japan and certain Scandinavian countries, due perhaps to the consumption of smoked fish by residents of those countries. Infection with hepatitis B is responsible for the greater frequency of cancer of the liver in certain sections of Asian and Africa (Krakoff, 1998). Within the United States, the incidence of malignant neoplasms is highest in the East South Central region

TABLE 2.1 Age-Adjusted Death Rates for Four Types of Malignant Neoplasms by Sex and Ethnicity

	Type of Malignant Neoplasm				
Sex and Ethnicity	*Respiratory System*	*Colorectal*	*Prostate*	*Breast*	*All*
All male	54.2	14.8	14.9		153.8
All female	27.5	10.2		20.2	108.8
White	38.9	11.8	13.5	19.8	125.2
Black	48.9	16.8	33.8	26.5	167.8
American Indian/Alaskan Native	24.4	8.5	9.8	12.7	84.9
Asian/Pacific Islander	17.4	7.7	5.8	8.9	76.3
Hispanic	15.4	7.3	9.9	12.8	77.8

From National Center for Health Statistics, (1998a).

(Kentucky, Tennessee, Alabama, Mississippi) and lowest in the Pacific states. Among all states, the rate of death due to cancer is lowest in Utah and highest in the District of Columbia (Hoyert et al., 1999).

Carcinogens. Many physical and chemical substances are known to be significant carcinogenic (cancer-producing) agents. Examples of carcinogens found in industrial environments or products and the types of cancer associated with them include vinyl chloride with liver cancer, industrial tars and oils with skin cancers, and aniline dyes with cancer of the bladder. Other cancer-producing substances or conditions and the associated diseases include cigarette smoking and cancers of the upper respiratory tract, esophagus, larynx, bladder, pancreas, liver, stomach, and kidney; excessive alcohol drinking and cancer of the mouth, pharynx, larynx, and liver; overexposure to ultraviolet rays and skin cancer; obesity and cancers of the breast, colon, rectum, pancreas, prostate, gall bladder, ovaries and uterus. Other causes of cancer include sexual and reproductive behavior (cancer of the cervix with the human papilloma virus), infectious viruses, bacteria, and parasites; family history (with breast, colon, ovarian, and uterine cancer); occupational hazards (lung cancer from industrial asbestos, bladder cancer from dye, rubber, and gases; skin and lung cancers from smelters and mines; leukemia from glues and varnishes; liver cancer from polyvinal chloride; lung, bone, and bone marrow cancer from radiation; air, land, and water pollution; Cherath, 1999)

Early Detection. Cancer is often referred to as the silent killer, in that it may remain undetected until it is well advanced. Treatment is usually more effective in the beginning stages of the disease, so early detection and diagnosis are encouraged. All adults, particularly those over age 40, should be aware of the following seven warning signs of cancer: sore that does not heal; changes in the size, shape, or color of a wart of mole; a lump or thickening in the breast or elsewhere; persisting cough, hoarseness, or sore throat; Chronic indigestion or difficulty swallowing; and Unusual bleeding or discharge; Any change in bowel or bladder habits.

People with one or more of these symptoms should consult a physician immediately. The medical examination for cancer may include inspection of the oral cavity, the skin, the pelvis, the breasts, the rectum, prostate, and genital area. In addition to microscopic examination of biopsy tissue, laboratory tests include examination of sputum, blood, urine, and stool, and imaging tests (computerized tomography scan, magnetic resonance imaging scan). The American Cancer Society also recommends sigmoidoscopy for colorectal cancer, mammography for breast cancer, a pap smear for cervical cancer, and a prostate serum antibody test for prostate cancer. Newer techniques, such as genetic testing, are also used to determine one's chances of contracting cancer (Cherath, 1999).

Treatment. Depending on the specific type of cancer, treatment may include surgery (removal of affected tissue or organ, bone marrow transplant, etc.), radiation therapy (external administration of X-rays, internal administration of radioactive materials), chemotherapy (busulfan, chlorambucil, cyclophosphamide, methotrexate, and other antimetabolites; antibiotics; vinblastine and vincristine; metallic salts; cortisone and other hormones), and immunotherapy. Supportive therapy consisting of the use of medicines to counteract the unwanted side effects of cancer treatment (e.g., low blood count, nausea and vomiting) are also used (Krakoff, 1998).

Psychological Factors. The results of casual observation and research suggest that psychological factors, such as an attitude of passivity and hopelessness in the face of stress, can influence the growth, if not the genesis, of cancer cells (Grossarth-Maticek, Eysenck, Vetter, & Frentzel-Beyme, 1986). Convinced of the importance of psychological factors in the prognosis of cancer, Simonton, Matthews-Simonton, and Creighton (1978) supplemented physical treatment methods with psychological techniques in the treatment of cancer. Their purpose was to get patients to think positively and confidently about their ability to control their illness and to stimulate the immune system by their thoughts. Among the techniques that have been used are relaxation to control anxiety and visual imagery, in which patients imagine that their white blood cells are attacking and destroying cancer cells. Some positive results have been reported from the use of these methods, but physicians remain skeptical. Psychological treatment, in conjunction with physicochemical treatments, is certainly worth trying. Psychological counseling can also increase a cancer patient's ability to cope with cancer and to reduce the side effects of medical treatments.

Other Potentially Fatal Diseases

After heart disease, cancer, and stroke, the highest death tolls among the various causes of death among Americans are associated with chronic obstructive pulmonary diseases and allied conditions. Four other diseases among the 10 leading causes of death for all races, sexes, and ages combined were pneumonia and influenza, diabetes mellitus, kidney diseases (nephritis, nephrotic syndrome, and nephrosis), and chronic liver disease and cirrhosis (see Table 2.2). Although not in the top 10, HIV infection and Alzheimer's disease are also significant causes of death.

TABLE 2.2 Age-Adjusted Death Rates for Six Other Potentially Fatal Diseases

	Age-Adjusted Death Rate	
Disease	*Males*	*Females*
Chronic obstructive pulmonary diseases	42.7	38.8
Pneumonia and influenza	30.0	34.5
Diabetes mellitus	21.5	25.2
Chronic liver disease and cirrhosis	12.4	6.5
Nephritis, nephrotic syndrome, and nephrosis	9.3	9.7
Alzheimer's disease	5.4	11.3
HIV infection	9.8	2.7

Note. HIV=human immunodeficiency virus.

[a]From Hoyert, Kochanek, & Murphy (1999).

Chronic Obstructive Pulmonary Diseases. Disorders classified under this label— bronchitis, emphysema, asthma, and related respiratory conditions—are similar in many respects and often confused with one another. They involve interference with the normal breathing pattern, expectoration of mucus or sputum, wheezing (emphysema and asthma), and coughing (chronic bronchitis and asthma). The causes of these disorders are not well understood, but heredity is known to play a role in asthma and one type of emphysema. Smoking and air pollutants are important predisposing conditions in emphysema and chronic bronchitis.

Emphysema has the highest fatality rate among the chronic obstructive pulmonary diseases. Men over 40 years of age constitute the largest group of victims. Emphysema, which is highly disabling even when it is not fatal, involves the destruction of millions of tiny air sacs (alveoli) in the lungs. The patient experiences great difficulty inhaling and may develop a barrel-chested appearance (Raleigh, 1998).

Chronic bronchitis is a progressive inflammation of the bronchial tubes. Like emphysema, it occurs most often in men over age 40. Both emphysema and chronic bronchitis can lead to heart failure, and chronic bronchitis may also progress to emphysema or pneumonia. Furthermore, chronic bronchitis and asthma can lead to each other.

The fatality rate for asthma is substantially lower than that for emphysema, but asthma attacks may be quite alarming. These attacks, in which the bronchioles constrict spasmodically and the bronchial tubes swell, are precipitated by a variety of substances (certain foods, drugs, and inhalants) as well as psychological stress.

Influenza and Pneumonia. Influenza, which was a lethal disease of epidemic proportions during the early part of the 20th century, is not usually considered life threatening today. In older people who have several chronic disorders, however, influenza can cause death. Rather than being the direct cause of death, influenza may make a person less resistant to cardiac disorder or pneumonia. Inflammation of the lungs, which characterizes pneumonia, can be produced by infectious agents (bacteria, viruses, yeast and other fungi, rickettsia), chemical agents, radiation, or allergic reactions to inhaled foreign particles (Mogabgab, 1998; Vorhaus, 1998a).

Diabetes Mellitus. The symptoms of this disorder include abnormally large amounts of sugar in the blood and urine, resulting from a malfunctioning pancreas. Although the symptom picture varies from person to person, a typical diabetic manifests persistent thirst and frequent urination combined with a loss of strength and weight. The disease also makes the patient more susceptible to infection and heart disease, and it produces varying degrees of blindness. There is no known cure for diabetes mellitus, but insulin injections and strict adherence to a prescribed diet can control it (Rizza, 1998).

Cirrhosis of the Liver. In this disorder, regenerative nodules (groups of hard cells) replace the normal spongy tissue of the liver, resulting in the formation of scar tissue throughout the organ. Cirrhosis can be caused by excessive alcohol consumption, dietary deficiencies, inhalation of certain chemicals, and hepatitis (inflammation of the liver; Lieber, 1998).

Alzheimer's Disease. One of several organic brain disorders that claim thousands of victims each year, Alzheimer's disease was the cause of death in 22,475 deaths in the United States in 1997. The death rate for this disorder is higher in females than in males and higher in Whites than in Blacks. Although death due to Alzheimer's may occur in middle adulthood, less than 2% of its victims are under age 65 (Hoyert et al., 1999). By age 85, one in three persons has Alzheimer's, and if everyone lived to be 100 years old an estimated 50% of the population would get it (Kettl, 1997).

The exact cause of Alzheimer's disease is unknown, but a variety of substances or conditions have been found to be associated with it. These include biochemical deficiencies of certain enzymes, neurotransmitters or minerals, and deposits of certain proteins. Postmortem microscopic examination of the brains of Alzheimer's patients reveals the presence of various structural abnormalities: dark-colored areas called *senile plaques,* strand-like protein filaments known as *neurofibrillary tangles,* and small holes (granulovacuoles) in neuronal tissue resulting from cell degeneration. Four different genes are associated with Alzheimer's, and the presence of amyloid beta protein is a marker that may permit early detection.

Changes in cognitive abilities and mood associated with Alzheimer's may be seen as early as the fifth or sixth decade of life. The onset of the disease is insidious, and its course is progressive. The psychological changes are gradual, usually beginning with simple memory failure (e.g., difficulty remembering names). Cognitive abilities (memory, judgment, abstract thinking), personality, and behavior gradually deteriorate, becoming steadily worse over a period of 7–10 years. Other brain functions (language and motor abilities) are also affected. Mental alertness, adaptability, sociability, and tolerance for new things or changes in routine all decline. The patient may become more self-centered in thoughts and actions, untidy, agitated, preoccupied with natural functions (eating, digestion, excretion), and in certain cases manifest paranoid delusions. Initial symptoms include disturbances in judgment, memory, and language, but motor functioning and bowel and bladder control are maintained. Then, the patient, who can still walk, becomes incontinent. Falls increase in frequency, and patients who live long enough become unable to walk and are eventually unable to swallow. Consequently, the patient may die of aspiration pneumonia (Kettl, 1997). In rare instances a remission of symptoms and a partial recovery can occur, but the general picture is one of progressive deterioration

A definitive diagnosis of Alzheimer's disease can only be made by an autopsy, but the patient's history and the results of physical examinations, cognitive tests, laboratory tests, and imaging studies can provide strong evidence for a diagnosis. The disease cannot be

cured, but treatments are available that may slow the rate of decline and preserve patient functioning for a time. These treatments include acetylcholinesterase inhibitors (tacrine, donepezil) to inhibit the degradation of acetylcholine in neural synapses, anti-inflammatory drugs (ibuprofen, etc.) to reduce the inflammatory response of senile plaques late in the course of Alzeheimer's, and estrogens.[7] Data obtained by L.S.Schneider, Pollock, and Lyness (1990) also suggest that antioxidants such as Vitamin C can slow the progression of Alzheimer's disease. Behavioral problems (agitation, physical and verbal assaultiveness, depression, psychotic behavior) accompanying the disease are treated, as appropriate, with antipsychotic, antidepressant, and anxiolytic drugs. Caregivers within the family, who may also require treatment for depression, are cautioned to follow safety measures (withholding car keys, turning off stoves, removing checkbooks, key-locking doors at night to prevent wandering, etc.; Kettl, 1997).

Diseases in Young Children

An estimated 33,546 children aged 4 years and under died in the United States in 1997, but in the developing countries of the world many more millions of children die before school age. The majority of these children die of pneumonia, diarrheal diseases, vaccine-preventable diseases, or some combination of the three—all of which are either preventable or curable. Poverty, and what it implies in terms of lack of basic medical care, sanitation, and education, is the principal contributing factor to these grim statistics, but it is not the only one. Unlike the situation in the United States, where more young boys than girls die, girls tend to fare worse than boys in most other regions of the world. In addition to receiving poorer health care, girls are more poorly educated than boys (United Nations Children's Fund, 1993).

Some progress has been made in the treatment of diseases that claimed the lives of millions of the world's children in former years. One example is the reduction in deaths due to dysentery and other intestinal ailments, thanks largely to a home remedy known as rehydration therapy. Another example is the dramatic decrease in poliomyelitis, which formerly struck at the lives of a half-million children each year. Now, because of the widespread increase in immunizations, the incidence of polio has declined to around 100,000 new cases each year. If the present trend continues, polio may be the second child killer (smallpox was the first) to be eradicated from the face of the earth (United Nation's Children's Fund, 1993).

EPIDEMICS AND STARVATION

I remember as a child having to remain indoors for 2 weeks because of an outbreak of polio in our town. Although I didn't mind skipping school, being quarantined and the use of ibuprofen may reduce the risk of developing the disease.

[7]There is some evidence that ibuprofen and estrogens may also serve a protective function against Alzheimer's disease (L.S.Schneider, Farlow, Henderson, & Pogoda, 1996; Stewart, Kawas, Corrada, & Metter, 1997; Tang et al., 1996). Although the genetics of Alzheimer's are not well understood, Kettl (1997) suggested that the long-term use of estrogen in postmonopaual women

was irksome after a while. This was my first encounter with an *epidemic,* a disease that has widespread effects, afflicting and often killing large numbers of people. A disease is more likely to reach epidemic proportions when it is highly infectious, as in the cases of malaria, smallpox, typhus, and *acquired immune deficiency syndrome* (AIDS).

HIV Infection and AIDS

HIV infection, which was first observed in homosexuals and drug users in 1981, spread rapidly to the bisexual and heterosexual population and to women as well as men. Exposure to the HIV virus may result in AIDS or a related condition. HIV infection causes the AIDS-related complex, which usually precedes the onset of AIDS. In 1996, an estimated 31,130 persons in the United States died of HIV infection, but in 1997 that number dropped to 16, 516 (Hoyert et al., 1999). The rate of death due to HIV infection is less than 1 per 100,000 among Americans under age 25, increasing to a high of 16 per 100,000 in the 35–44 year age range and then declining to less than 2 in 100,000 after age 65 (Hoyert et al., 1999). Death rates due to this disease are particularly high in certain African countries.

HIV infection disables the immune system and makes the infected person more vulnerable to a host of viral, bacterial, and malignant diseases. The two most common causes of death among AIDS patients are *pneumocystis carinni pneumonia* and a rare type of cancer known as *Kaposi's sarcoma*. The infection spreads by exchanging body fluids during sex, by sharing needles or other drug paraphernalia, by blood transfusions, and from mother to child before delivery. Homosexuals, intravenous drug users, bisexual men, and hemophiliacs run the highest risk of HIV infection (Haseltine, 1998).

At present there is neither a cure for AIDS nor a vaccine that prevents HIV viral infection, but certain drugs (AZT, DDI, DDC) inhibit the spread of the virus. Educating and counseling people to avoid high-risk behaviors can also assist in reducing the transmission of AIDS. Health education programs that increase knowledge of AIDS and how it spreads appear to have reduced the incidence of sexual practices associated with the disease. Emphasizing the use of condoms and other safe-sex acts such as limiting the number of partners has had some effect. Avoidance of needle-sharing among intravenous drug users can also reduce the risk of AIDS. Unfortunately, among the high-risk groups are many people who appear to be unconcerned or view themselves as invulnerable—a belief that they will not get the disease or at least that their sexual partners will let them know if they are infected with the virus.

The psychological effects of AIDS are not as devastating as the physical ones, but the emotional and cognitive consequences of this illness are often severe. Testing positive for HIV can be a very stressful experience. In addition, the neurological consequences of AIDS can lead to problems with balance and coordination, memory, concentration, decision making, and impulse control.

Other Epidemic Diseases

The history of the world has been shaped in some measure by epidemic diseases, including those that struck the armies of Hannibal and Napoleon, the Crusaders, and other masses of people on the move. The discovery of America by Columbus led to an

exchange of infectious diseases as well as other things, but Native Americans clearly received the poorest part of the bargain. Millions of Native Americans died from smallpox, malaria, and certain other diseases brought to the Western hemisphere by Europeans. For example, in a three-year span during the 16th century, an estimated 3.5 million Aztecs died from smallpox brought to Mexico by the Spanish army. Much smaller numbers of Europeans in the New World succumbed to syphilitic infection presumably transmitted to them by American Indians. Another example of a disease running wild in a virgin population in which the diseases is new is the tuberculosis epidemic of 1915, which killed 150,000 people in the Balkans. Examples of other epidemic diseases in the 20th century are influenza and cholera (Felsenfeld, 1998).

Infectious diseases of epidemic proportions are associated with migration, crowding, and poverty. Although there are exceptions (e.g., poliomyelitis), epidemics have killed more people in less-developed countries than in the countries of Europe and North America. Europe has, of course, not always been exempt from epidemics. An estimated one-fourth of the European population died of the Black Plague during a 3-year period during the mid-14th century. This second wave of the plague, which was caused by a bacillus residing in the stomachs of fleas on the fur of rats brought to Europe from Asia, and which lasted well into the 18th century, was not the first or the last time that it has occurred in epidemic proportions.

Although the nature of the plagues of biblical times is not entirely clear, it appears fairly certain that there was an epidemic of bubonic plague in the Mediterranean world during the 6th to 8th centuries (Carmichael, 1998). A third wave of the bubonic plague began in the 1890s, when it spread through transoceanic shipping to Australia and the Western hemisphere. In San Francisco, the plague of 1900 was carried by ground squirrels, but Asian immigrants were blamed at first. This occurrence of the plague led to the unraveling of its causes—isolation of the plague bacillus and the discovery of its carriers. Subsequently, effective vaccines and treatments (antibiotics) were developed.

The Black Plague (Black Death) of medieval and Renaissance Europe is the wave of this disease about which so much was written. The most famous literary treatment is Alessandro Manzoni's *I Promessi Sposi (The Betrothed)*. The bubonic form of the plague infected the bloodstream and caused swellings of the lymph glands (buboes) and internal hemorrhages. More lethal and more communicable was the pneumonic form, which affected the respiratory system. Disturbed by the mass deaths and filled with visions of the Apocalypse, religious leaders of the time blamed the epidemic on Jews, prostitutes, homosexuals, and what they viewed as other immoral or heretical individuals and influences. By the 19th century, the second wave of the plague had abated, but yellow flags (a sign of plague or other epidemic disease) were still flown by ships and viewed with fear.

Epidemic diseases such as bubonic and pneumonic plague continued to kill millions of people, particularly in Southeast Asia, right up to the time of the Vietnam War. Other infectious diseases, such as cholera, pneumonia, measles, whooping cough, tuberculosis, and malaria, continue to take a toll in human lives, particularly in the less-developed countries of Africa and Asia. More exotic-sounding tropical infectious diseases, such as schistosomiasis, lymphatic filariasis, river blindness, Chagas's disease, leishmaniasis, leprosy, and African sleeping sickness also infect nearly a half-billion people (Stolberg, 1993).

Vaccinations and antibiotics have helped to reduce the incidence of infectious diseases, but many people in nonindustrialized countries are deprived of the benefits of modern medicine and health and consequently die in large numbers at an early age.

Starvation

The American public was startled in 1992 by news reports and pictures of starving children and adults in Somalia, and impressed by the efforts of relief organizations to get food to the victims and treat them. Eventually, the landing of the U.S. Marines in that country helped to ensure the uninterrupted distribution of food and the application of treatment to the afflicted children and adults. The situation in Somalia demonstrated that rather than being due to changes in the physical environment (drought, excessive rainfall and floods, unpredictable weather, etc.) or to plant and animal disease epidemics or inadequate technology for producing and distributing food, hunger is now mostly the result of man-made political factors and armed conflict. In the history of the world, famine has often accompanied warfare, as when the fields of the enemy were burned and food stores destroyed.

Countries that suffer most from starvation in the modern world include those of Southeast Asia (Bangladesh, Pakistan, Sri Lanka) and sub-Saharan Africa (Somalia, Mozambique, Zimbabwe, Malawi), but starvation also occurs in Eastern European countries such as Russia, Bulgaria, Romania, and Albania. Historically, the huge populations of China and India have suffered greatly from famine (15–30 million people died from starvation in China during 1958–1962), but major strides in food production and distribution and work-for-food programs have been made in those countries since then (Vorhaus, 1998b).

Most people can last only 10–12 days without food and water, but life may continue for 30–50 days without food alone. When food is first denied to a person, the body feeds on its store of glycogen in the liver. As starvation continues, water is lost, and the body feeds on fat and muscle and may lose up to one-third of its normal weight. The victim looks gaunt and hollow-cheeked; fluid collects in the cells, causing edema (swelling) of the abdomen; the heart shrinks; the liver is depleted; the stomach stops functioning; and the intestines break down. The victim becomes lethargic, weak, easily fatigued, and nauseated and suffers abdominal pains and cramps, headaches, and sometimes shortness of breath. Sexual activity declines, women stop menstruating, and those who give birth have premature, underweight babies that seldom survive. Starvation also has psychological effects, including mental deterioration, confusion, depression, disorientation, irritability, and a general disintegration of personality.

In developing countries, an estimated 200 million children are malnourished, and more than half of the nearly 12 million deaths of children in this age group are associated with malnutrition and starvation. Those who survive fall ill more often and grow up with lasting mental or physical disabilities (United Nations Children's Fund, 1998).

Two types of starvation have received particular attention in the news media—kwashiorkor and anorexia nervosa. *Kwashiorkor,* which is principally a result if protein deficiency, has been seen mostly among children in certain underdeveloped African countries. Victims of this disorder grow poorly, have poor appetites, and suffer from diarrhea, atrophied muscles, swelling legs, enlarged livers, anemia, and a symptomatic skin rash. *Anorexia nervosa* is a self-imposed starvation with a psychological basis and occurs mainly in adolescent girls.

Bringing a person back from starvation is a lengthy process. He or she must begin to eat again, but not all at once and not the high-calorie rich food that was offered to Somalians by generous and well-meaning, but perhaps misguided, American Marines. In the proper treatment of starvation victims, intravenous drops of carbohydrates are administered initially. Dehydrated patients are also given tiny sips of oral rehydration solution of water, sugar, and salt. Recovering victims are fed a nutrient-intense liquid and eventually solid food when they are able to chew again. But treatment is only part of the picture; prevention by means of public health measure is even more important ("The Anatomy of Starvation," 1992). Many of the health problems associated with starvation and malnutrition can be prevented at a relatively low cost. For example, Vitamin A deficiency, which causes blindness and early death in millions of children throughout the world, can be controlled for only pennies per child. Vitamin A supplementation has helped to increase the resistance of children to disease and reduce maternal deaths throughout the world. Iodine deficiency, which may cause mental retardation, can also be eliminated at reasonable cost. It is noteworthy that nearly 60% of the world's salt is now iodized, sparing millions of children from mental retardation (United Nation Children's Fund, 1998). Be that as it may, good politics as much as good medicine is needed to prevent and cope with malnutrition and starvation on the international scene.

SUMMARY

Senescence, the physical deterioration associated with aging, is caused by disease, physical trauma, psychological stress, and the biological aging process. Declines in body structure and functioning with aging occur at all levels—systemic, organic, and cellular. Changes in the skin and skeletal structure influence one's physical appearance, and neuromuscular changes accompanying aging reduce the speed and accuracy of responses.

Characteristics of premature aging occur in progeria and, at least in the mental sphere, in Alzheimer's disease. Even among people who age normally, there is a wide range in the rate of senescence. The effects of psychological variables may be observed in the extent to which people are able to compensate for physical deterioration and continue their activities despite these changes.

Associated with aging are heredity, parental environment, nutrition, exercise, environmental pollution, and psychological stress. Various theories of aging take many of these variables into account. Wear-and-tear theories emphasize the effects of lifestyle and environment. Homeostatic imbalance theory, immunological theory, autoimmunity theory, and hormonal theory highlight changes in the body's internal environment. Theories that emphasize the breakdown of mitochondria and the role of free radicals and cross-linkages (error-catastrophe theory) concentrate on changes at the cellular level. However, most of these theories deal with the effects of the genetic aging process rather than the causes of the process itself.

Research on the genetics of aging has revealed an inborn upper limit to the number of divisions of human cells, but precisely how the biological aging clock is represented in the structure of the DNA molecule is not known.

Scientific medicine has been more successful in combating infectious diseases with a single identifiable cause than multifactor diseases produced by a combination of causes (heart disease, cancer, etc.). Cardiovascular diseases (heart disease and stroke) kill more

people in the United States each year than all other diseases combined. It is clear that the lifestyle characteristic of a given cultural group, combined with a hereditary predisposition, influences the prevalence of cardiovascular diseases and other disorders. Many demographic variables (socioeconomic status, ethnicity, sex, etc.) associated with specific diseases that cause death are also related to background conditions such as poor nutrition, smoking, alcohol and drug abuse, lack of exercise, and psychological stress.

Among the cardiovascular diseases listed as causes of death are arteriosclerosis, hypertension, cerebrovascular disease, rheumatic fever, congenital heart disease, and, most often, ischemic heart disease. Any of the disorders that result in a block (thrombosis) or break (hemorrhage) in an artery can cause heart failure. A clot in a coronary artery leads to a heart attack, and a clot or hemorrhage in a cerebral artery causes a stroke. The incidence of heart disease varies with heredity, sex, ethnicity, nationality, and lifestyle. A diet high in cholesterol contributes to a greater risk of heart disease, and a diet high in salt contributes to hypertension. Personality variables (e.g., Type A behavior pattern, disease-prone personality) are also related to the occurrence of coronary heart disease.

Cancer, the uncontrolled growth of cells, is not a unitary disease. Age, sex, ethnic, and geographical differences have an effect on the type and frequency of cancer; modern living conditions are also a contributory factor. The emphasis in controlling and treating cancer has been on carcinogenic agents such as tobacco smoke, industrial waste, ingested substances (e.g., fats) and overexposure to the sun and other sources of radiation. Psychological variables, such as loneliness and a hopeless or helpless attitude, are also thought to influence the incidence and severity of cancer, but the biological mechanisms by which this takes place are not completely understood. Some positive results have been found in treating cancer by psychological methods, but most physicians remain skeptical, and surgical, chemical, and radiation treatments remain the first line of defense.

Other significant causes of death include chronic obstructive pulmonary diseases (emphysema, chronic bronchitis, asthma, etc.), pneumonia and influenza, diabetes, kidney diseases, liver diseases, Alzheimer's disease, and HIV infection. Because of its infectious nature and potential lethality to the general public, a great deal of research attention has been directed toward the control and treatment of HIV infection. Identifying the cause or causes of Alzheimer's disease and methods for diagnosing and treating this disorder have also consumed a great deal of research attention and time

In the past, epidemics and starvation took millions of lives. Because of advances in science and technology, human beings are not so much at the mercy of changes in the physical environment and the spread of plant and animal diseases as they once were. Nevertheless, disease and malnutrition have not been completely eradicated and continue to take their toll on human lives throughout the world.

QUESTIONS AND ACTIVITIES

1. What effects do psychological variables, such as cognitive abilities and personality, have on aging and disease? Are they more or less important than physical variables? How do the two kinds of factors—physical and psychological—interact in causing disease and disability?

2. How do the types and incidence of diseases vary with chronological age? What physical and psychological variables associated with age contribute to the relationship of age to physical disorders?
3. How and why does the rate of aging vary with the individual? What are some of the factors that affect this interindividual variation—gender, race, lifestyle, socioeconomic status, and environmental conditions?
4. Suppose that you were diagnosed as having an incurable illness and given only 6 months to live. Would you change your lifestyle? In what way? What else would you do to get ready for death?
5. Suppose that you were a member of a committee charged with deciding which patients should be provided with a new expensive medical treatment that might prolong their lives. What conditions, both personal and social, would play a role in your decision?
6. Suppose that you were permitted to choose the manner in which you are going to die (see Box 2.1). What factors would play a role in your decision, and what would it be?
7. How do you expect to spend the result of your life? Do you think you will end up with the same physical, intellectual, and personality characteristics as those of your parents? If not, how do you anticipate being different from them?
8. To what age would you like to live? To what age do you expect to live? How do you account for any discrepancy between these two ages?
9. Web exercise: After cardiovascular diseases, cancer is the second most common killer disease in the United States and in many other countries as well. After reading the section on cancer in chapter 2, log on to one of the following web sites and summarize the functions of each of the corresponding organizations:

American Cancer Society: *www.cancer.org*
Leukemia Society of America: *www.leukemia.org*
National Cancer Institute: *www.nci.nih.gov*

Though not as common as cancer as a killer disease, AIDS and efforts to develop treatments for it have been the focus of extensive activity throughout the world in recent years. After reading the section on HIV infection and AIDS in chapter 2, log on to the following web sites and make a list of the things that you learned about AIDS from your excursion that you did not know before:

AIDS Action Council: *www.thebody.com/index.html*
American Foundation for AIDS Research: *www.amfar.org*
AIDS Resource Foundation for Children: *community.nj.com/cc/aidsresource* National Association of People With AIDS: *www.napwa.org*

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3
ACCIDENTAL DEATH AND SUICIDE

TOPICAL OUTLINE OF THE CHAPTER:

Accidental death
- *How and where do accidents occur?*
- *When do accidents occur?*
- *Who has accidents?*
- *Accident-prone personality*
- *Disasters*

Suicide
- *Statistics and demographics of suicide*
- *Other correlates of suicide*
- *Suicide and the law*
- *Durkheim's analysis of suicide*
- *Psychological aspects of suicide*
- *More on suicide in the young*
- *Identification of suicide potential*
- *Suicide prevention*
- *Physician-assisted suicide*

QUENTIONS DEALT WITH IN THIS CHAPTER

- *How serious are accidents as causes of death, and what are the death rates for different types of accidents?*
- *How, where, when, and to whom do fatal accidents occur?*
- *How can fatal accidents be prevented?*
- *What are the causes of disasters and catastrophes?*
- *How does the suicide rate vary with time, place, and person?*
- *How are gender, ethnicity, socioeconomic status, occupation, and religion related to suicide?*
- *What explanations/interpretations have been offered for suicidal behavior?*
- *How can suicidal behavior be predicted and prevented?*

It may seem strange to discuss accidental death and suicide in the same chapter, but many so-called *accidents* are the results of self-destructive motives. In addition, many *suicides* are accidental, in the sense that they are the results of risky or careless behavior prompted by thrill-seeking, exhibitionism, escapism, or other motives rather than a desire to die.

Since 1950, the accident rate in the United States has declined, but the suicide rate in the general population has remained fairly stable. In 1997, accidents (and other adverse effects) and suicide were the fifth and eighth leading causes of death in the United States.

ACCIDENTAL DEATH

Accidents, defined as unintentional events that result in bodily injury and/or property damage, claimed a reported 92,200 lives in the United States in 1998; this was a very slight decrease from the accidental death toll of 93,800 in 1997. However, 19,400,000 injuries were suffered by U.S. residents as a result of accidents in 1998, the estimated total cost of these unintentional injuries being $480.5 billion (National Safety Council, 1999). These figures are disturbing, but the accidental death rate declined significantly in the United States in the 20th century, a decline largely attributable to the efforts of organizations such as the National Safety Council. Among other things, this organization has stressed the risks of driving under the influence of alcohol or drugs, of not wearing safety belts, and of engaging in other unsafe acts.[8]

The largest number of deaths (41,200) caused by accidents and the highest costs of accidents ($191.6 billion) in 1998 were associated with motor-vehicle mishaps. These statistics could be reduced appreciably by the existence and aggressive enforcement of laws concerned with the use of safety belts and driving while intoxicated. Private organizations such as Mothers Against Drunk Driving have made valiant efforts to reduce the incidence of accidental death and injury associated with drinking, but accidents still rank first among all causes of death before age 45 (Hoyert etal., 1999).

How and Where Do Accidents Occur?

Accidents may be classified according to type and class. The *type* of accident is determined by how the accident occurs or what caused it. Figure 3.1 illustrates how the number of deaths and the death rate varied with the type of accident in 1998. Among the accidental deaths in the United States during that year, nearly 46% were caused by motor vehicles, nearly 18% by falls, and over 9% by solid or liquid poisoning. Other prominent causes of death from unintentional injuries included drowning, fires and burns, suffocation, firearms, and gas or vapor poisoning (National Safety Council, 1999).

[8]Data from the National Mortality Followback Survey of 1993 (National Center for Health Statistics, 1998b) indicated that one-third of decedents involved in fatal motor vehicle crashes were not wearing safety belts.

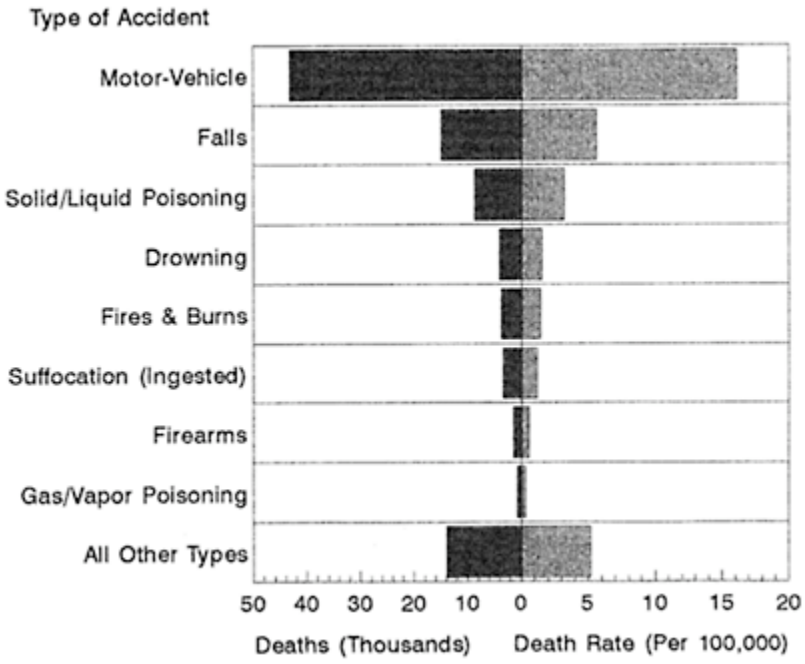

FIGURE 3-1 Number and rate of deaths for different types of accidents in United States in 1997

(data from National Safety Council, 1999).

The class of an accident is determined by where, or in what location, the accident occurred. Accidents are usually grouped into four classes: motor-vehicle accidents, work accidents, home accidents, and public accidents. As previously noted, in 1998 almost 46% of all fatal accidents in the United States occurred in motor vehicles, over 30% (28,200) in homes, over 20% (20,000) in public places, and over 5% (5,100) in either motor-vehicle or non- motor-vehicle related situations at work (National Safety Council, 1999).

Motor vehicles have held the leading position as a cause of accidental death for over a half-century. The causes of motor-vehicle accidents are well-known to traffic safety officials: improper driving in two-thirds of the cases, alcohol consumption in half of the accidents, and vehicle defects in 10%.

Falls are the top-ranking cause of accidents in the home, followed by poisoning by solids and liquids. Fires, burns, and deaths associated with fires are third, suffocation by ingested object is fourth, followed by drowning, firearms, mechanical suffocation, and poisoning by gases and vapors, in that order (National Safety Council, 1999). Within the home itself, more accidents occur in bedrooms than in any other location. The reason for the high rate of death in bedrooms is not, as some may suspect, because lovers' quarrels are more frequent there. Rather, it is because older adults and infants, the two age groups with the highest non-motor-vehicle accident rates, spend more of their time in bedrooms than other age groups. The yard and kitchen also rank high as places where accidentsoccur.

The reasons for this should be obvious, considering the machinery, tools, and other potential hazards in these places.

Among public accidents other than those involving motor vehicles, most common are falls, followed by drowning, water transport, air transport, railroad, firearms, and fires or burns. Among work-related accidents, highway accidents, assaults and violent acts by persons, and falls to a lower level are the top three causes of fatalities (National Safety Council, 1999). In general, considering the high potential for injury and death around industrial machinery, the incidence of job-related injuries is fairly low. One reason for this is that greater attention is paid to safety rules and practices in job situations. Fatal and nonfatal accidental injuries are also relatively low in other organizational settings, such as schools. People are usually more vigilant and careful in situations in which safety practices are emphasized, enforced, and rewarded.

When Do Accidents Occur?

The most straightforward answer to the question of when accidents are most likely to occur is "whenever prevailing conditions are unsafe." The death rate for motor-vehicle accidents tends to be higher at night than during the day, from Friday through Sunday than from Monday through Thursday, during holidays than at other times, during the summer and fall months (July and August, in particular) than during the winter and spring months, and during times of economic expansion than during recessions. Among the conclusions that may be drawn from the above list are that lower illumination and many vehicles on the road, combined with perhaps less vigilant behavior, contribute significantly to vehicular accidents and fatalities in particular. The major careless driving practices that lead to fatal accidents are speeding, failing to yield the right of way, and driving on the wrong side of the road (National Safety Council, 1999).

Unsafe conditions that lead to fatal accidents at home, in public, and at work have been studied extensively. Research in industry, for example, has shown that lighting and temperature influence the accident rate on the job. Interestingly enough, the accident rate is lower among night workers than among day workers. The reason why this is so appears to be because artificial illumination is better than daylight for performing job-related activities (D.P.Schultz & Schultz, 1990).

Who Has Accidents?

Unsafe conditions do not, by themselves, usually lead to fatal accidents. To cause accidents, unsafe conditions must be combined with unsafe acts committed by people. One variable that is related to unsafe acts is chronological age. Motor vehicles are the top-ranked cause of accidental death, but two peaks occur—one in the 15- to 24-year age range and another in old age (see Fig. 3.2). Late adolescence and the early 20s are the ages when young people are learning to drive, and lack of caution, combined with lack of experience, leads to adverse effects. Unlike older adults, whose slower response times and physical disabilities

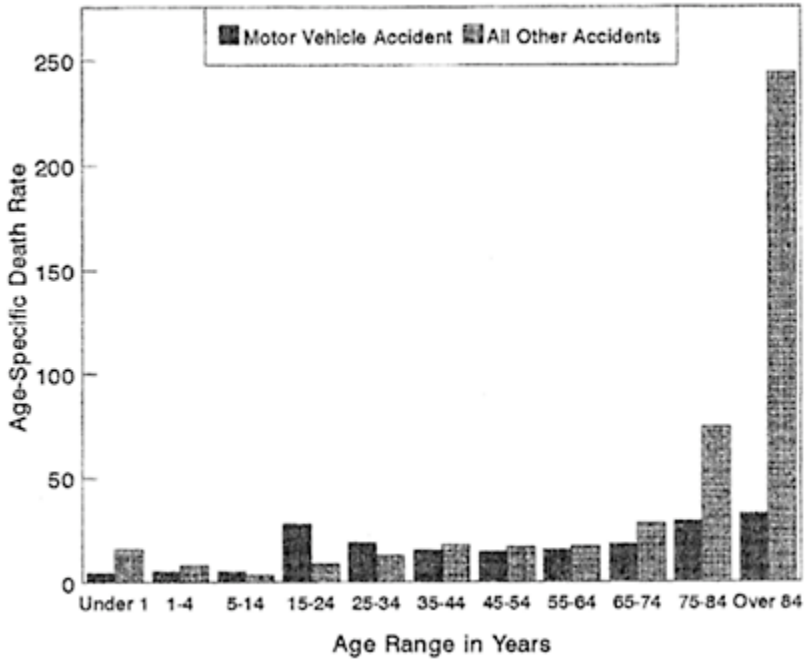

FIGURE 3-2 Age-specific death rates for motor vehicle and other accidents in the United States in 1997

(data from Hoyert, Kochanek, & Murphy, 1999).

contribute to their higher accident rate, the high rate among younger drivers is a reflection of inexperience, impulsivity, and a desire for peer approval. These same factors contribute to the peak in deaths caused by firearms in the 15- to 24-year age range (National Safety Council, 1999).

Drownings are the second-leading cause of accidental death until the early 40s, falls are second from ages 45 to 74, and motor-vehicle accidents are second to falls after age 74. The death rate for accidents other than those involving motor vehicles is particularly high in old age (see Fig. 3.2), when sensory defects and loss of motor coordination are typical and people spend more time at home. The very old are less likely to perceive dangerous conditions, such as a small object left on the floor, open doors or other projecting objects, or something burning. Even when elderly people sense danger, their reactions are usually slower and less precise. Like the elderly, infants have a high death rate due to home accidents, but for somewhat different reasons. Infants and young children suffer more home accidents than older children because of helplessness and a lack of knowledge.

A combination of unsafe acts and greater exposure to unsafe conditions results in a greater likelihood of accidents, including fatal accidents, among males than fe-males. As shown in Fig. 3.3, the difference in the male-female accidental death rate is especially pronounced for Blacks. Also plausible is that individual differences in physical condition, intelligence, and personality are correlated with accident rate. There is good evidence that

health and fatigue influence accident rate, but the results of studies of the relationship between intelligence and accidents is not clear. Inexperience with a task is likely to lead to an accident, but below-average intelligence appears to be significantly related to accidents only on jobs that require frequent judgments (D.P.Schultz & Schultz, 1990).

Accident-Prone Personality

Even less conclusive are the findings of studies of the relationships of personality characteristics to accidents. At one time a great deal of attention was focused on the so-called *accident-prone personality*. It was maintained that people with this type of personality are, because of temperament or habits, more likely to have accidents. The observation that in job situations a small number of workers seem to have a large percentage of the accidents appeared to give credence to this notion, but subsequent research failed to demonstrate that accident proneness is a consistent personality characteristic. This did not mean, of course, that temporary emotional states such as anger or depression

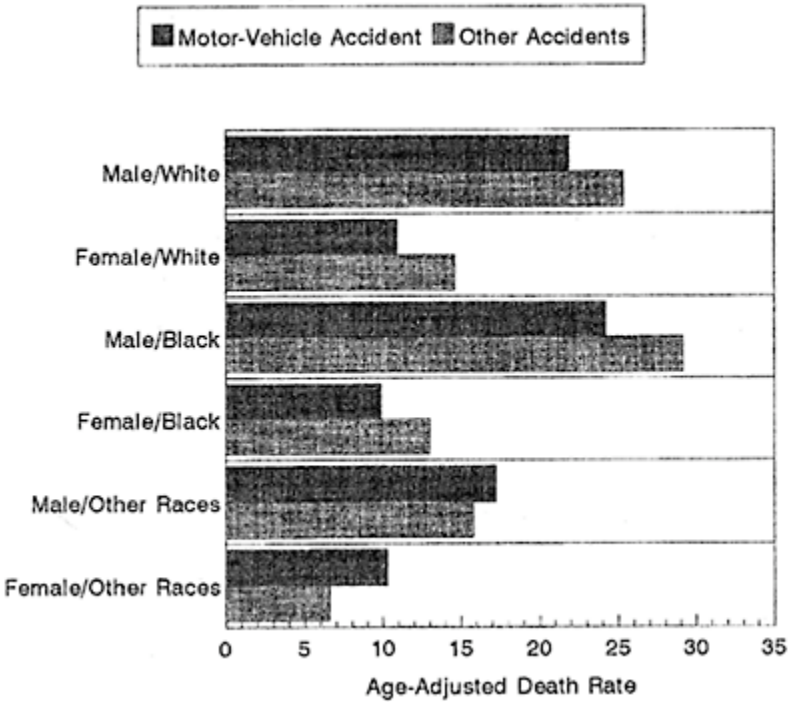

FIGURE 3–3 Age-adjusted death rates for motor vehicle and other accidents by sex and race in the United States in 1997

(data from Hoyert, Kochanek, & Murphy, 1999).

cannot increase the likelihood of accidents. Any emotional or cognitive state that distracts a person or induces him or her to take unwarranted risks can increase the chance of an accident and consequent injury.

Results of a number of investigations have offered some support for a connection between specific personality characteristics and accidents. Shaw and Sichel (1971) found that accident repeaters were less emotionally stable, more hostile toward authority, higher in anxiety, had more problems getting along with other people, and had less stable work histories than nonrepeaters. The results of another investigation indicated that individuals who were excessively ambitious and who harbored revengeful attitudes had a higher than average accident rate (McGuire, 1976). Subsequently, Niemcryk, Jenkins, Rose, and Hurst (1987) found that air-traffic controllers who displayed Type A behavior were more likely than those showing Type B behavior to experience injuries on the job. Even more comprehensive was Hansen's (1989) analysis of the relationships of biodata, personality, and cognitive variables to accidents in a large sample of industrial chemical workers. Hansen found that a social maladjustment scale constructed from the Minnesota Multiphasic Personality Inventory and a measure of neurotic distractibility were both significantly and independently related to the rate of accidents. The results of Hansen's (1989) study and those obtained from other research investigations (e.g., Arnett, 1990; Montag & Comrey, 1987; Perry, 1986) led Furnham (1992) to conclude that there is substantial evidence that personality variables are related to all sorts of accidents in many different populations. With regard to traffic accidents, for example, the results of recent research indicate that drivers with higher levels of arousal take more risks, are more likely to engage in thrill and adventure-seeking behavior, and are less inhibited in socially stimulating situations than drivers with lower levels of arousal (Trimpop & Kirkcaldy, 1997). The results of other studies indicate that an aggressive-competitive personality (Magnavita et al., 1997), alcoholism or a personality disorder of some kind (McDonald & Davey, 1996), and a low level of conscientiousness (Arthur & Graziano, 1996) are more common among people who have a greater number of automobile accidents. Furthermore, Caspi et al. (1997) found that many of the personality characteristics that are related to dangerous driving habits in early adulthood could be identified in early childhood and were also associated with other risky behaviors (alcohol dependence, violent crime, unsafe sex) engaged in at age 21.

Disasters

Accidents or acts of nature in which many lives (usually 25 or more) are lost are referred to as *disasters* or *catastrophes*. A number of famous disasters throughout history come to mind, including the destruction of Pompeii and Herculaneum by the eruption of Mount Vesuvius in 70 A.D., the deaths of an estimated 36,000 people by a tidal wave produced by a volcanic eruption in the East Indies in 1883, and the loss of 1,157 lives in the sinking of the ship *Titanic* by an iceberg in 1912. The most frequent causes of disasters are weather (heat waves, cold waves, snowstorms, blizzards, tornadoes, hurricanes, floods), fires, earthquakes, and airplane crashes; train wrecks, shipwrecks, and other collisions and structural failures also take many lives. Disasters involving airplanes, trains, and buses are usually more publicized than automobile accidents, but the death rate per million passenger miles is substantially higher in automobiles and motorcycles than in other methods of transportation. This is one reason why airline personnel occasionally tell disembarking passengers that they are now beginning the most dangerous part of their journey.

Any sort of accident creates a certain amount of psychological stress in anyone, but the stress becomes particularly acute when many people are killed. Varying to some extent with the individual, the immediate reactions to a disaster are shock, fear, sadness, and rage, which may even lead to a denial that the disastrous event occurred. A person's sense of control over his or her life and many of the things that make it real and predictable are threatened by an unexpected disaster.

Carson and Butcher (1996) described a *disaster syndrome* consisting of three stages. The victim first goes through a *stage of shock,* in which he or she is stunned, dazed, apathetic, and experiences a loss of control. Following the shock is a *suggestible stage,* consisting of passivity, suggestibility, and a willingness to take directions from other people. Last is a *recovery stage,* which begins with tension, apprehension, and generalized anxiety but leads gradually to the regaining of equilibrium on the part of the survivor. At this stage the survivors typically experience a need to talk about the disaster or catastrophe. These three stages are apparent in the following description:

> *On July 25, 1956 at 11:05 P.M., the Swedish liner Stockholm smashed into the starboard side of the Italian liner Andrea Doria a few miles off Nantucket Island… During the phase of initial shock the survivors acted as if they had been sedated… as though nature provided a sedation mechanism which went into operation automatically. (During the phase of suggestibility) the survivors presented themselves for the most part as an amorphous mass of people tending to act passively and compliantly. They displayed psychomotor retardation, flattening of affect, somnolence, and in some instances, amnesia for data of personal identification. They were nonchalant and easily suggestible. (During the stage of recovery, after the initial shock had worn off and the survivors had received aid) they showed…an apparently compulsive need to tell the story again and again, with identical detail and emphasis. (P. Friedman & Linn, 1957, p. 426)*

Unfortunately, feelings of anxiety, nightmares, and flashbacks associated with a disaster or other stressful experience may occur for months or even years after the event. These and other symptoms (feelings of anxiety and estrangement, insomnia and recurring dreams and nightmares, a tendency to be easily startled, problems with social relationships and substance abuse) are characteristic of *posttraumatic stress disorder (PTSD)*. Flashbacks to the stressful event can occur months and even years afterward. PTSD is not limited to disasters; it has been studied most intensively in fighting men and victims of war and terrorism (Roberts, 1988).

SUICIDE

Over the years, I have occasionally asked large groups of high school and college students whether they have ever thought seriously about suicide. When permitted to answer anonymously, over half of the students in several of these groups have replied in the affirmative. It may seem surprising that so many healthy, attractive young people in the spring of their lives with so much to live for have entertained thoughts of self-destruction.

But the surprise diminishes somewhat when one realizes that pain and suffering are no respecters of youth, health, beauty, ability, or affluence. Even the most physically and socially favored individuals can hurt, and sometimes they decide to terminate their suffering by ending their lives.

Until the past 30 years or so, suicide was considered a somewhat taboo topic that many people thought about but few discussed. This situation has changed markedly in recent years, and *suicidology,* the study of suicide, has become a more popular topic of discussion in the media and scholarly publications as well.

Research on the demographics and dynamics of suicide has accompanied the growth of suicide prevention centers, prescriptions for committing suicide, and university courses and course units on the topic. Several professional journals publish reports of research and theorizing concerned with suicide, for example, *Suicide and Life-Threatening Behavior* and *Omega: Journal of Death and Dying*. A number of professional organizations provide information and counseling for dealing with potential suicide (e.g., The Samaritans) and actual suicide (e.g., Heartbeat). Suicide prevention and crisis centers, many of which followed the model established by Normal Farberow and Edwin Shneidman at The Los Angeles Suicide Prevention Center in 1958, have been established throughout the United States and other countries.

Statistics and Demographics of Suicide

There were 30,535 reported suicides in the United States in 1997, an average of 1 every 17 min. Suicides accounted for slightly over 1 % of all deaths in this country during that year (Hoyert et al., 1999). If one considers the large number of suicides that are hushed up or disguised as accidents, perhaps as many as 200,000 Americans in a given year and over 5,000,000 at some time during their lives attempt to kill themselves (McCall, 1991). Many automobile accidents, alcohol and drug overdoses, and even homicides are disguised suicidal behaviors. And other self-destructive behaviors, such as overeating, excessive gambling, and high-risk sports are potentially suicidal.

Table 3.1 is a list of the methods used in committing suicide and the number of Americans who used each method in 1996. Firearms constituted the most popular method for both sexes, and particularly males; hanging, suffocation, and strangulation also ranked high for both men and women, but poisoning and jumping from high places were significantly more common among women. Other less common methods include cutting or stabbing oneself, drowning, and even ramming one's head, aspirating paper or food, or tearing blood vessels with the fingers. Certain methods are, of course, potentially more lethal than others. In order of lethality are gunshot, carbon monoxide, hanging, drowning, plastic bag (suffocation), impact from jumping from high places, fire, poison, drugs, gas, and cutting (Card, 1974).

Geographical Differences. Despite the seemingly large numbers of suicides that occur each year in the United States (11.4 per 100,000 population in 1997), the suicide rate in this country is by no means the highest in the world. In the mid-1990s Russia had the world's highest annual suicide rate (40+ per 100,00), and Hungary (30+ per 100,000) was second. The suicide rates for Austria, Denmark, Finland, France, and Switzerland, all around 20 per 100,000 were also higher than that of the United States. The rates for Australia, Canada, and Scotland were roughly the same as the United States, but those for

Italy, the Netherlands, Portugal, Spain, England, and Wales were lower (U.S. Census Bureau, 1999). The lowest suicide rates in the world (near 0 per 100,000) occur in Iceland,

TABLE 3.1 Methods Used in Committing Suicide in the United States in 1996

Method	*Number of Suicides*	*Percent of Total Suicides*
Poisoning by solid and liquid	3,073	9.94
Poisoning by gases and vapors	2,007	6.49
Motor-vehicle exhaust gases	1,508	4.88
Other and unspecified gases and vapors	499	1.61
Hanging, strangulation, and suffocation	5,330	17.25
Drowning	361	1.17
Firearms	18,166	58.78
Handgun	3,675	11.89
Shotgun	2,293	7.42
Hunting rifle	945	3.06
Other and unspecified firearms	11,253	36.41
Cutting and piercing instruments	435	1.41
Jumping from high places	645	2.09
Other, unspecified suicide and late effects	886	2.87
All suicide deaths	30,903	100.00

From National Safety Council (1999).

the Faeroe Islands, and among the aborigines of Western Australia. Not only the rate but also the method of committing suicide vary with nationality. Undoubtedly because of their easy availability, firearms are the most popular method in the United States. Inhaling domestic gas is, however, the most common method of committing suicide in the United Kingdom.

The Mountain states have the highest suicide rate of all geographical regions in the United States. Nevada had the highest age-adjusted rate (22 per 100,000) of all 50 states in 1997. New England had the lowest regional age-adjusted suicide rate (8.0) in the continental United States in 1997, but New Jersey had the lowest rate (6.6) of all 50 states (Hoyert et al., 1999). Within the various states, the suicide rate tends to be higher among residents of urban than in rural areas (Curran, 1987).

Age Differences. Figure 3.4 shows that the suicide rate in the United States, as a whole, is lowest in childhood and youth. The low rate for young children is due, to some extent at least, to the practice of the National Center for Health Statistics of not reporting the deaths of children under age 8 as suicides. The number and rate of suicides increase up to the late 30s to early 40s. Both the number and rate remain fairly constant from the

late 40s to the early 70s, after which the number declines but the rate rises. Not only in the United States, but throughout the world, more older people than any other age group commit suicide (Adamek & Kaplan, 1996;A. S.Brown, 1996).

The high incidence of suicide among older Americans is seen in statistics from both the 19th and 20th centuries. Also noteworthy in interpreting age-related statistics on suicide is that

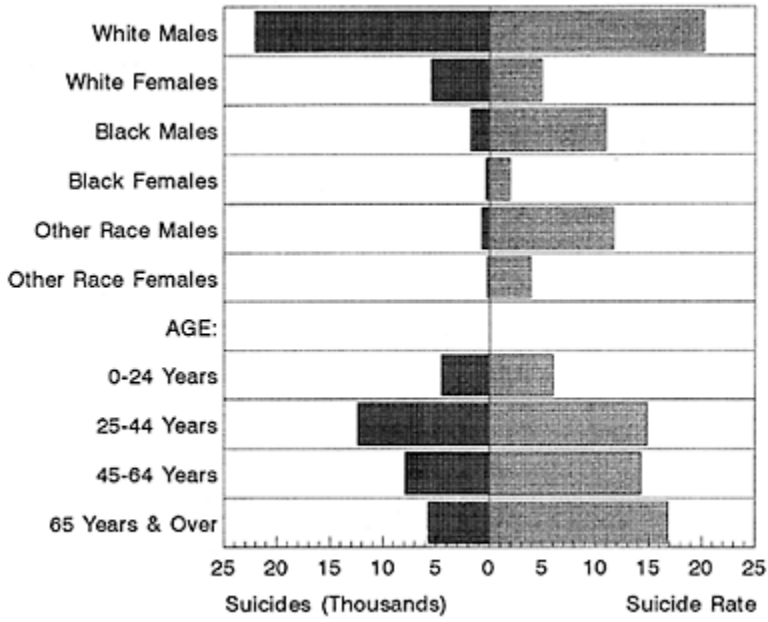

FIGURE 3-4 Age-adjusted suicide rates by sex, race, and age groups in the United States in 1997

(data from Hoyert, Kochanek, & Murphy, 1999).

older adults are more successful than younger adults in their suicide attempts. The presumed reasons are that older people who commit suicide are more determined to die, and their ability to recover from physical injury is less.

A *suicide pact,* in which two or more people agree to kill themselves at the same time and usually in the same place, is usually viewed as a phenomenon of youthful romanticism. However, on occasion it also occurs in later adulthood. Newspapers occasionally carry stories of older married couples, who, because they are the victims of repeated crime or suffer from severe neglect, poverty, or chronic illness, become despondent and decide to take matters in their own hands and end their lives together.

Although the suicide rate is lower among teenagers than among the elderly, it has increased dramatically in recent years. In 1997 suicide was the sixth leading cause of death for 5- to 14-year-olds and the third leading cause of death for 15- to 24- year-olds (Hoyert et al., 1999).

Cluster suicide, in which several suicides take place in the same group or community, occasionally occurs among high school students (Gould, Wallenstein, & Davidson, 1989; Hazell, 1993). According to G.B.Fulton and Metress (1995), cluster suicides account for 1–5% of suicides by American youths. Cluster suicide on a large scale also takes place among adults, as at Masada in Judea in 73 A.D., in Jonestown, Guyana in 1978, and at Rancho Santa Fe in San Diego, California in 1997. In the last of these, 39 members of the Heaven's Gate UFO Cult committed suicide, reportedly in preparation for a trip to heaven in a space ship. Many cluster suicides are actually murder/suicides, in which many people kill each other, as at Jonestown by drinking soft drinks laced with cyanide.

The imitative or modeling aspect of cluster suicide is seen in the fact that the rate tends to increase after the suicide of a celebrity and/or media attention to suicide stories. For example, Phillips and Carstensen (1986) found a significant relationship between the occurrence of nationally televised news or feature stories about suicide and the suicide rate among American teenagers. The greater the degree of publicity given to the suicide story, the greater was the increase in the number of suicides, primarily in the geographic region where the publicity occurred. Imitative or copycat suicide is, of course, not a phenomenon limited to modern times. During the Romantic era of the 19th century, suicide reached epidemic proportions in Europe following publication of Wolfgang Goethe's *The Sorrows of Young Werther* (Kull, 1990)

Religious and Cultural Differences. Despite occasional attitudes of tolerance and even admiration when committed in a heroic context, suicide was opposed in ancient Greece, Rome, and other early Western nations. Judaism did not sanction suicide but was less opposed to it than to murder. There is a long tradition in Judaism of honoring suicide committed to avoid rape, slavery, or idol worship (Curran, 1987). Although the sixth commandment in the Book of Exodus states "Thou shalt not kill," taking one's own life is not specifically forbidden by the scriptures. The five recorded incidents of suicide in the Bible (Samson, Saul, Abimilech, and Achitophel in the Old Testament and Judas Iscariot in the New Testament) are described without comment. For example, the Bible simply states that "Saul took a sword, and fell upon it," and Achitophel "put his household in order, and hanged himself." The Koran, on the other hand, strongly forbids suicide; it was and still is most severely condemned in Islamic countries.

Roman Catholic theology considers suicide to be a mortal sin. Unlike murderers, suicides cannot confess and receive absolution for their sins. The rules against suicide that became the basis for Roman Catholic doctrine were laid down in the 5th century A.D. by St. Augustine, who relied on the writings of Plato and Aristotle. Augustine was concerned over excessive martyrdom through suicide, and his injunctions against it were echoed by Thomas Aquinas during the 13th century A.D. Aquinas characterized suicide as a mortal sin that usurps God's power over life and death.

The Christian church in the Middle Ages viewed the taking of one's own life as a violation of the sixth commandment and as destroying something (a human life) created by God. As a result, the penalties for suicide were severe, including denial of Christian burial, degradation of the corpse, confiscation of the deceased's possessions, and censure of the survivors. However, Catholicism changed during the 20th century, and the Roman Catholic Church now permits the Mass of Christian Burial and burial in consecrated ground for suicide victims. Among religious groups today, the suicide rate is higher for Jews than for Protestants, and higher for Protestants than that for Roman Catholics and Muslims (Oaks & Ezell, 1993).

Far Eastern cultures in which Hinduism, Buddhism, and related religions predominate have traditionally been tolerant of suicide. Both Hinduism and Buddhism condone suicide under certain circumstances, as when it serves religion or country. *Suttee,* an ancient Hindu custom in which the living wife of a deceased man was voluntarily (or involuntarily) cremated on her deceased husband's funeral pyre, was practiced in northern India until being outlawed by the British in the 19th century (see Fig. 3.5). It was also customary among the Vikings and other early northwestern European groups for the wife or concubine of a slain warrior to commit suicide or be killed so she might be available to serve the deceased in the afterlife.

Suppuku, or *hara-kiri,* a ritual in which a disgraced samurai disemboweled himself with a knife before having his head chopped off by an assistant, was considered an honorable way to die in medieval Japan. A more modern form of ritual suicide was followed by an estimated 1,000 Japanese kamikaze (divine wind) pilots during World War II. So eager were many young Japanese men to sacrifice themselves for emperor and country that their superior officers had to restrain them and discourage the practice. Even today, the Japanese, whose language contains 58 different phrases pertaining to suicide, remain sympathetic toward hara-kiri as an honorable way to die under certain circumstances (Jameson, 1981). Since World War II, however, changes in the social and political structure of Japan have led to the virtual disappearance of ceremonial hara-kiri.

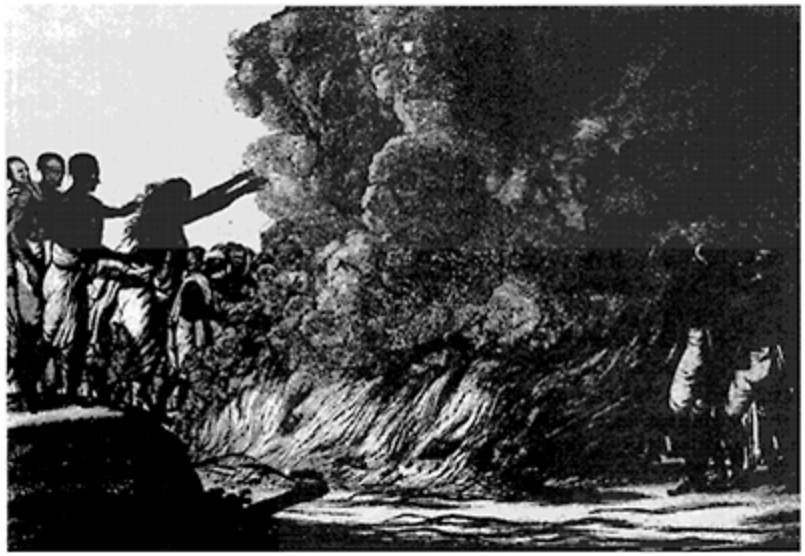

FIGURE 3-5 A Hindu widow leaps onto the funeral pyre of her dead husband. This sacrificial rite, known as *suttee* and once regarded as a virtuous obligation, has long been forbidden by law in India.

Sex Differences. More females than males, perhaps 9 times as many, in the United States attempt suicide, but males succeed 3–4 times as often before old age and 10 times

as often after age 85 (Shneidman, 1987). One reason why males are more successful than females in committing suicide is that the former are likely to use more lethal methods. Although the predominant method of committing suicide for both sexes is firearms, males are more likely than females to use guns, which are usually more fatal, whereas females are more likely to take an overdose of a drug or medicine (Garland & Zigler, 1993).

Sex differences in suicide rates among older adults are also influenced by the differing roles that men and women are expected to play in American culture and the changes in those roles with age. The assertive, achievement-oriented role of a typical man is not so adaptable to socioeconomic and status changes in later life as the more passive, nurturant role assumed by a typical woman. Consequently, the greater change in behavior and self-esteem required of an older man may create more stress and resulting depression when he cannot find satisfaction in his new role or situation. The high suicide rate for recently widowed White men in particular may be due in some measure to their relative lack of other confidants, compared with the many such confidants among widows. Men are also less likely than women to seek medical or psychological help when they become depressed and contemplate suicide. Nevertheless, the suicide rate for American women over age 65 has increased in recent years (Adamek & Kaplan, 1996).

Ethnic Group Differences. Although the suicide rates for White males and females are higher than those for Black males and females (Fig. 3.4), the increase in the overall suicide rate during old age is primarily a reflection of the very high rate for White males. Such statistics are the basis for the perception of suicide by the Black community as "a White thing." Within the Black community, suicide is viewed as a weak and cowardly way of solving one's problems (Early & Akers, 1993). Despite this viewpoint, suicide rates for Black Americans, especially males, have increased steadily since World War II. The increase may be attributable in some measure to the vertical social mobility of American Blacks, the consequent role changes, and the associated high degree of psychological stress. Social changes during the 1950s and later decades created high expectations in ethnic groups that had for generations resigned themselves to low social status. When people are unaware of what they do not have or when opportunities for acquiring material benefits do not exist, they usually adjust and resign themselves to their situation. But frustration invariably follows when hopes and expectations are raised and not fulfilled fairly soon. Such frustration then leads to anger and depression,and in certain instances to violence against other people and oneself.

Cultural conflict, as seen among certain Native American and Eskimo groups, is also a significant cause of frustration that may lead to suicide. EchoHawk (1997) discusses the influence of historical factors such as religious influence of Christian missionaries and legislative acts concerning territory on the high suicide rate among Native Americans in the 15- to 24-year age range. These events are interpreted as having weakened and fragmented tribal unity by erecting language barriers, undermining parental influence, introducing nontraditional religions, and uprooting tribes from their lands. Similarly, Van Winkle and May (1986, 1993) attributed the high rate of suicide among Eskimo teenagers in Alaska to cultural disruption and finding oneself caught between the ancestral culture and the White man's world.

Social Class and Occupational Differences. The influence of material factors is seen in the fact that suicide is more common during times of economic distress and for people of lower socioeconomic status and those experiencing downward social mobility. Even

during later life, men who have fairly good incomes from Social Security, pensions, and other sources are less likely than their poorer age-mates to take their own lives (Marshall, 1978).

The rate of suicide is also related to occupation. Data collected by the National Institute for Occupational Safety and Health indicate that the suicide rate is highest in the military, followed by farmers and other agricultural workers (Conroy, 1989). Within occupational groups, the rate of suicide is highest for public administration, agriculture, forestry, and fishing. It is high among physicians (highest among psychiatrists and lowest among pediatricians and surgeons), dentists, and lawyers, but low among teachers and clergy (Wekstein, 1979). Understandably, the suicide rate is a function of the availability of means for committing it. Physicians can easily obtain lethal drugs and instruments; soldiers and police officers, who also have a high suicide rate, have easy access to firearms. Furthermore, the fact that all three of these occupations can be quite stressful undoubtedly contributes to the high suicide rate (Cavan, 1998).

Other Correlates of Suicide

In addition to the various demographic variables discussed previously, the rate of suicide is related to personal and social factors, mental and physical health, family history, and marital status (Garrison, 1989). It is highest for people who have serious problems—the chronically ill or violent, alcoholics, drug addicts, and the mentally ill. Suicide also runs in families, either because of the genetic transmission of a potential for self-destructive behavior or by following the example of suicidal relatives. The suicide rate is also high among the childless and those from broken homes. With respect to marital status, suicide is most common among widowed persons, next most common among the divorced, next among separated and single persons, and least common of all among married people (Ezell, Anspaugh, & Oaks, 1987).

With respect to a biochemical basis, research has discovered low levels of serotonin (5-HT) or its neurotransmitter metabolite (5-HIAA) in the victims of suicide (Nielson et al., 1994; Roy, 1994; Slaby, 1994). In general, it is believed that chemical factors such as these may serve to increase the individual's vulnerability to chronic depression and suicide.

Although the suicide rate is slightly higher on Mondays and during the first part of the month (specifically the fifth day), and in the spring (Gabennesch, 1988), day and season are not closely related to suicide. The suicide rate also does not vary significantly with the phases of the moon (Maldonado & Kraus, 1991). The rate is higher during times of economic recession, depression, and social unrest, but it declines during wartime and with the occurrence of earthquakes and other natural disasters (Carson & Butcher, 1996). Contrary to popular belief, with the possible exception of New Year's Eve and New Year's Day, suicides are no more common on major holidays than at other times of the year (McCleary, Chew, Hellsten, & Slynn-Bransford, 1991; Phillips & Wills, 1987). However, the rate does tend to decrease during presidential elections (Boor, 1981).

Suicide and the Law

Many of the penalties for suicide in canon (ecclesiastical) law were codified into civil law. Under early English law, suicide was a felony punishable by driving a stake through

the heart of the victim and burying the body at a crossroads ("Suicide," 1984). Antisuicide laws continued on the law books of Western countries until the late 18th century, when they began to be repealed. France was the first (1789) and England the last (1961) European nation to repeal antisuicide legislation. In the United States, suicide is no longer illegal according to federal law, but attempted suicide is a felony in nine states: Alabama, Kentucky, New Jersey, North Carolina, North Dakota, South Carolina, South Dakota, Oklahoma, and Washington, and aiding and abetting suicide is a felony in 20 states.

Durkheim's Analysis of Suicide

The eminent sociologist Emile Durkheim (1897) differentiated among four different types of suicide: altruistic, anomic, egoistic, and fatalistic. Hara-kiri, suttee, and other ritualistic or conventional forms of suicide were designated as *altruistic*. People who are strongly integrated overtly into society, who have an exaggerated concern for it, and are willing to die for the social group are more likely to become altruistic suicides. *Anomic suicide,* on the other hand, is a personal response to a loss of social equilibrium. The social norms are no longer effective for such an individual, and he or she feels betrayed by the institutions of society. For example, a sudden loss of one's job or personal fortune (as in a stock market crash) can precipitate anomic suicide.

The third type of suicide in Durkheim's (1897) analysis is *egoistic suicide,* a selfish act committed by an individual who, through failure to become socially integrated, lacks adequate social supports for coping with a personal crisis. Such people may have peculiar talents or exist in circumstances that place them in a special category (e.g., a celebrity or star) but are not connected to society in conventional ways.

A final type of suicide described by Durkheim (1897) is *fatalistic suicide,* in which the victim has been overcontrolled (held to strict rules) or oppressed by others. Acting out of a sense of despair over a lack of opportunity to satisfy or fulfill individual needs and potentials, the person decides to end it all.

Rather than viewing it as a medical problem, Durkheim (1897) saw suicide as caused by the failure of people to become adjusted to or integrated into society and to absorb its values and norms. As a result, he maintained, people with strong group ties are less likely to commit suicide. They are more sensitive to the standards and expectations of the group, including opposition to group dissolution and suicide, and more susceptible to the enforcement of those standards. It follows that an important deterrent to suicide by distressed or depressed people is involvement and identification with others.

As pointed out earlier in this chapter, married people, who presumably have stronger familial or social ties than divorced, separated, widowed, or single people, are less likely to attempt suicide. In addition, people whose relationships with others are stable and satisfying are less likely than isolates, loners, or those whose social relationships are unrewarding to kill themselves (Ezell et al., 1987; Farberow, 1974). Such findings would appear to lend substance to Durkheim's (1897) analysis, but the current scientific viewpoint on suicide is more interdisciplinary; it includes not only sociological factors but also biological and psychological ones.

Psychological Aspects of Suicide

As suggested by the large number of people who admit having contemplated suicide at one time or another, all kinds of people kill themselves and for a variety of reasons. Among the reasons are rejection by or the death of a loved one; loneliness; feelings of guilt; failure to attain a desired professional or social position, or the loss of one; chronically poor health and physical pain; a desire for revenge; and even altruism. Among young people, loss of self-esteem, failure to live up to parental expectations, and problems with interpersonal relationships are common causes. Associated emotional reactions include depression, guilt, anger, hopelessness, and despair. Depression is the most common emotion in suicide, and mental disorders in which depression is a primary symptom carry the highest risk. The risk increases when drinking and drugs accompany the state of depression.

Most people who are contemplating suicide communicate their intentions, directly or indirectly, to at least one other person. These "cries for help" range from subtle hints that one may not be around much longer, all the way through clear-cut threats to kill oneself. Although people are usually ambivalent about taking their own lives, suicide threats should always be viewed seriously. A survivor who is oblivious to such cues often finds that the suicide of a friend or relative has placed a permanent "psychological skeleton" in the survivor's "emotional closet" (Shneidman, 1995).

Psychoanalytic Perspective. Because so many personal and situational variables contribute to a decision to take one's own life, no single theory of personality or behavior can explain all suicides. Classical psychoanalysis interpreted the act of suicide as resulting from an internalization of anger that the person is unable to express externally. Freudians believe that the destructive instinct, *Thanatos,* which is always present in the individual, gains the upper hand in suicide. To Freud, suicide is murder in the 180th degree. It occurs when the anger or guilt felt toward another person is turned inward and redirected toward the "introject," or internalized image of that person. A person who attempts suicide has also failed to live up to his or her ego ideal, and pressure from the superego becomes unbearable, driving the person toward self-destruction (Friedman, 1967)

Humanistic Perspective. The humanistic perspective views a good life as one that is meaningful and self-actualizing. For this reason, suicide represents a waste or defeat. By destroying themselves—slowly or quickly, directly or indirectly, people fail to fulfill their potentialities and so their lives become meaningless.

Behavioristic Perspective. According to the behavioristic analysis of suicide, people attempt to destroy themselves only when there is a loss of reinforcers (health and vitality, love, success, material benefits, etc.). By committing suicide, the person fancies that he or she will move from a position of no reinforcement to a position in which pity, attention, revenge, and other possible consequences of death provide reinforcement, albeit in absentia (Bootzin & Acocella, 1994)

Cognitive Perspective. Shneidman and Farberow (1970) interpreted suicide as an action that results from particular modes of thinking. *Catalogical thinking* is described as despairing and destruction; the individual feels helpless, fearful, and pessimistic about becoming involved in personal relationships. In *logical thinking,* on the other hand, the person's thought processes are rational. An example is an elderly person who, after enduring long years of physical suffering or loss, decides to gain release by departing this

life. In *contaminated thinking,* as represented by hara-kiri, suicide is viewed as a way of saving face or as a transition to a better life. For such a person, death is a religiocultural ritual with a deep personal significance. In a fourth type of suicidal thinking, *paleological thinking,* the person responds with the act of suicide to accusatory delusions or hallucinations that involve shame and promise redemption only through death.

More on Suicide in the Young

> *Dear Mom, Dad, and everyone else,*
> *I'm sorry for what I've done, but I loved you all and I always will, for eternity.*
> *Please, please don't blame it on yourselves. It was all my fault and not yours or anyone else's. If I didn 't do this now, I would have done it later anyway. We all die someday. I just died sooner.*
> *Love,*
> *John*
>
> *(Berman, 1986, p. 151)*

Suicide is more common among the old than the young, but it is the third-leading cause of death among Americans aged 15–24. Many of today's youth appear confused and frightened about the future. Feelings of anonymity and alienation, insecurity, and pressure to grow up too soon or to become popular and successful overnight are widely expressed by teenagers and young adults. Children may reach a point where they feel that nothing is fun anymore, that they are loved by no one and must reciprocate by loving no one and nothing. The failure to live up to parental expectations and the resulting loss of feelings of belonging and self-esteem act as predisposing conditions for anger and depression. Then the danger signals of potential suicide begin to appear.

Various physical changes may precede suicide attempts by children and youth, including digestive upsets, headaches, insomnia, loss of appetite, and a decline in appearance. Behavioral warning signs of suicide include a decline in school performance, irritability, mishaps of various kinds, unhappiness, loss of interest in things, a slowing down of movements, and increased use of alcohol and drugs. Cognitive changes such as increasingly rigid and negative thoughts, as well as a preoccupation with suicide, are also common (see Table 3.2).

Young boys with high suicide potential are more apt to have temper tantrums, engage in violent actions, and run away from home; young girls are more likely to become deeply depressed and to develop psychosomatic symptoms, including headaches, nervous quirks, and excessive weight gains. In addition to a decline in academic achievement, older youths may exhibit depression, deterioration in personal care and hygiene, withdrawal and isolation, and self-criticism indicative of low self-esteem. The person may increase his or her consumption of alcohol and/or drugs, talk about methods of committing suicide, and even threaten to kill himself or herself. Such behavior is most likely to occur during a crisis or transition period in a young person's life—the breakup of a romance, parental divorce or death, academic failure, or when the person is forced to rely on his or her own resources for the first time (Carson & Butcher, 1996).

TABLE 3.2 Symptoms of Suicidal Feelings in Teenagers

Change in eating and sleeping habits.
Withdrawal from friends, family, and regular activities.
Violent actions, rebellious behavior, or running away.
Drug and alcohol use.
Unusual neglect of personal appearance.
Marked personality change.
Persistent boredom, difficulty concentrating, or a decline in the quality of schoolwork.
Frequent complaints about physical symptoms, often related to emotions, such as stomach aches, headaches, fatigue, and so on.
Loss of interest in pleasurable activities.
Not tolerating praise or rewards.
Teenagers who are planning to commit suicide may also
Complain of being "rotten inside."
Give verbal hints with statements such as "I won't be a problem for you much longer," "Nothing matters," "It's no use," and "I won't see you again."
Put his or her affairs in order—for example, give away favorite possessions, clean his or her room, throw away important belongings, and so on.
Become suddenly cheerful after a period of depression.

Source: American Academy of Child and Adolescent Psychiatry. (1999).

Identification of Suicide Potential

People who are thinking about suicide typically fail to realize that they need help, and therefore they do not seek it. Interested family members, friends, and associates must be aware of and alert for the danger signs of suicidal behavior. Because prediction facilitates prevention, much attention is given by suicidologists to symptoms of suicide potential. These symptoms include threats and other statements revealing a desire to die, previous suicide attempts, changes in performance at school or on the job, changes in personality (nervousness, anger outbursts, withdrawal, moodiness, apathetic with regard to health and appearance), depression (crying sleeplessness, loss of appetite, hopelessness), increased use of alcohol or drugs, and final arrangements such as giving away personal possessions or making a will (Beck, Brown, & Steer, 1989; Evans & Farberow, 1988, pp. 58–59, 63).

Whenever a person, either directly or indirectly, threatens suicide, the listener should be accepting, caring, and supportive. However, if a suicide attempt is judged imminent, then the person should be encouraged to call a crisis intervention center or accompany the listener to a hospital. If these efforts fail, the listener should call a rescue unit or the police.

Hotline volunteers at the Los Angeles Suicide Prevention Center are provided with a "lethality checklist" to help identify callers with a high potential for suicide. Affirmative answers to the following questions characterize high-risk cases:

1. Does the person communicate an intent to commit suicide?
2. Is the person highly specific about the details of the suicide plan? (e.g., "I know how many pills it will take for my body weight," "My will is folded under the telephone," "I will end it at sunset looking out my window," and "I will be wearing….")
3. Does the person have no family or other social support system?
4. Is the person facing a concrete life stress?
5. Is the individual suffering from a serious illness?
6. Has the person suffered from symptoms such as insomnia, depression, or alcoholism?
7. Is the individual a male?
8. Does the person have a chronic, debilitating illness? (Evans & Farberow, 1988, p. 187)

Suicide Prevention

The prevention of suicide is important not only to the victim but also to the survivors. Perhaps not the most important reason, but a serious one, is that insurance companies usually are not required to pay death benefits to the survivors of suicide victims. Nearly a million people in the United States are influenced each year by someone else's suicide, not just economically but also psychologically. The grief, guilt, blame, and feelings of helplessness experienced by these survivors are incalculable.

The need for a professional approach to suicide prevention has led to the establishment in many countries of clinics devoted to this task. One of the first formal organizations to help prevent suicide was the Samaritans, which was founded by an Anglican minister, Chad Varah, in 1953 in London, England. Samaritans' volunteers, known as "befrienders," are available to listen and help, with no strings attached, not even expressions of gratitude. The organization has chapters throughout the British Commonwealth and in other parts of the world (see Appendix B).

The first suicide prevention clinic in the United States opened in Los Angeles a few years after the founding of the Samaritans. The number of such clinics is now in the hundreds nationwide. The clinics, which are oriented mainly toward crisis intervention, provide psychological first aid and support to thousands of lonely, desperate people every year. Clinic staff members try to help suicidal people cope with immediate crises in their lives. They are not always successful in preventing suicide, but the reward of saving a few lives is worth the effort (Frankish, 1994; Lenaars, 1994).

Long-term programs for treating suicidal persons emphasize helping them to realize the possibilities that remain open and giving them hope and the courage to make their lives more meaningful and worthwhile. Counselors of people contemplating suicide (counselees) use the following procedures:

1. The counselee is urged to speak frankly, no matter how negative his or her statements may seem.
2. The counselor listens carefully and shows genuine interest, concern, and caring.
3. The counselor assesses the internal and external strengths and resources of the counselee.
4. The counselor assists the counselee in clarifying his or her problem or problems and formulating a plan of action.
5. The counselor arranges for psychiatric hospitalization when the situation is highly lethal, even if legal commitment becomes necessary (Altrocchi, 1980).

Various techniques may be effective in modifying the thoughts and behaviors of suicidal persons. Included among these are *self-monitoring, differential reinforcement, social support,* and *cognitive restructuring*. Self-monitoring consists of attending to and thus becoming aware of one's own thoughts and behaviors and how they are interpreted by other people. The very process of attending to what one is thinking and doing can help to change negative thoughts and behaviors. Differential reinforcement consists of rewarding positive or constructive thoughts and behaviors and not rewarding destructive ones. Social support for positive, nondestructive ideas and actions is, of course, itself a kind of differential reinforcement. All three of these behavior modification techniques are used in cognitive restructuring, which consists of: (a) identifying persisting thoughts that lead to depression, (b) training the person to realize that these kinds of thoughts are distortions of reality, and (C) showing the person how to eliminate such thoughts by "thought-stopping" maneuvers and by dealing with the negative thoughts rationally (Beck et al., 1987). Biological treatments aimed at dealing with depression and anxiety and thereby reducing the risk of suicide include the use of electroshock therapy and antidepressant and antianxiety drugs. A combination of biological and psychological treatments may be used and is often the best strategy (Beck, Hollon, Young, Bedrosian, & Budenz, 1985; Beck, Rush, Shaw, & Emery, 1987). Psychotherapeutic procedures, when applied by trained, empathic counselors and therapists, are effective with a sizable percentage of suicidal persons. Unfortunately, these procedures do not always work, and a suicidal person may ultimately decide that the only reasonable solution to what he or she considers an intolerable situation is to take one's own life. Psychiatrist Thomas Szasz (1986) maintained that suicide is a fundamental right of adults, and if the person does not really want help and actively rejects it "then the mental health professional's duty ought to be to leave him or her alone" (p. 809).[9]

Physician-Assisted Suicide

Whether a person who, after examining the various alternatives in detail, decides to commit suicide should be permitted to do so and even helped to make it less painful has been debated in private and in the media and other public forums for many years. A patient's "right to die," which became a prominent issue in the United States with the cases of Karen Anne Quinlan and Nancy Cruzan in the 1970s and 1980s, is a complicated issue, involving legal, medical, philosophical, psychological, public policy, and religious arguments pro and con. Organizations such as the Center for the Rights of the Terminally Ill, Choice in Dying, the Hemlock Society, and the Society for the Right to Die (see Appendix B) have worked actively to bring the issue into public consciousness.

As of 1999, physician- or doctor-assisted suicide (PAS/DAS) was prohibited by statutes in 37 states, and 8 states prohibit it through application of common law. In 1997, such state bans on PAS were found by the Supreme Court not to violate the U.S. Constitution. Currently, in only one state—Oregon—is PAS legal. Under the Oregon law, which has been legal and practiced in that state since November 1997, physicians can legally write prescriptions for lethal drugs for adults with a diagnosed terminal illness and a prognosis of 6 months or less to live.

[9]Additional information on the prevention and treatment of suicide may be obtained from the American Association of Suicidology and the International Association for Suicide Prevention (see Appendix B).

Despite the legal sanctions against physician-assisted suicide, a small percentage of doctors, often at the family's request, have helped terminally ill patients end their lives (Emanuel, Daniels, Fairchlough, & Clarridge, 1998; Meier et al., 1998). Certainly the most controversial character in the PAS/DAS drama is Dr. Jack Kevorkian, unaffectionately referred to by his opponents as Dr. Death, who has assisted some 130 terminally ill patients to commit suicide. The last of these deaths, that of a patient suffering from Lou Gehrig's disease, resulted in a second-degree murder conviction and a 25-year sentence for Dr. Kevorkian.

SUMMARY

Unintentional injuries, or accidents, the leading cause of death among all Americans in the first 4 decades of life, and the fifth leading cause of death among Americans of all ages, were responsible for an estimated 93,800 deaths in this country in 1997. However, the rate of both fatal and nonfatal accidents has declined significantly in recent years. The major causes of fatal accidents in 1997 were, in order and grouped according to type, motor vehicles; falls; poisoning by solids and liquids; drowning; fires, burns, and deaths associated with fires; suffocation by ingested object; firearms; and poisoning by gases and vapors. Grouped according to class of accident, the four main causes of accidental death were motor vehicles, injuries in and about the home, public accidents, and job-related accidents.

Fatal motor-vehicle accidents are more likely to occur at night, on weekends and holidays, in the summer and fall, and during periods of economic expansion. Although older adults have more accidents than other age groups, the age-specific death rate for motor-vehicle accidents by Americans in the 15- to 24-year age range is just as high as that for adults aged 75 and above. Accidents and accident fatalities are higher for males than females, for Blacks than Whites, and for people in poor physical condition (caused by illness, fatigue, alcohol, or drugs) than among the physically healthy and alert. Intelligence and personality variables are not closely related to accidents, but temporary emotional states can affect their occurrence and severity.

The annual suicide rate in the United States of approximately 12 per 100,000 inhabitants is about average for the world. The rate is particularly high for American Indians and older White males in the United States (see Box 3.1). The world rate varies from almost 0 for Iceland and Western Australia to over 30 for Russia and Hungary. The suicide rate increases with chronological age and is higher for males than females, for Caucasians and Asians than Blacks, and for Jews and Protestants than Catholics. It is higher for urban than for rural residents, higher in lower class than upper class people, and higher in widowed and divorced people than in married people. It is also higher during times of economic recession than during economic upswings, and higher after the suicide of a famous person, real or fictional.

Taking one's own life is opposed in Western and Middle Eastern countries, especially predominantly Roman Catholic or Islamic countries. It is viewed with less disfavor in the Far East, where conventional suicides such as suttee in India and hara-kiri in Japan were practiced for generations. The act of suicide is no longer a criminal offense in most Western countries, but it is generally disapproved by society. Helping a person to commit suicide is illegal in almost all of the United States, but some nonconformists are testing the laws.

Durkheim's (1897) sociological theory differentiates between four types of suicide: altruistic, anomic, egoistic, and fatalistic. Psychological theories of suicide in-elude the psychoanalytic conceptions of a death instinct (Thanatos) and self-directed aggression, the humanistic perspective of suicide as a loss of meaning in one's life, the behavioristic view of suicide as an attempt to attain positive reinforcement, and the cognitive conception of catalogical, logical, contaminated, and paleological thinking.

An increase in the incidence of suicide among teenagers and young adults has been attributed to feelings of anonymity, alienation, and uncertainty. Young people who are contemplating suicide, and suicidal individuals in general, usually show changes in behavior and other indicators of their intentions. Suicidologists and suicide prevention clinics make efforts to predict and prevent suicide in all age groups.

QUESTIONS AND ACTIVITIES

1. Have you ever been in a motor vehicle accident? If so, was anyone injured? Some people who are in automobile accidents are unable to remember what happened just before the accident *(retrograde amnesia)* or just after the accident occurred *(anterograde amnesia)*. Have you or anyone whom you know had such an experience? If so, describe it and try to explain why it happened.
2. Do you think that some people are more prone to accidents than other people? What individual characteristics, both physical (size, motor dexterity, sex, etc.) and mental (intelligence, aggressiveness, carelessness, etc.) seem to play a role in accidents?
3. Do you believe that many accidents, such as being hit by an automobile or being shot while playing with a gun, stem from suicidal impulses? How could it be proven that an "accidental" death was really a suicide, and why would one want to prove it?
4. Differentiate between the psychoanalytic, humanistic, behavioristic, and cognitive (modes of thinking) perspectives of suicide. Try your hand at combining various perspectives into a general theory of suicidal behavior.
5. Have you ever known anyone who committed suicide or at least made a bona fide attempt to do so? What do you believe were the reasons or motives for the person's act? Was there anything unique or different about the person as far as you could tell? Was he or she depressed or angry?
6. Arrange to visit a suicide prevention center or a community hotline (or helpline) and interview the staff about their activities, training, goals, and the sources of satisfaction to be found in this kind of work.
7. Complete the questionnaire in Form 3.1, and administer it to several other people. Compare your answers with theirs.

FORM 3.1 Attitudes Toward Suicide

Directions: Indicate your degree of agreement or disagreement with each of the following statements by writing SA (Strongly Agree), A (Agree), U (Undecided), D (Disagree), or SD (Strongly Disagree) next to the statement number.

1. Only people with certain types of personalities are capable of suicide.
2. Almost anyone is capable of suicide in the right circumstances.
3. People should be permitted to commit suicide if they really want to.
4. Suicide is a crime against humanity.
5. People who are very ill and have nothing to live for should be assisted in dying if they wish to.
6. There should be no legal penalty for attempting to commit suicide.
7. There should be no legal penalty for helping a terminally ill person commit suicide.
8. You should do everything in your power to keep a person from committing suicide.
9. Suicide is a crime against nature and a sin against God's law.
10. People should be permitted to do whatever they wish with their own bodies—even commit suicide.
11. People who attempt to commit suicide should be sentenced in a court of law and punished.
12. People who try to commit suicide usually don't really want to; they just desire attention.
13. Suicide is a cry for help rather than a serious attempt to die.
14. Many people who take unnecessary risks appear to be expressing a desire to die.
15. Most people who attempt suicide really want to die.
16. People who try to commit suicide are mentally ill.
17. People who commit suicide are cowardly and inconsiderate of others.
18. In certain cases, suicide can be a beautiful, moving experience.
19. Suicide may be a rational response to an unbearably painful situation.
20. People who help others commit suicide should be punished to the limit of the law.

8. Web exercise: Of the two topics covered in this chapter, accidental death is more common than suicide, but both are among the top 10 killers of Americans. A number of organizations exist to provide information on the frequency, circumstances, and prevention of accidents and suicide. Examples, including the associated web sites, are as follows:

National Safety Council: *www.nsc.org*
American Association of Suicidology: *www.suicidology.org*
American Foundation for Suicide Prevention: *www.afsp.org*
Log on to these three sites, browse through them, and make notes on the goals and activities of these three organizations.

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4
HOMICIDE AND WAR

TOPICAL OUTLINE OF THE CHAPTER:

Homicide: Meanings, circumstances, and causes
- *Definitions and distinctions*
- *How are murders committed?*
- *Murderers and victims*
- *Why, where, and when are murders committed?*
- *Cultural differences in murder*
- *Psychosocial and biological considerations in murder*

Mental disorders and serial killers
- *Murder in the home*
- *Apprehending murderers*

Genocide, assassination, and terrorism
- *Collective crime and genocide*
- *Hate crimes*
- *Political assassination*
- *Terrorism*

War
- *Historical perspective*
- *Causes of war*
- *Waging war*
- *Effects of war and imprisonment*
- *Reducing the threat of war*

QUESTIONS DEALT WITH IN THIS CHAPTER

- *How common is murder, and how is it differen t from other types of homicide?*
- *How, by whom, why, where, and when are murders committed?*
- *What roles do biological, psychological, and cultural factors play in murder?*
- *What are the characteristics of mass murderers, serial murderers, and political murderers?*
- *What are the causes and characteristics of genocide?*
- *What are the causes and characteristics of terrorism?*
- *What are the causes and consequences of war?*
- *Can wars be prevented, and if so, how?*

HOMICIDE: MEANINGS, CIRCUMSTANCES, AND CAUSES

Every year, approximately 20,000 deaths in the United States are caused by homicide and legal intervention. Although the homicide rate has declined substantially in recent years, in the late 1990s it was the second leading cause of death among all Americans aged

15–24 years and the leading cause of death among Black Americans in that age range. The rate of homicide varies with a host of demographic, social, and personal variables. As illustrated in Fig. 4.1, for example, the rate of homicide and legal intervention declines from infancy through childhood and early adolescence. Both the number and rate of homicides reach a peak in late adolescence and early adulthood, and decline from then until later adulthood.

The causes of homicide are complex, but the depiction of violence in the media and its acceptance in American society as a way of solving one's problems have been a continuing source of concern to responsible citizens and officials. By the time the average American child reaches age 14, he or she has witnessed an estimated 18,000 deaths —mostly violent murders—on television (Goldman, 1994). And this does not count the violent deaths seen in movies and video games, or the observed and reported deaths of friends and relatives caused by drunk driving and other acts of violence. The attention given to murder has prompted a constant flow of stories and programs in the media, as well as hundreds of research reports and scholarly books. Perhaps even more startling are the results of a study that showed that 73% of the eighth graders in Chicago schools had reportedly seen someone shot, stabbed, robbed, or killed (DeAngelis, 1993).

Discovering the reasons for the high rates of homicide and suicide in the United States and other countries is not easy, and many questions remain. For example, the bombing of the Murrah Federal Building in Oklahoma City in April 1995 and the shootings at Columbine High School in Littleton, Colorado for years later served as fuel for newscasters, talk show hosts, and professional (and amateur) testifiers, but the reasons why these crimes were committed are still being debated. The Columbine tragedy was of particular interest, not only because the murderers and most of the victims were teenagers, but because it was a case of murder *and* suicide. As noted in chapter 3, what appears to be murder on the surface may actually be a subtle form of self-destruction. In any event, the data, speculations, theories, and research findings on homicide are interesting, informative, and sometimes of practical value.

Definitions and Distinctions

The terms *homicide* and *murder* are often used interchangeably, but the former has a broader meaning than the latter. *Homicide,* the killing of one human being by another, includes a variety of criminal and noncriminal acts. A criminal charge of homicide is

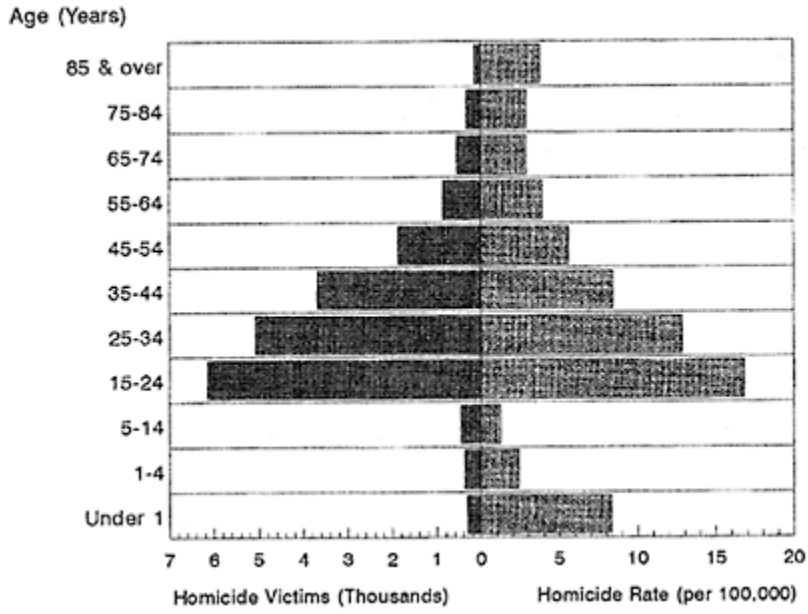

FIGURE 4-1 Number and rates of homicides by chronological age in the United States in 1996

(data from Hoyert, Kochanek, & Murphy, 1999).

established by proof that a person died and that the death was caused by a criminal act. This is true even when no body or weapon has been found. Furthermore, to constitute homicide it must be shown that the victim died within a year and a day after the criminal act was committed. This information is obtained by various means, including an autopsy of the body and a police investigation to ascertain the facts pertaining to the killing. The results are then evaluated by the district attorney's office and the court system and a decision is made whether to bring the case to trial or dismiss the defendant (Schroeder, 1998).

A critical matter in deciding whether to prosecute the alleged killer (or killers) in a homicide case is whether the act was justifiable, excusable, or felonious. A homicidal act may be *justifiable,* as when killing in self-defense or to protect other people. Homicide is considered justifiable when a felon is killed by a law enforcement officer in the line of duty or by a private citizen while a felony is being committed. In 1998 there were 559 justifiable homicides in the United States, 95% by firearms. Of these justifiable homicides, 365 were committed by law enforcement officers and 194 by private citizens (U.S. Department of Justice, Federal Bureau of Investigation, 1999).

A homicidal act is considered *excusable,* as in accidents or other misfortunes, when it involves neither negligence nor unlawful intent. Or it is *felonious* when negligence, unlawful intent, or both were present during the homicidal act. Felonious homicide, in turn, is classified as *manslaughter* when it involves negligence but not malice, or *murder* when there is an intent to kill. Manslaughter itself may be either *voluntary,* when

committed during the heat of passion, or *involuntary,* when the killing takes place during a misdemeanor (e.g., reckless driving). Although viewed legally as a lesser crime than murder, manslaughter is a serious criminal offense, and, depending on the circumstances and the jurisdiction, punishable by 1–15 years in prison (Schroeder, 1998).

The most serious type of homicide is *murder,* in which the killer intended to kill the victim *(malice aforethought)*. When a killing is deliberate and premeditated (cold-blooded or planned), it is classified as *first-degree murder* (murder one); a deliberate but not premeditated killing is classified as *second-degree murder* (murder two). Exceptions to this rule are when a killing takes place during the course of a robbery, rape, or kidnaping, or when a high-government official or a police officer is killed intentionally in the line of duty. Such killings are classified as first-degree murder.

The distinction between first- and second-degree murder is particularly important during sentencing of the guilty person. The former crime is punishable by life imprisonment or death, whereas the latter crime carries a sentence of 5 years to life with the possibility of parole. However, a person who has been tried for murder and found to have committed the crime is not necessarily sentenced. He or she may be judged not guilty of murder by reason of insanity and given an open-ended commitment to a mental institution rather than a fixed prison sentence (Schroeder, 1998).

The United States has one of the highest murder rates in the world. There were 18,208 reported murders in this country in 1997 and 16,214 in 1998 (U.S. Department of Justice, Federal Bureau of Investigation, 1999). How, why, when, and where were these murders committed, and who were the killers and their victims?

How are Murders Committed?

People kill each other with guns, knives, ice picks, clubs, poisons, fire, gas, their bare hands, by drowning, and in a variety of other ways. Table 4.1 shows that, due largely to their general availability, handguns are the most common murder weapon in the United States. Next in popularity to handguns as murder weapons are knives or other cutting instruments, but substantial numbers of people are killed by rifles, shotguns, blunt objects, personal weapons, fire, poisons, explosives, narcotics, drowning, strangulation, and asphyxiation.

Since 1900, well over a million U.S. civilians have been killed by firearms. This figure is greater than the total number of American military personnel killed in all wars in which this country has fought. In the late 1990s, every year over 30,000 Americans were killed in homicides, suicides, and accidents involving firearms. More Blacks than Whites, four times as many White males as White females, and eight times as many Black males as Black females were victims of homicides involving guns (Hoyert et al., 1999). The number and rate of people killed with guns were highest in those geographical areas having the largest per capita ownership of guns.

Because guns are so much more likely to be lethal than other weapons and are used so often in criminal activities, why hasn't greater legal force been exerted to control the sale and use of these weapons? The answer to this question has two parts: (a) strict gun control is probably impossible to enforce, and (b) Americans who own guns form a powerful lobby against gun control. Imagine the difficulties of disarming a population of over a quarter-billion people in which every other household owns a gun and millions more are sold every year. Even the relatively

TABLE 4.1 Weapons Used in Murders in the United States in 1998

Weapon Used	*Number of Murders*	*Percentage of Total*
Total firearms	9,143	64.89
Handguns	7,361	52.25
Rifles	538	3.82
Shotguns	619	4.39
Other guns	16	0.11
Firearms, not stated	609	4.32
Knives or cutting instruments	1,877	13.32
Blunt objects (clubs, hammers, etc.)	741	5.26
Personal weapons (hands, fists, feet, etc.)	949	6.74
Poison	6	0.04
Explosives	10	0.07
Fire	130	0.92
Narcotics	32	0.23
Drowning	27	0.19
Strangulation	211	1.50
Asphyxiation	99	0.70
Other weapons or weapons not stated	863	6.13

Source: U.S. Department of Justice, Federal Bureau of Investigation (1999).

tame Federal Gun Control Act of 1968, which prohibits mail-order and over-the-counter sales of guns and ammunition to certain groups of people (out-of-state residents, convicted felons, juveniles, mental defectives, mental hospital patients, drug addicts) has proven difficult to enforce. The "Brady bill," which requires a waiting period before the purchase of a hand gun, has been of some help, but even juveniles are able to obtain guns (often from private persons and at gun shows) if they so desire.

In addition to federal legislation, all states have laws that limit the sale and use of guns. New York and Massachusetts, for example, limit gun possession to adults with no criminal record who can show a legitimate need for a gun. A California law completely bans military-style assault weapons. However, many states deny guns only to mental patients and paroled felons. None of these laws is very effective in limiting the acquisition and use of guns. Furthermore, the National Rifle Association and certain other influential organizations have mounted stiff opposition to laws that would prohibit the manufacture or importation of guns and their purchase by ordinary citizens.

Murderers and Victims

The available supplementary data on murder victims in the United States during 1998 whose sex, race, and age were known showed that 76% were male and 24% were female, 49% were White and 47% were Black, and 87% were 18 years or older. The available supplementary data on murder offenders whose sex, race, and age were known showed that 90% were male and 10% were female, 47% were White and 48% were Black, and 89% were 18 years old or over (see Fig. 4.2). The majority of the offenders were below average in socioeconomic status and had not finished high school (U.S. Department of Justice, Federal Bureau of Investigation, 1999).

In 1998,9 of every 10 female murder victims were killed by males, whereas only one out of every nine male murder victims was killed by a female. Ninety-three of every 100 Black murder victims were killed by other Blacks, and 86 of every 100 White victims were killed by other Whites. Among victims under 18 years old, in 23% of the cases the offender was also under 18; among victims 18 years old and over, in 87% of the cases the offender was also in that age group. In a large percentage of murders, the victim and assailant were either related or acquainted. Approximately 32% of all female victims were murdered by their husbands or boyfriends, whereas a much smaller percentage of male victims were killed by their wives or girlfriends (U.S. Department of Justice, Federal Bureau of Investigation, 1999).

Despite the fact that Blacks constitute less than 13 percent of the U.S. population, in roughly half of the murders committed in this country, Black people kill Black people.

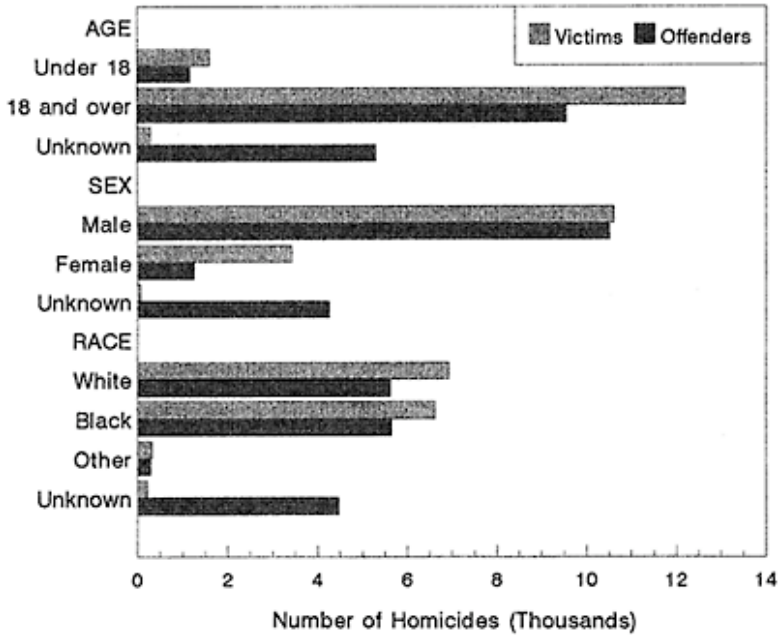

FIGURE 4-2 Numbers of murder offenders and victims by age, sex, and race in the United States in 1998

(Data from U.S. Department of Justice, Federal Bureau of Investigation, 1999).

This fact, combined with the youthfulness of most offenders and their victims, results in homicide being the leading cause of death in Black American males between the ages of 15 and 24 (Hoyert et al., 1998).

Why, Where, and When Are Murders Committed?

Most murders are not carefully planned, complex crimes of the sort described by Agatha Christie or solved by Sherlock Holmes. Most murders are committed not by professional criminals, but rather are impulsive, spur-of-the moment crimes. That fewer murders are of the felony than the nonfelony type is seen in the fact that in 1998, approximately 18% of the murders committed in the United States occurred in connection with a felony such as robbery, rape, or arson. The remaining 82% resulted from arguments, juvenile gang or gangland killings, drug-related activities, and other circumstances (U.S. Department of Justice, Federal Bureau of Investigation, 1999; see Table 4.2).[10]

In a large percentage of murders, both the killer and the victim have been drinking (Lunde, 1976). A murder scene might involve two young working-class males under the influence of alcohol or drugs who begin arguing about something and, to prove their toughness, resort to physical violence. The larger the volume of alcohol consumed the greater the likelihood of a violent crime. Drinking, of course, also contributes to accidental death. Other drugs, such as amphetamines and crack cocaine, may also contribute to accidents and violent outbursts.

The most common location for murder is in the home, and a bedroom in particular. More women than men are murdered in bedrooms, and more men are murdered in kitchens. The kitchen is the second most deadly room in the home, and the living room is third. Outside the home, murders occur most often in the streets, followed by bars and other commercial establishments (Lunde, 1976).

Murder rates are higher in large cities than in suburbs or rural areas. The murder rate for metropolitan areas in the U.S. in 1998 was 7 victims per 100,000 inhabitants, compared with 5 per 100,000 for rural counties and 4 per 100,000 for suburban areas (U.S. Department of Justice, Federal Bureau of Investigation, 1999). The District of Columbia consistently has the highest murder rate of all U.S. cities. Within large cities are a few sections with exceptionally high murder rates, usually areas of high population density, high unemployment, substandard housing, poor health-care services, and a generally low educational level among residents.

The murder rate in the United States also varies with geographical region. In 1998, the Southeastern states, which constitute the most heavily populated region, accounted for 44% of all murders in the United States, a murder rate of 8 per 100,000 population. In contrast, the Western states accounted for 22% of the total murders (a rate of 6); the Midwestern states accounted for 21% of the total (a rate of 6), and the Northeastern states accounted for 13% of the total (a rate of 4). Of the states, the largest number of murders occurred in California, with Texas second (U.S. Department of Justice, Federal Bureau of Investigation, 1999).

That the rate of murder increases with a decrease in geographical latitude is seen not only in the United States but also to some extent on the international scene. Countries

[10]Nationwide, less than 10% of murders are gang-related, but in Los Angeles County that figure reaches as high as 40% (Rohrlich & Tulsky, 1996).

such as Columbia, Mexico, Guatemala, and Nicaragua, which are closer to the equator, have even higher murder rates than the United States. On the other hand, the rates are much lower in most European countries and Japan.

Murder rates show both temporal and spatial variations. For example, murders are more common on weekends, holidays, and vacation periods. The murder rate also varies by month: More murders are usually committed during holiday periods and in the summer months, when many people are on vacation and large sums of money are being exchanged (U.S. Department of Justice, Federal Bureau of Investigation, 1999).

TABLE 4.2 Circumstances of Murders in the United States in 1998

Circumstance	*Number of Murders*
Felony type	
Rape	61
Robbery	1,232
Burglary	92
Larceny-theft	18
Motor vehicle theft	15
Arson	80
Prostitution and commercialized vice	14
Other sex offenses	20
Narcotic drug laws	679
Gambling	12
Other, not specified	268
Suspected felony type	104
Total	**2,491**
Other than felony type	
Romantic triangle	184
Child killed by babysitter	23
Brawl due to influence of alcohol	206
Brawl due to influence of narcotics	116
Argument over money or property	240
Other arguments	4,080
Gangland killings	70
Juvenile gang killings	627

Institutional killings	13
Sniper attack	16
Other, not specified	1,560
Unknown	4,358
Total	**7,135**

Source: U.S. Department of Justice, Federal Bureau of Investigation (1999).

Understandably, murder for personal profit is more common during times of economic recession and in poorer countries. In contrast, as seen in the United States during the 1990s, not only the murder rate but the frequency of crime in general declines during times of low unemployment and general economic prosperity. Also of interest is that both the homicide and suicide rates tend to decrease during wartime (Yang & Lester, 1997). Although no relationship has been found between murder rate and weather conditions, nighttime murders are more common during a full moon. A 1956–1970 study in Florida found, however, that more murders occurred during the dark phase of the lunar cycle (see Lunde, 1976). It has been speculated that this phenomenon is attributable to the gravitational pull of the moon on the brain. But considering the very small effect of the moon's gravity on the human body, this conclusion seems a bit far-fetched. Similar explanations have been proposed for the slight correlation between the murder rate and magnetic fluctuations of the earth.

American society has become conditioned to violence not only through a history of settling disputes by individual and collective battles but by films and stories that are full of aggression, injury, and death. Violence on television, in the movies, and perhaps even in video games and on the Internet can habituate people to violent acts and stimulate them to commit those acts themselves. According to statistics compiled by Phillips (1983), homicides in the United States during the mid-1970s increased by an average of 12.46% after heavyweight championship prizefights. Apparently, viewing prizefights on television stimulates fatal aggressive behavior, which may lead to death.

Cultural Differences in Murder

The relationships of murder to geography, nationality, ethnicity, sex, religion, and many other demographic variables can be interpreted to a large extent in terms of cultural differences. For example, historically the southern regions of the United States have had higher homicide rates than other regions (Fox & Zawitz, 1998). The dominant culture of the Southern United States has been characterized historically by firearms, duels, militia, military training, military titles (e.g., Colonel), and vigilante groups such as the Ku Klux Klan (Franklin, 1956). The maintenance of extreme social class differences in this geographical region required the use of violent punishment to control troublemakers and rebels against the system. This latter-day feudal system persisted even after the Civil War, when the South continued to resist industrialization, defended local ownership and control, and reacted suspiciously to strangers. The affinity for guns, manifested by both

Southern Whites and Blacks, was associated with the murder rate. Given the central role of guns and militarism in Southern history, it is not surprising that the incidence of murder is higher in states that were settled primarily by Southerners in the westward expansion of the nation (e.g., Louisiana and Texas) than in states settled predominantly by Northerners (e.g., Wisconsin and Minnesota). However, Northeastern and Midwestern states containing large cities (e.g., New York, Illinois, Michigan) also tend to have above-average numbers of murders annually.

The use of violence and firearms to settle disputes occurs in many subcultural groups, especially those in the lower socioeconomic stratum. Members of the "subculture of violence" that characterizes certain sections of large U.S. cities are likely to subscribe to the machismo ethic that one should carry a weapon and be ready to use it when one's status is questioned or threatened. Such a person may become sensitized to any real or imagined insult and be prepared to attack on a moment's notice. Furthermore, those who do not conform to this ethic are usually ostracized or victimized.

Violence and murder have been condoned in certain countries and during certain historical periods. The murder rate in Mexico, a country in which the dominant majority subscribes to the macho ethic, is three times that of the United States. By way of contrast, the murder rate in Canada, a nation that absorbed the British emphasis on order and self-control, is only one-fifth that of the United States, and gun ownership is also lower.[11]

Mexico and other Latin American countries with high murder rates (Nicaragua, Colombia, Guatemala, etc.) also have quite low suicide rates, a fact that maybe interpreted in terms of the effects of religion on the expression of violence. Although the Bible commands that "thou shalt not kill," the Koran is less vehemently opposed to murder. The teachings of the Bible, the Koran, and other religious books have obviously been interpreted somewhat differently by different cultural groups. Homicide is not necessarily a mortal sin in Roman Catholic theology, but Judaism is strongly opposed to murder.

Consistent with religious differences in attitudes toward homicide and suicide are the observations that the murder rate is high and the suicide rate low among Muslims and Catholics, whereas the reverse is true among Jews. Protestant theology is less opposed to suicide than Catholicism and less opposed to homicide than Judaism. Predictably, the rates of murder and suicide in Protestant groups fall between those for Catholics and Jews (Ezell et al., 1987; Lunde, 1976).

The seeming tendency for homicide and suicide rates to vary in opposite directions over time and across cultural groups has intrigued many social scientists (e.g., Binstock, 1974; Havighurst, 1969). In one early study, Porterfield (1949) found that cities with high suicide rates had low murder rates, and cities with high murder rates had low suicide

[11]"Indicative of differences in the political philosophies of Canada and the United States, and consequently in the behavior of the citizens of these two neighboring countries, are the rights enunciated in the Declaration of Independence and the British North America Act. For the United States, these rights include "life, liberty, and the pursuit of happiness." For Canada, they are "peace, order, and good government." Compared with Canadians, Americans appear to be more devoted to individualism, liberty, and autonomy, and less concerned with the needs of the community of which they are a part (Menand, 1994).

rates. Following up on Porterfield's research, Henry and Short (1954) pointed out that suicide decreases and homicide increases during economically prosperous times, but that the opposite is true during economically depressed periods. In addition, suicide is more common than murder among higher social classes but the reverse is true in lower social classes. It is tempting to conclude, with Henry and Short, that a sociological law underlies these findings: There appears to be a relatively fixed level of "violent energy" in any given culture or society. The expression of this energy depends on the relative strength of restraints placed on individual behavior by social forces outside the person (external restraints) and restraints imposed from within the person himself (internal restraints). The extent to which violent energy is expressed in homicidal or suicidal behavior depends not only on the relative strengths of these external and internal restraints but also on the degree to which homicide and suicide are culturally prohibited. When homicide is more strongly prohibited than suicide, the murder rate will be low and the suicide rate high. When suicide is more strongly prohibited, the murder rate will be high and the suicide rate low. Furthermore, if there are strong external restraints on group members and suicide is strongly forbidden, then, as in the lower social classes, the murder rate will be higher than the suicide rate. If, as in the upper social classes, internal restraints on group members are strong and murder is more severely censured than suicide, the suicide rate will be higher than the murder rate. Unfortunately, the results of subsequent studies fail to support Henry and Short's thesis. Both the murder and suicide rates have risen in recent years, and both are now higher in lower than in upper social classes.

Another connection noted between murder and suicide is that both violent acts may represent efforts to cope with feelings of helplessness, hopelessness, hostility, and depression. Halleck (1971) reported that murder can be an act of self-preservation, in that murderers kill other people to keep from killing themselves. Of course, this self-protective gesture fails when a murder is committed and the murderer then commits suicide.

Murder, suicide, and other violent behaviors are usually interpreted as culturally conditioned reactions to specific situations, but modern-day cultures are not static. A culture may change rapidly, being continually influenced by information and techniques communicated by interactions with people from other cultures. Children in many different cultures now see murders in domestic situations, in the streets, and in combat scenes almost every day on television, in films, and in other media. Socially condoned violence in the Middle East and southern Europe results in the social acceptability of violence as a means of handling disputes elsewhere in the world. People learn to murder by mail, with handguns and explosives, with military-style assault weapons, and with other instruments provided by modern technology. Specialized techniques of killing are not restricted to a certain culture; they are there for all unhappy frustrated people to see and use.

Psychosocial and Biological Considerations in Murder

Criminology, the study of criminal behavior, traditionally was the province of sociologists, whose principal explanation of the cause of criminal behavior was the *principle of differential association* (Sutherland, Cressey, & Luckenbill, 1992). A modified version of this principle states the following:

> *Overt criminal behavior has as its necessary and sufficient conditions a set of criminal motivations, attitudes, and techniques, the learning of which takes place when there is exposure to criminal norms more than exposure to corresponding anticriminal norms during symbolic interaction in primary groups. (DeFleur & Quinney, 1966, p. 7)*

According to this principle, a necessary and sufficient condition for murder is prolonged exposure to a subculture of violence and violent role models without compensating exposure to nonviolent situations and models. The principle does not take biological variables into account, but it does consider the learning process. The study of learning is a primary concern of psychologists, who consider learning to be crucial in the development of criminal behavior in general and homicidal behavior in particular.

Many anthropologists and biologists have been interested in the possible influences of biological variables such as body build (somatotype), hormones, brain waves, and abnormal chromosomes or genes in the determination of criminal behavior. The notion of the "bad seed" continues to influence speculations about the causes of murder and other crimes (see Yochelson & Samenow, 1993). Although not denying the importance of environment, supporters of a genetic basis for criminality maintain that a predisposition to such behavior, as manifested in temperamental characteristics such as impulsiveness or low frustration tolerance, is inherited. Some years ago, the XYY, or so-called supermale, chromosomal pattern received much attention as a possible biological basis for aggressiveness and impulsive murder. However, research failed to confirm the hypothesized relationship between the XYY pattern and violence (e.g., Court-Brown, 1968). Other theorists maintain that though criminal behavior is not strictly determined by heredity, one may inherit a characteristic, such as an athletic (mesomorphic) body build that makes violent activity more likely or rewarding (Glueck & Glueck, 1956). More recent research on biological factors in criminality has concentrated on testosterone (e.g., Dabbs, Carr, Frady, & Riad, 1995) and on the lower platelet monoamine oxidase (MAO) activity (Alm, af-Klinteberg, Humble, & Leppert, 1996; af- Klinteberg, 1996; Kristiansson, 1995) in criminals than noncriminals.

Unfortunately, no single theory of criminal behavior in general or homicidal behavior in particular can account for the variety of crimes and their antecedents. Not all murderers have biological abnormalities, not all come from deprived backgrounds or have criminal associates, and not all have a low IQ or the same personality traits. Even Guttmacher's (1960) classification of murderers into four types—normal, sociopathic, alcoholic, and avenging—fails to do justice to the range of characteristics and motives found in people who kill. There is some evidence that the greater the impulsiveness and violence of a murderer, the more likely he or she is to be rather shy and inhibited (Lee, Zimbardo, & Bertholf, 1977). In theory, the overcontrol normally exhibited by such people breaks down when the core of the person's identity is threatened and he or she is no longer able to deny intense feelings of anger. Contrasting with the overcontrolled, impulsive murderer is the more common undercontrolled, macho individual who acts out his aggressions with little restraint. Such a person may kill someone for stepping on his shoes, staring at him, or looking at his girlfriend. If another person has something that he

wants, he may kill for it without a second thought. As one juvenile offender confessed in describing why he killed the driver of a car and pushed the body out before driving away, "I needed the car, but I didn't need the person." Even more bizarre is to select murder victims at random in order to prove the assailant's strength or ability. In any case, the violent act of murder releases feelings of frustration and tension and sometimes fear in the murderer. The killer may view both the victim and himself with a sense of impersonality or detachment. The victim becomes a dehumanized object, to be exploited and destroyed. The detached self of the killer looks on as he uses the lethal weapon, after which a release of emotion occurs and he may feel as if a heavy weight had been lifted from his shoulders.

Mental Disorders and Serial Killers

Any discussion of the psychological aspects of murder requires some consideration of the popular assumption that many murderers are mentally disordered. Most law-abiding citizens probably find it impossible to identify with or understand a person who commits a particularly violent murder in which the victim is raped and mutilated. It is natural to conclude that anyone who commits such a crime must be deranged. This point of view is perhaps more common in countries such as England, where the murder rate is substantially lower than in the United States and one-fourth of apprehended murderers are declared legally insane (Feshbach, Weiner, & Bohart, 1996; U.S. Bureau of the Census, 1979). Although social supports for murder and efficient means of committing it are less common in England, the rate of mental illness is just as high as in the United States. In addition, murder is more often followed by suicide in England than in the United States, presumably because of the stronger social sanctions against taking a life and the resulting fear and guilt experienced by the murderer.

Mentally disordered people are often feared, but most of them are actually less likely to commit murder than so-called normal people. Those few mentally ill people who kill usually provide dramatic, frightening stories in the media that stimulate public fear of drooling mad dogs on the loose or horrible, subhuman monsters roaming the streets. This fear becomes particularly intense when a mass murderer or serial killer such as the Boston or Hillside Strangler or the Son of Sam is depicted as prowling by night and stalking unsuspecting, innocent victims. Stories of Ted Bundy, who bludgeoned college coeds from coast to coast in the 1970s, John Wayne Gacy who murdered over 30 young boys in Chicago, and Juan Corona, who killed 25 migrant workers in California over a period of years, sell newspapers but also prey on the public's feelings of helplessness and fear of the unknown. Still, many people experience a morbid fascination with the behavior and personalities of mass murderers, such as Kenneth Bianchi, Jeffrey Dahmer, and particularly the fictional Hannibal (the Cannibal) Lecter of *Silence of the Lambs* fame.

Not all mass murders are serial killers who pursue their lethal activities over a span of months or years. The killings may be committed in a very short period of time, as in the Littleton, Colorado massacre or when 21 patrons were shot in a San Diego fast-food restaurant before the perpetrator committed suicide.

Hundreds of speculative and scholarly articles have been written on mass murderers and serial killers, including their childhood experiences and family backgrounds,

neurological disorders, substances that they ingested, and the sexual nature of their acts. Some serial killers, such as David Berkowitz (the Son of Sam) are diagnosed as paranoid schizophrenics, whereas others, such as Jack the Ripper, are described as sexual sadists. Paranoid mass murderers usually have a history of psychiatric treatment, but sexual sadists, who derive sexual pleasure from killing, abusing, and mutilating their victims, usually do not. Not all mass murderers are paranoids or sexual sadists, and, unlike the typical impulsive killer, most have no police record and are quite intelligent. These characteristics make mass murderers difficult to apprehend. Many appear to have a Dr. Jekyll-Mr. Hyde personality, seeming to be ordinary, law-abiding citizens to their neighbors and coworkers. In actuality, a mass murderer may experience severe feelings of inadequacy and status frustration, and secretly act out his problems on persons who contribute to these feelings or who represent or threaten his status (Leyton, 1986; see Box 4.1).

Murder in the Home

As indicated previously, more murders occur in the home than in any other location. Coupled with the demands placed on immature parents, the fragility of young children makes them prime targets for the hostility of overwrought fathers and mothers. It is often, but far from invariably, the case that parents who abuse and murder their children were themselves abused during childhood (Widom, 1989). Such parents are usually unrealistic in their expectations of children, demanding things that the children cannot always do. In most cases, parents

BOX 4.1 Portrait of a Ukrainian Serial Killer

Kiev, Ukraine (AP)—A Ukrainian who described himself as a robot without feelings was sentenced to death Thursday for murdering 52 people with a sawedoff hunting rifle, knives, and axes. It took a judge nearly two days to read the verdict against Anatoliy Onoprienko, a 39-year-old former sailor who said he had been guided by an unknown dark power.

Onoprienko, wearing running shoes and an oversized, hooded jacket, sat impassively in an iron cage, his eyes almost never leaving the floor. His accomplice in nine of the murders, 35-year-old Afghan war veteran Serhiy Rogozin, was sentenced to 13 years in prison.

Onoprienko's murderous spree apparently began in 1980, when he and Rogozin robbed and killed nine people. He resumed his rampage in 1995– 1996, killing a total of 43 people in less than 6 months. After a manhunt frustrated by the lack of clues and witnesses, he was arrested in April 1996 at his girlfriend's house near the Poland border. His trial started in November in Zhytomyr, 87 miles west of the capital, Kiev.

Onoprienko has repeatedly confessed in police and media interviews to all the killings, which included the slaughter of entire families with small children. "I've robbed and killed," the small, thin-faced, balding man said last week in a prison interview with the Associated Press Television News. "But I'm a robot, I don't feel anything."

> Psychiatrists ruled Onoprienko fit to stand trial in spite of his ramblings about world politics, mysterious revelations, foreign and security services. He might not face execution, because Ukraine has imposed a moratorium on capital punishment and pledged to eventually ban it. Courts continue to hand down death sentences, but none of the 146 people sentenced to death in 1998 has been executed.
>
> Onoprienko says he doesn't fear death. "I've been close to death so many times that it's even interesting for me now to venture into the afterworld, to see what is there, after this death," he said.
>
> From "Serial Killer of 52 in Ukraine," 1999. Reprinted with permission of Associated Press.

who commit infanticide do not intend to kill their children, but the stress and frustration of coping with children become too great and the parents vent their rage in abuse and murder. As in other murders, the child victim is perceived as a demanding dehumanized thing that is interfering with the parent's emotional gratification (Kastenbaum & Aisenberg, 1976).

The motives of people who kill their spouses vary with the sex of the killer. Wives are more likely to kill their husbands because of bruised bodies, whereas husbands are more likely to kill their wives because of bruised egos. A wife will usually attempt to kill her husband only as a last resort, after she has been verbally and physically brutalized for a prolonged period of time. On the other hand, a husband who murders his wife usually does so as an impulsive response to a walkout, a demand, or a threat of separation. These behaviors represent rejection, abandon-ment, or desertion to the husband or lover of the victim (Barnard, Vera, Vera, & Newman, 1981).

The killing of a spouse in the home may, to some extent, be victim-precipitated, in that the victim either knowingly or unknowingly contributes to his or her own demise (Lester, 1973). Victim-precipitated homicide is more common in lower socioeconomic classes and when the victim and offender have similar characteristics. Homicide victims may contribute to their own deaths in a variety of ways and circumstances—by habitually exposing themselves to danger, by badgering, insulting, or arguing with a drunken person or one who for other reasons is out of control (e.g., "You haven't got the guts to kill me!" or "Go ahead and kill me; I don't care."), by being indiscriminately seductive, and even by striking the first blow. In such instances it seems as if the victim harbored a secret suicidal desire and encouraged violence as an indirect form of self-destruction. A similar psychological process occurs in people who commit "senseless" murders in order to receive the death penalty. In these cases, the murderer, consciously or unconsciously, believes that it is more socially or morally acceptable to be killed by another person or agency than to kill oneself (Abrahamsen, 1973; Wolfgang, 1969)

Apprehending Murderers

Though not as high as it once was, the rate of arrest, or *clearance rate,* is higher for homicide than for any other crime. For example, in 1998, law enforcement agencies nationwide registered a murder clearance rate of 69% (U.S. Department of Justice, Federal Bureau of Investigation, 1999). In approximately two-thirds of the cases, the

killer, who usually goes to great pains to escape or avoid detection, is in police custody within 24 hr after the crime has been committed. For whatever reason—fear, tension, a feeling of helplessness—murderers often behave in such a way as to ensure their own detection and capture. The desire to be apprehended, as dramatically portrayed in Fyodor Dostoevski's *Crime and Punishment,* is most apparent in impulsive murders committed by quiet, nonviolent people who have no prior arrests. However, if the murderer is not caught within 48 hr after the crime, the odds against clearance increase markedly.

Arrest of a homicide suspect does not, of course, ensure conviction. Only about 6 out of 10 people charged with murder or voluntary manslaughter in the United States are convicted and sentenced. The severity of the sentence depends on a variety of extenuating or mitigating circumstances, for example, whether the defendant expresses remorse over the crime. The death penalty is used infrequently, and even a person who is sentenced to life imprisonment is usually eligible for parole in 7 years. On the average, people who are convicted of first-degree murder in this country spend 10½ years in prison; those convicted of second-degree murder are in prison for approximately 5 years, and those convicted of manslaughter for about 3½ years. The recidivism rate for murder is lower than that for any other crime: less than 2% of convicted murderers are arrested again for murder. Be that as it may, and in spite of the declining crime rate nationwide during the past few years (U.S. Department of Justice, Federal Bureau of Investigation, 1999), many people feel that stiffer prison sentences and a more liberal application of the death penalty are necessary to curb what they perceive as the high crime rate. This issue, and in particular the national debate over capital punishment, is considered in more detail in chapter 7.

GENOCIDE, ASSASSINATION, AND TERRORISM

Collective Crime and Genocide

A special type of mass murder known as *collective crime* occurred during the 1960s in the killings committed by the Manson family and by the U.S. soldiers led by Lt. William Calley in Vietnam. On March 16, 1968, 455 men, women, and children in the village of My Lai, South Vietnam, were massacred by American soldiers. When such killings, which are sanctioned by a particular social group, occur on a sufficiently large scale and are directed at a specific social, national, or ethnic group, they are known as *genocide*. In genocide, an attempt is made to eliminate an entire ethnic, national, or religious group, as in the systematic extermination of 800,000 Armenians by the Ottoman Turks during World War I, the shooting and gassing of 6 million Jews and an additional 5 million political opponents and "unfits" by the Nazis during World War II, and the execution and starvation of 2 million Cambodians by the Khmer Rouge in the mid-1970s. Examples from the 1990s include the killing of tens of thousands of Kurds in northern Iraq, the slaughter of Bosnians and Kosovars by Serbs, and the massacre of as many as a million members of the Tutsi tribe in Rwanda. Genocide, which often occurs during times of economic recession, political upheaval, and social disorder, is a form of displaced aggression against a less powerful group that is blamed for the prevailing troubles.

Victims of genocide are typically viewed by their executioners as subhumans or inanimate objects of little or no value, an attitude that presumably makes the slaughter appear justified and easier to carry out. Thus, the Nazi regime characterized the Jews, Slavs, and other non-Nordic groups as *Untermenschen* and depicted them as packs of rats that should be exterminated. New heights (or depths) of genocide were achieved in the "final solution" of gassing and cremating Jews and political prisoners in the slaughterhouses of Auschwitz and other concentration camps during the early 1940s. Although the strong and healthy were spared for a while as slave laborers, the old, young, sick, and women with children were led to special chambers, ostensibly to be deloused and showered, but actually to be gassed and then cremated. Efforts to systematically exterminate the Jewish population, whom the Nazi leaders viewed as the source of many of Germany's problems, were carried out in all of the German-occupied countries of Europe. There were as many as 3 million victims in Poland, 2 million victims in the Soviet Union, and thousands more in Austria, Hungary, Romania, the Netherlands, Czechoslovakia, France, Greece, Yugoslavia, Belgium, and several other European countries (Davies, 1996).

Some Jews were saved by the indigenous populations of those countries, the most notable example being the successful transfer of the entire Jewish community of Denmark to Sweden in private boats. With the exception of several cities in Poland (Warsaw, Bialystok, and Vilnius), there was, however, surprisingly little organized resistance to the efforts of the Nazis to round up the Jews. The great majority of the inhabitants of the occupied countries apparently did not believe that Jews were being killed en masse, a belief that some people continued to hold long after the war. This act of genocide against the Jews, which has come to be known as the *Holocaust,* is commemorated today throughout the world in books, works of art, the United States Holocaust Memorial Museum in Washington, DC, and a Holocaust Remembrance Day (Yom Hashoah) in April or May, corresponding to the 27th day of Nisan on the Hebrew calendar.

Hate Crimes

Related to genocide in its prejudicial motivation are hate crimes, defined as crimes motivated by preformed, negative bias against persons, property, or organizations based solely on race, religion, ethnicity/national origin, sexual orientation, or disability. The Hate Crime Statistics Act of 1990 mandated the collection of data on hate crimes throughout the United States, thousands of which are committed each year. Approximately 70% of the hate crimes committed in the United States in 1997 were crimes against persons, ranging in frequency from aggravated assault (the lowest) to intimidation (the highest). Eight of these offenses were murders, five precipitated by racial bias and three by sexual orientation bias (U.S. Department of Justice, Federal Bureau of Investigation, 1998).

Political Assassination

Genocide, the systematic effort to exterminate an entire ethnic or nationality group, is sometimes called *political murder*. Political murder on a much more limited scale occurs in the assassination of a political or religious leader such as a president, prime minister, or

pope. The assassination of political leaders has been a common practice for centuries, and even the profession of certain individuals. For example, of the 107 emperors of the Byzantine Empire between 395 and 1453 A.D., 23 were assassinated, 18 were mutilated and dethroned, 12 died in prison, 8 were killed in war, and only 34 died of natural causes (Bell, 1979). More recently, attempts have been made to cause bodily harm to one-fourth of all American presidents, and four of them have been assassinated while in office.

A popular conception of political assassins is that they are deranged or insane, but many assassins act from what may be viewed as rational motives. According to Clarke (1982), there are at least four types of political assassins: Type I is extreme but rational, selfless, principled, and without perversity; Type II kills for revenge or to gain acceptance of recognition from a significant other; Type III is a psychopath who views life as meaningless and purposeless and the destruction of society (including himself) as desirable for its own sake; and Type IV is a "real crazy." Not all of the 17 political assassins considered by Clarke fall into one of these four categories, but the great majority (15) do. Finally, whatever his or her personality characteristics may be, a political assassin's task is easier when guns and explosive devices are readily available. Most assassins and would-be assassins have military training in the use of lethal weapons, which improves their chances of success.

Terrorism

Related to assassination, and usually political in its aims, is *terrorism,* the use of threats and violence to intimidate or coerce. Typical terrorist activities include assassinations, kidnappings, hijackings, and bombings (in crowded buildings and other areas, international airline flights, etc.). Though murder is a common result of terrorist activity, the primary purpose of terrorism is not to kill or injure people but rather to frighten, anger, or otherwise arouse them into committing irrational acts. Since the 1960s, terrorist activity has been a frequent source of news, but terrorism is by no means a new phenomenon. Three prominent terrorist groups in earlier times were the Jewish Zealots of Roman Judea, the Muslim Assassins of the Ottoman Empire, and the Indian Thugs. The Jewish Zealots were perhaps the most successful terrorist group in the ancient world, in that their activities prompted a popular uprising. However, those activities eventually led to the mass suicides at Masada in 73 A.D., the destruction of the Second Temple, the death of half the Jewish population, and the scattering of the Jews outside Palestine (the *Diaspora*). Nineteen centuries later, terrorism against the British by certain Jewish groups was an important factor in the founding of the new states of Israel.

WAR

Another kind of political murder, but one that is considered legal and sometimes even heroic, is *war*. The two or more opposing forces in war are typically countries whose rulers or representatives perceive that the country's vital interests can only be fulfilled by means of armed intervention. Most wars are *limited,* in that the daily lives of most of the civilian population of the combatant nations or factions are not directly involved. *Total war,* on the other hand, involves both the military and civilian populations. In total war,

fighting is not restricted to military personnel; all of the citizens, weapons, and other resources of the combatants are subject to use and attack. Of course, the enemy in war may be internal rather than another country or other external source. In rebellions, insurrections, revolutions, and civil wars, internal rebel forces attempt to overthrow the existing government.

Historical Perspective

It may seem to many students and teachers as if the history of the world has consisted mainly of a succession of wars. Certainly, armed conflicts involving large numbers of people have occurred since the beginning of recorded history. Some of the most famous wars in ancient times—the Trojan War, the Peloponnesian War, and Caesar's Gallic Wars—became the stuff of legends and literature. The romance and heroism as well as the destruction and horror of war have been represented in many famous works of art and literature. Examples of time-honored literary works dealing with war are Homer's *Iliad,* the Hindu *Mahabarata,* Tolstoy's *War and Peace,* Mitchell's *Gone With the Wind,* and Remarque's *All Quiet on the Western Front*.

The successes of the victors in wars are usually as much a matter of weaponry as bravery and leadership. In ancient times, iron weapons enabled the Hittites to defeat the Egyptians and the Greeks to defeat the Persians. Superior armaments, including automatic weapons, ironclad ships, airplanes, laser-guided missiles, and nuclear devices, have continued to ensure victory in more recent wars. A dramatic illustration of the effectiveness of superior firepower in the hands of a much smaller force was the slaughter in 1893 of 3,000 attacking Zulu tribesmen by 50 British security guards equipped with only four machine guns (Kearl, 1989). Technological advances are, however, not the only factor leading to a change in the nature of war. Prior to the Napoleonic Wars, battles were fought mostly by professional soldiers and on a limited basis. Napoleon's Grande Armee of a half-million men, most of whom were conscripts rather than volunteers, changed all that. Thereafter, rather than being counted in the hundreds or thousands, battle casualties were counted in the hundreds of thousands or even millions. Over a million Russians were killed at the Battle of Tannenberg, and another million British, French, and German soldiers were killed at the Battle of the Somme during World War I. Men were cut down by cannons and automatic firepower like wheat before a thresher. Rats grew as large as dogs and crows as large as eagles from gorging themselves on human flesh. A few decades later, saturation bombing in World War II killed hundreds of thousands of military personnel and civilians in England, Germany, Japan, Korea, and Vietnam. Even more combatants have died from infectious diseases or become permanently disabled by physical and psychological trauma.

The cost of war in terms of human suffering and death is documented by statistics such as those illustrated in Fig. 4.3. As shown in the figure, the war that claimed the most American lives was not World War I or II but rather the American Civil War. At Manassas, Antietam, Gettysburg, and other battle sites, more American soldiers were killed (over 600,000) than in all wars fought by this country in the 20th century. Three of the most recent wars involving the United States—the Korean War, the Vietnam War, and the Persian Gulf War—claimed the lives of 54,000, 58,000, and 305 American military personnel, respectively. Even more devastating than American losses are Europe's death

tolls during the first and second World Wars. An estimated 8 million military personnel in 14 European countries (5 million among the Allied Powers and 3.4 million among the Central Powers) were killed in World War I, and 14.4 million military personnel in 17 European countries (10 million among the Allied Powers and 4.3 million among the Axis Powers) were killed in World War II (Davies, 1996). Despite the hopes for peace raised by the establishment of the

FIGURE 4–3 U.S. military deaths in wars involving the United States

(data from Art, 1999).

United Nations after World War II, more than 23 million people worldwide were killed in 149 major wars between 1945 and 1992 (Sivard, 1993, p. 20). Unlike earlier wars in which the majority of those killed were military personnel, the vast majority of casualties in recent wars have been civilians. Approximately half the deaths in the wars of the 18th, 19th, and early 20th centuries were civilians, a ratio than had increased to two-thirds in World War II, and to almost 90% by the end of the 1980s (Ahlstrum, 1991, pp. 8, 19).

Causes of War

Is war rational or irrational? Is it the result of logical decision making or the impetuous act of frustrated, angry people? Traditionally, in story, song, and propaganda, the emphasis has been on war as a glorious, honorable, chivalrous enterprise. This was perhaps true to some extent of smaller wars during ancient and medieval times, but even then the supposed nobility of war was nine-tenths fiction. Men may have thought that they were fighting for God, honor, country, and ladies fair, but the actual causes of combat were much less idealistic.

Tribes and nationalities have fought since time immemorial for territory, wealth, security, and power, as well as against deprivation, injustice, suffering, and for religious reasons. Christians versus Muslims, Catholics versus Protestants, Hindus versus Sikhs, and other religious conflicts led to a long history of warfare before the 17th century. Though the motives of religious zealots may have been pure, their techniques were not. Many Christian Crusaders slaughtered hundreds of innocent women and children as well as armed men as they poured into Jerusalem and other Muslim strongholds. Even today, religious differences continue to be a source of discord, but since the 17th century war has been waged less often for religious reasons and more often for materialistic motives.

According to Carl von Clausewitz (1968, p. 2) war is a rational instrument of foreign policy, "an act of violence intended to compel our opponent to fulfill our will." The writings of von Clausewitz and other military theorists served as a justification for German militarism in the late 19th and early 20th centuries. But is war really a rational act, or is it the result of more emotional, irrational motives? This was the question discussed in the famous correspondence between Albert Einstein and Sigmund Freud during the 1930s. Einstein, Freud, and the social psychologist William McDougall concluded that human beings are born with an instinct for destructiveness and aggression, which Freud (1933/1950) labeled *Thanatos*). The conflict between Eros (the life instinct) and *Thanatos* (the death instinct) is eventually won by the latter. Rather than attempting to deny or suppress this instinct, Freud advocated diverting it into other activities, such as sports and creative productivity. The famous biologist Konrad Lorenz also emphasized the inherent nature of aggression in humans. To Lorenz (1966), aggression is a spontaneous activity within ourselves and not simply a reaction to an external stimulus.

Behavioral psychologists and other social scientists have questioned the idea of a destructive or aggressive instinct as the cause of armed conflict. To the early behaviorists, aggression was the result of *frustration*—any interference with goal-directed activity. The hypothesis that frustration invariably leads to aggression is, however, now recognized as incorrect. Rather than always leading to aggression, frustration may produce escape behavior. As concluded by Berkowitz (1990):

> *the negative affect generated by an aversive occurrence produces a number of behavioral inclinations—to fight and to flee—as well as several relatively primitive feelings, including anger and fear. A wide variety of conditions, including genetic influences, prior learning, and the perceived consequences of a particular action) determine the relative strengths of these different tendencies and feelings, (p. 35)*

In somewhat oversimplified fashion, it may be said that human beings possess the neural circuitry for aggressive, warlike behavior, but if and how such behavior is expressed depends on whether the proper switch is thrown (e.g., whether an appropriate instigating stimulus is present) as well as the individual's perception of how the environment will react to aggressive or attack behavior. But even if this formulation is correct, it is inadequate as an explanation of why nations go to war. As Berkowitz (1990) confessed, the national decision to declare war is almost always made on a rational, although not necessarily intelligent, basis.

Waging War

Training civilians to become combat soldiers is not an easy task. An important part of the training is discipline—learning to do what one is told without question, even when it goes against one's upbringing and natural impulses. Turning civilians into soldiers also involves a liberal amount of propaganda and hate training, in which the enemy is dehumanized and the cause of one's country is depicted as just and even sanctioned by God. The enemy may be characterized as subhuman or barbaric, a torturer or rapist, a desecrator of all that is sacred, and even as death itself. To explain and condition the civilian population to war and the proper attitude toward the enemy, propaganda campaigns, such as those designed by the Creel Committee of the United States during World War I and Josef Goebbels in Germany during World War II, are put into effect. Films, such as *Triumph of the Will* in Germany and *Why We Fight* in the United States helped during World War II to create an attitude of one's country as noble and virtuous and the enemy as barbaric and evil. It sometimes happens, however, that the negative qualities attributed to the enemy are projections of the very same qualities that we deny in ourselves.

Discipline and dehumanization of the enemy enable soldiers to kill without question, although the process is not easy or immediate. Fear is a constant companion of most combatants, but morale and group cohesiveness—relying on one's comrades and reluctance to let them down—help the soldier to face the fear (Stouffer et al., 1949). In addition, the game of war can be adventurous and exciting—at least while it is still seen as potentially winnable. Soldiers on the battlefield may report experiencing a vibrant feeling of being alive, of living in the present from heartbeat to heartbeat. Past and future time collapse into the present, and one lives only for the moment.

Waiting for battle rather than the actual encounter with the enemy is often the worst part of combat. An illustration of the agony of waiting and the "aliveness" of actual combat was provided by Lt. J.A.Allen after his first action in World War I:

> *I felt an overwhelming elation. It was not so much that one had left the firing line as that one had been in it. I often think of H.Benson's story of the man who was to be tortured and the agony of his dread. When he was put on the wheel they saw he smiled. His suffering was less than his suspense. Full of wretchedness and suspense as the last few days have been, I have enjoyed them. They have been intensely interesting. They have been wonderfully inspiring. (Holmes, 1985, p. 148)*

Still, there is nothing wonderful or inspiring about the suddenness with which a person can be changed from a breathing, living human being to an inert corpse:

> *I was looking straight at him as the bullet struck him and was profoundly affected by the remembrance of his face, though at the time I hardly thought of it. He was alive, and then he was dead, and there was nothing human left in him. He fell with a neat round hole in his forehead and the back or his head blown off. (Holmes, 1985, p. 176)*

After viewing such scenes, it is no wonder that some soldiers, as in Stephen Crane's *Red Badge of Courage,* make a hasty, unordered retreat. In fact, the natural tendency not to advance in the face of enemy fire is so strong that officers in some armies have ordered their own retreating troops to be fired upon to compel them to reverse direction and advance toward the enemy. Retreat has also been discouraged by executing selected members of squads that failed to advance against the enemy. Unable to retreat or unwilling to let their buddies down, many combat-hardened veterans slip into an unreal, dreamlike state, as if they were robots going through their motions; not only the enemy but also they themselves become depersonalized and frozen in time. These feelings of depersonalization and dissociation are reinforced by the use of colloquial euphemisms for death such as "eliminated," "neutralized," "taken out," "wasted," "whacked," and "zapped."

Intentionally firing at one's own troops is discouraged in most armies, but accidents and "friendly fire" kill many soldiers. This was true of some American casualties in the Vietnam War and the Persian Gulf War. Heroism and chivalry have little place in the modern theater of war. Few soldiers express an eagerness to fall on hand grenades to save the lives of their buddies or to "reup" or "ship over" in a dangerous combat zone.

Effects of War and Imprisonment

It was called *shell shock* in World War I, *combat fatigue* in World War II, and *PTSD* in the Vietnam War and subsequently. By whatever name, the psychological effects of war can be persistent and devastating. Of more than 10 million American men who were accepted for military service in World War II, the greatest number of medical discharges were for neuropsychiatric reasons (Bloch, 1969). The situation had improved somewhat by the Vietnam War, in that soldiers were not required to serve as long on the front line. Nevertheless, it is estimated that, despite being rotated every 12–13 months, as many as 50% of the 800,000 Americans who served in Vietnam continued to suffer from the experience long after their tour of duty was over (Shehan, 1987).

The Americans who fought in Vietnam were the youngest soldiers in our history, and, unlike the situation in World War II and the Korean War, they did not remain in the same unit for the duration of the war. The Vietnam War was also a different kind of conflict than preceding wars. It was a guerrilla war, in which booby traps were used and the killing of women and children occurred more often than in previous wars. Another difference is that, though the United States was not militarily defeated by Vietnam, it did not win the war. Unlike the returning veterans in other 20th century wars in which America has been involved, there was no glory and there were no parades for returning Vietnam veterans. Many American citizens had been opposed to the war and showed their opposition in the treatment of the veterans. Lack of civilian support and epithets such as "baby killers" convinced many returning service personnel that they had sacrificed and fought for nothing.

The situation was even worse for American soldiers who were taken prisoner by the Viet Cong or North Vietnamese. Like the prisoners in the Nazi concentration camps of an earlier generation, they were typically malnourished, treated like animals, and induced to perform acts that seemed unpatriotic or immoral. In addition to physical disorders such as diarrhea, serious infections, and malnutrition, prisoners suffered from anxiety, insomnia, headaches, irritability, depression, nightmares, and other psychological symptoms. Even those who cooperated with their captors were not immune to mistreatment, and many of the psychological symptoms persisted even after release from captivity.

Survivors of prisoner-of-war and concentration camps generally manifest a variety of debilitating conditions. Among these are lowered resistance to disease and frustration, greater dependence on alcohol and drugs, and general emotional instability (Hunter, 1978; Strange & Brown, 1970; Wilbur, 1973). The longer they were imprisoned and the harsher the treatment received in captivity, the greater the likelihood of developing psychiatric problems (Hunter, 1978; O'Connell, 1976). Depression, marital problems, and divorce were significantly more common among Vietnam veterans than among their age-mates who did no go to war (Hunter, 1981).

It was some time after the withdrawal of the last American troops from Vietnam before it became possible to begin the soul searching as to why the war was fought in the first place and how poorly the veterans had been treated by their country. Motion pictures such as *Apocalypse Now, Platoon,* and *Full Metal Jacket* dramatically depicted what combat in Vietnam was like and how the soldiers who fought in the war felt and acted. Wider recognition of the psychological effects of the war on those who fought and those who stayed home and wondered came slowly, but it did come. An important event in the process of catharsis with respect to the war was construction of the Vietnam Veterans Memorial ("The Wall") in Washington, DC. When one first views the Wall, it doesn't seem like much, but further reflection produces a profound effect (see Box 4.2).

Reducing the Threat of War

Despite the recognition given to rules for conducting warfare, armed conflicts between civilized nations have usually led to the violation of those rules and barbarism on both sides. The mistreatment of prisoners of war during the 19th century led to the Geneva Convention, a series of international meetings that began in 1864. This convention led to the establishment of rules for the humane treatment of prisoners of war and of the sick, wounded, and dead in battle. Other international efforts concerned with the regulation and reduction of wars among nations led to the Hague Peace Conference in 1800 and a second conference in 1907. A result of the first Hague conference was the establishment of a Permanent Court of Arbitration to settle disputes among nations. The second Hague conference defined rules for the treatment of prisoners of war, the conduct of maritime war, and the position of neutral nations during wartime. Another effort to reduce the threat and abuses of war was made in the Treaty of Versailles, which established a League of Nations to

BOX 4.2 The Vietnam Veterans Memorial ("The Wall")

As I walked closer, down the long slope toward the bottom of the apex, the polished black granite arms tapered off on either side. I was about ten feet from the Wall when the impact of the thing hit me. From ten feet higher than my head, stretching out of sight on either side, were the names of 57,939 people. The dead and the missing from Vietnam. I was slammed with the enormity of it all, the weight of those people who were not here, who had died because they had been asked, or sent, to do a job their nation wanted done. Emotions washed across me, and my eyes filled with tears. I moved away and sat alone on the grass.

> Later, I watched a couple, obviously tourists, start at one end and walk toward the apex, chatting and looking around, About three-quarters of the way down, I saw it hit them, too. They suddenly knew what it was and what it meant. In the last analysis, this is what Vietnam was all about, 57,939 people listed on the Wall and millions of veterans who, in their minds somewhere, sat on the grass abandoned and alone, betrayed by the nation they'd fought for. If the Wall could do that, I thought, it's doing all that could be asked of it.
>
> From Dying and Grieving: Lifespan and Family Perspectives (pp. 300–301) by A.S.Cook & K.A.Oltjenbruns, 1989, New York: HB College Publishers. Reprinted by permission.

promote world peace and international cooperation. This organization was dissolved in 1946 and replaced by the United Nations.

Unfortunately, none of the above attempts to minimize the horrors of war and ensure peace was completely successful. Despite the continuing demonstration that military buildup tends to increase rather than decrease the threat of war, since World War II trillions of dollars have been spent on weapons of war. The threat of nuclear war was made very real by the capacity of missiles carrying nuclear warheads to hit, in a few minutes after launching and within a few hundred feet, a target thousands of miles away. International conferences concerned with the need to restrain national self-interest, reduce armaments, achieve a better balance of power between competing nations, and guarantee collective actions against aggression have not been without success. Still, continuing disagreements between nations throughout the world have been used to justify a strong military and a large stockpile of arms. The end of the Cold War made the likelihood of a nuclear holocaust less imminent, but dozens of international "hot spots" continue to exist. At any moment war can break out in one or more of these places, leading to a regional conflict and perhaps even triggering a worldwide conflagration. The United States is now recognized as the sole remaining superpower, but it can not act alone as the world's police force. Collective, cooperative action among member states of the United Nations is required to maintain world peace. In all likelihood, even maximum cooperation among nations and swift action against aggression will not ensure permanent peace. However, for the present there is no viable alternative if the threat of wholesale destruction of our planet and its people is to be contained.

SUMMARY

The homicide rate in the United States has declined during the past few years, but homicide remains the second most common cause of death in males between the ages of 15 and 24 and the primary cause of death among Blacks in that age range. The law distinguishes between justifiable, excusable, and felonious homicide, between voluntary and involuntary manslaughter, and between first- and second-degree murder. Manslaughter involves criminal negligence but not intent to kill (malice). Second-degree murder involves malice but not premeditation, whereas first-degree murder involves both malice and premeditation.

Firearms are the most popular murder weapon in the United States, accounting for nearly two-thirds of all murders. Compared with other countries that have stricter gun-control laws, firearms are not difficult to obtain in the United States. Knives and other cutting instruments are the second most popular weapon in the United States, and personal weapons (hands, fists, feet, etc.) are third.

The great majority of murder victims and offenders in the United States are males 18 years old or over. Slightly larger percentages of both murder victims and offenders are Black than White, and tend to be of lower than average socioeconomic status and educational level.

Alcohol and arguments are associated with murder, which in most cases is the result of impulsive rather than premeditated violence. Homes are the most popular places for murder, followed by streets and bars. The murder rate is higher in cities than in small towns and rural areas and higher in the Southern and Western states than in the North Central and Northeastern states. The murder rate is also higher in countries closer to the equator. The frequency of murder is usually greater during the summer months and during holidays and vacation periods. Of the major religious groups in the United States, the murder rate is highest among Roman Catholics, intermediate among Protestants, and lowest among Jews

The principle of differential association is an attempt to explain criminal behavior, including homicide, as the result of living in a subculture of violence and in the company of violent role models. Biologically based explanations of violent behavior point to the inheritance of aggression and other temperamental and structural characteristics that predispose human beings to violence. Psychological theorists emphasize specific personality traits and learning processes in their analyses of violent behavior.

Most murderers are not legally insane, and the murder rate is lower than average among the mentally ill. Mass murders and serial killings are rare, and no single personality profile is associated with mass or serial killers. Collective crime, genocide, and war are types of mass murder sanctioned by a particular social group. Such murders are usually politically motivated, as are many assassinations of public figures. Political assassins, however, vary greatly in their motives and personalities.

Women who murder their husbands or lovers typically do so because of bruised bodies, whereas men who murder their wives or lovers do so because of bruised egos. Parents also abuse and murder their own children, the usual cause being frustration combined with emotional immaturity or severe mental disturbance. The percentage of perpetrators of crimes who are apprehended (the clearance rate) is higher for homicide than most other crimes. People who are charged with murder are, however, not necessarily tried, convicted, and sentenced. The recidivism rate for murder is very low: Murderers who are paroled from prison rarely kill again.

Millions of soldiers and civilians have been killed in wars throughout history, and particularly in the two world wars of the 20th century. Wars are waged for many reasons — religious and secular, materialistic and psychological. Rather than being precipitated by an inborn aggressive instinct, however, wars are usually the result of rational, though not necessarily intelligent, decisions made by political leaders and other powerful individuals

Efforts to eliminate war by stockpiling weapons and maintaining large standing armed forces have not been very successful. When the armaments and armies exist, sooner or later they are likely to be used. Among the reasons for waging war are national security and pride, a need for territory and other material resources, and the desire to impose one's beliefs or way of life on others.

The Hague Conferences, the League of Nations, and the United Nations represent international efforts to control the manner in which war is waged and, hopefully, ensure a more lasting peace among nations. Unfortunately, the existence of nuclear arsenals, the arms race, and persisting external and internal conflicts through the world have made these efforts only partially successful.

QUESTIONS AND ACTIVITIES

1. It has been said that almost anyone will commit homicide if pushed to an extreme, whereas many believe that some people simply don't have it in them to kill another human being. It has also been said that the first murder is the hardest. What do you believe? Justify your answers.

2. Ken Pence of the Nashville, Tennessee Police Department developed a questionnaire for rating a person's risk of being murdered. The items on the questionnaire are concerned with such matters as the respondent's yearly salary, job or position, population of closest city, amount of public exposure, family status, use of recreational drugs, personal habits, gang associations, law enforcement response time to home, and other factors. If you have access to the World Wide Web through the Internet, sign on the following URL: *http://www.nashville.net/police/risk/murder.html*. Complete and score the "Rate Your Risk: Your Risk of Being Murdered" questionnaire. Describe what you have learned from the exercise, and your opinion of the questionnaire.

3. An interesting, if potentially disturbing, experience is a trip to a maximum security prison, and particularly the death row and execution chamber of the prison. If you have an opportunity and feel that you are up to the experience, make arrangements to visit and tour a prison. If this is not possible, perhaps students who have visited a prison can describe their experiences and reactions to the class as a whole.

4. Arrange to view the film *Scared Straight* and its sequel. Do you believe that the experiences of the juveniles depicted in the film(s) discouraged them from a life of violent crime?

5. Complete the following questionnaire and administer it to several other people. Compare your responses with those of others.

Questionnaire

Directions: Indicate the extent to which you agree or disagree with each of the following statements by writing SA (Strongly Agree), A (Agree), U (Undecided), D (Disagree), or SD (Strongly Disagree) by the number of the statement.

__ 1. Only people with certain types of personalities are capable of murder.

__ 2. Almost anyone can commit murder in the right circumstances.

__ 3. A person has to be under extreme stress in order to kill someone.
__ 4. I could never kill another human being, regardless of the provocation.
__ 5. I believe that homicide is justifiable in certain situations.
__ 6. Taking a human life, for whatever reason, is a mortal sin.
__ 7. Some people are so bad that they deserve to be killed.
__ 8. I could kill a person who threatened my home or family.
__ 9. Most murderers don't really mean to kill; they just let their emotions get out of control.

6. Have you visited the United States Holocaust Memorial Museum in Washington, DC or seen films on the Holocaust such as *Schindler's List?* What do you think led to the atrocities depicted in such displays and films? Do you believe that you could ever participate in genocide? What or why not? In what way do you consider yourself different from the young Germans who took part in the murders of Jews and other ethnic groups during World War II?

7. Have you ever visited the Vietnam Veterans Memorial ("The Wall") in Washington, DC? If not, by all means visit the memorial sometime if you can. It is a much less romanticized memorial than some of the monuments that appear to glorify armed conflict, but perhaps more realistic. Over 58,000 Americans died in the Vietnam War, and the memorial is a stark reminder of the slaughter and horror of that war and all wars.

8. Under what circumstances would you expect the frequencies of homicide and suicide in a culture to be positively related, and under what circumstances would you expect them to have a negative relationship or no relationship at all?

9. It sometimes seems astounding that highly educated, cultured people would go to war and kill each other. Then why does it happen? What factors contribute to the outbreak of war?

10. Administer the following questionnaire (Peterson & Thurstone, 1933) to 10 women and 10 men. Then use the scoring key given below the scale to compute each person's score. Find the mean score for men and the men score for women. Is there a significant difference between the two means? Why or why not?

Questionnaire

Directions: Put a check mark by the number of each of the following statements with which you agree.

__ 1. Under certain conditions, war is necessary to maintain justice.
__ 2. The benefits of war rarely pay for its losses, even for the victor.
__ 3. War brings out the best qualities in people.
__ 4. There is no conceivable justification for war.
__ 5. War has some benefits, but it's a big price to pay for them.
__ 6. War is often the only means of preserving national honor.
__ 7. War is a ghastly mess.
__ 8. I never think about war and it doesn't interest me.
__ 9. War is a futile struggle resulting in self-destruction.

__ 10. The desirable results of war have not received the attention they deserve.
__ 11. Pacifists have the right attitude, but some pacifists go too far.
__ 12. The evils of war are greater than any possible benefits.
__ 13. Although war is terrible, it has some value.
__ 14. International disputes should be settled without war.
__ 15. War is glorious.
__ 16. Defensive war is justified but other wars are not.
__ 17. War breeds disrespect for human life.
__ 18. There can be no progress without war.
__ 19. It is good judgment to sacrifice certain rights in order to prevent war.
__ 20. War is the only way to right tremendous wrongs.

Scoring: Add the following points to the statements checked; then divide the sum by the number of statements checked. The resulting mean is the respondent's score on the questionnaire.

Statement	*Points*	*Statement*	*Points*	*Statement*	*Points*
1	7.5	8	5.5	15	11.0
2	3.5	9	1.4	16	6.5
3	9.7	10	8.3	17	2.4
4	.2	11	4.7	18	10.1
5	6.9	12	2.1	19	3.2
6	8.7	13	6.8	20	9.2
7	.8	14	3.7		

Source; From *Scale of Attitude Toward War,* by Ruth C.Peterson, The University of Chicago Press. Copyright 1931. Reprinted by permission of The University of Chicago Press.

11. Web exercise: Both the Federal Bureau of Investigation (FBI) and the Bureau of Justice Statistics (BJS) within the U.S. Department of Justice serve as collectors of statistical data on victims of crime in the United States, but different procedures are used by these two organizations to obtain such data. Log on the following web sites and try to obtain information on the differences in the approaches of the FBI and BJS in obtaining victimology data: Bureau of Justice Statistics *(www.ojp.usdoj.gov/bjs)* and Federal Bureau of Investigation *(www.fbi.org)*.

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PART III

CULTURAL BELIEFS AND CUSTOMS

5
FUNERARY RITUALS AND RELIGION

TOPICAL OUTLINE OF THE CHAPTER:

Traditional funerary rites and customs
- *Purposes of funerary customs*
- *Corpse disposal*
- *Grave sites and structures*
- *Treatment of the corpse*
- *Posture and orientation of the corpse*
- *Grave goods*
- *Prefunerary rites*
- *Funeral transports and processions*
- *Lamentations and other mourning behaviors*

Modern funeral practices
- *Wake, service, and committal*
- *The funeral business*
- *Legal regulation of the funeral industry*
- *Changing attitudes and practices*

Religious beliefs
- *Myths and beliefs concerning death*
- *Immortality and the soul*
- *The land of the dead*
- *Paradise and purgatory*
- *Testing and judgment*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *What are the origins and characteristics of death rituals and beliefs?*
- *What purposes are served by funerary rites and customs?*
- *What factors have played a role in methods of treating and disposing of corpses and in selecting and designing graves?*
- *How do modern funerals differ from traditional funerals?*
- *What problems have been experienced by the funeral industry in recent years, and what have been their causes?*
- *What are the relationships between myth and religion, and what purposes do these cultural belief systems serve?*
- *What are the differences between Eastern and Western religions in their conceptions of life after death, and how did these differences arise?*
- *What are the similarities and differences among the major religions of the world in eschatological beliefs (final battle between good and evil, appearance of savior figure, last judgment, etc.)?*

The topic of death and dying is not something that has been of interest only to writers and scholars in the late 20th century. From the earliest beginnings of civilization, people

have been faced with death and the questions of why it occurs, what it means, and how to cope with it. Primitive people encountered death almost daily, and the members of early cultures and societies were undoubtedly keenly aware that it was their fate to die someday. Because one's life expectancy at birth was less than 20 years in ancient times, that day was not long in coming.

Death is a personal event experienced by the individual, but it is also a social event. People did not have to wait for John Donne's 17th-century verses to realize that "no man is an island" and that "each man's death diminishes me." As is true today, the death of a member of an ancient social group disrupted the harmony of the group, forcing readjustments in roles and feelings. Rather than having a uniformly negative effect on other members of a tribe or clan, in most cases death served to increase group cohesiveness, adaptability, and growth. The death of a relative or friend, however, was an emotional experience for a person and accompanied by a sense of loss. Not only did it remind other members of the group of their own mortality, but collective ignorance about the causes and meanings of life and death led to a fear of dying and of the dead. This fear, known in its extreme form as *thanaphobia,* contributed to the invention of a variety of methods for dealing with death and efforts by the living to gain some control over it.

The great diversity of cultural rituals and customs concerning death originated from both a psychological need to cope with the fear of death and a practical need to dispose of the deceased and his or her belongings. According to cultural anthropologists, such rituals may either relieve or intensify anxieties about death. Anxiety concerning immortality and the afterlife may be decreased, but the loss itself, the need for social readjustment, and the possible existence of spirits and ghosts may precipitate additional anxieties in the living (Lessa, 1976).

Although the beginnings of death customs and rituals were associated with magic, myth, and religion, to some extent they became self-perpetuating and continued to exist even in the absence of strong religious beliefs. Just as Muslims make pilgrimages to Mecca, Christians and Jews journey to the Jerusalem, and Hindus make the trek to the Ganges River, nonreligious people may attach great importance to traveling long distances to visit the graves of their heroes and idols. Even when they involve no true religious sentiment, such rituals serve to strengthen the feeling of belonging or togetherness with other adherents and devotees.

Research on the ways in which human beings have dealt with death has enlisted the efforts of archaeologists, linguists, theologians, psychologists, cultural anthropologists, and historians. Information concerning death customs and rites has been obtained from relics and documents discovered in archaeological excavations of ancient graves, tombs, churches, and other structures, from manuscripts and records preserved by monasteries and in other antique collections, and by anthropological studies of primitive cultures that continue to exist in out-of-the-way places of the world today. Findings thus far have revealed a kaleidoscope of practices and beliefs concerning death. Each culture has, to use Kastenbaum's (1991) term, its own *death system*—a network of beliefs and practices with which a society attempts to cope with death and come to terms with it. Many of the elements of any death system are oriented toward the seemingly universal and timeless belief that the dead do not cease to exist, but rather continue to function in some kind of afterlife. Different death systems have different conceptions of the nature of that afterlife, and the persistence of human personality or individuality in it.

TRADITIONAL FUNERARY RITES AND CUSTOMS

Strictly speaking, humans are not the only creatures that bury their dead. For example, elephants have been seen burying dead elephants and other animals with mud, leaves, and earth (Douglas-Hamilton & Douglas-Hamilton, 1975). Large quantities of food, flowers, and fruit are sometimes included in these elephant graves. Burying behavior has also been observed in other animals, and it is possible that early humans watched and copied the burying behaviors of animals (R.K. Siegel, 1980).

Be that as it may, no animal buries its dead with as much deliberation, detail, and fanfare as *homo sapiens*. In a typical modern funeral, for example, the grave is prepared carefully and the corpse is treated and neatly groomed. One or more services or events, at which the behavior of participants and spectators is prescribed, are then performed. The funeral rituals of high-ranking people were particularly elaborate and painstakingly planned in ancient times.

Purposes of Funerary Customs

Social customs associated with burial and mourning of the dead serve a variety of purposes: disposal of the physical body, public recognition that a life has been lived, paying tribute to the deceased, facilitating the expression of grief and providing support to the bereaved, a rite of passage for both the deceased and the bereaved from one status to another, assisting the deceased in afterlife activities, providing an opportunity to reestablish contact with friends and relatives, and reaffirming or rearranging the surviving social group that may have been disrupted by the death of the deceased.

Concerning the transition of the deceased from one state to another, many societies believe that the soul of the deceased must be assisted or allowed to pass from the land of the living to its final resting place in the land of the dead. Archaeological evidence suggests that these purposes have applied in both ancient and modern times. For example, the presence of food, tools, and ornaments in the graves of Neanderthal men who lived over 50,000 years ago suggests a belief in an afterlife. Another archaeological finding that points to a belief in an afterlife is the discovery in some of the earliest graves of skeletons bound by their hands and feet into a fetal position, an orientation presumed to be most appropriate for rebirth.

Observations of funeral customs among primitive peoples living today, coupled with archaeological evidence, lead to the conclusion that burial rites have existed since Lower Paleolithic times (500,000–250,000 B.C.; Middleton, 1998). Rather than hygienic considerations, about which early humans presumably knew nothing, these burial ceremonies were apparently motivated by fear of the supernatural. They were used as a means of placating the ghost of the deceased by facilitating its journey to the spirit world and new existence in that world. Funerary rites also served in later times to honor the dead and to find favor with the gods. As time passed, the rituals and customs became more elaborate. In certain cases they were set down in writing, as in the Egyptian and Tibetan versions of *The Book of the Dead*. These books provide detailed descriptions of the death systems of the respective cultures, including instructions for treatment of the deceased in accordance with specific views of the afterlife.

Funerary rites and customs served not only religious purposes; they also became occasions for artistic, engineering, and even scientific achievements. The creation of the pyramids and the tomb builders of ancient Egypt, Greece, and other cultures undoubtedly contributed to the feeling that people are not utterly helpless in the face of death. These edifices served both as repositories for people of high status and as reminders of the lives and accomplishments of the deceased. The construction and decoration of these structures also provided occasions for cooperative social action, thus reaffirming the vitality and permanence of the community.

Corpse Disposal

Human beings, both ancient and modern, have shown an almost obsessive concern with proper disposal of the dead—a process that has often involved elaborate procedures and multiple steps. There are sound hygienic reasons for this concern, but they were not the principal aims of corpse disposal in prehistoric and early historic times. People in many cultures have believed that the soul cannot find its final resting place until the physical body is properly cared for. Consequently, survivors were anxious to dispose of the corpse as quickly as possible in order to circumvent the activities of ghosts and help the dead find peace.

Interment (Inhumation). Burial of a corpse in a covered or enclosed pit, a cave, or other structure, in which it eventually decomposes, has probably been the most common method of disposing of the dead since the beginnings of human societies (Middleton, 1998). It is also the most ancient method, dating back to the Paleolithic era. Burial was presumably prompted by the belief that a body planted in the soil will rise again like a plant rises from a seed (Fulton, 1999). Among certain peoples, such as the ancient Egyptians and the Peruvian Indians of a later date, the body was treated with preservatives before interment, a process known as *mummification*. Similarly, in the modern world the corpse is often chemically treated or embalmed before interment to preserve it for a time. During the American Civil War, embalming was reintroduced and improved as a method for temporarily preserving a dead soldier's body so it could be returned to his home. However, embalming was not practiced routinely until the late 19th or early 20th century.[12]

In preparation for burial, people in former times might dress the corpse, wrap it in a cloth or animal hide, paint or decorate it in other ways, and bury it with some of the deceased's possessions or other *grave goods*. Another practice was to bury the body and wait until the flesh had decomposed. The bones were then exhumed, cleaned, and buried a second time in a receptacle or place for the bones of the dead known as an *ossuary*.

[12]Although perhaps not as effective as modern techniques, embalming was also practiced in ancient times. For example, as stated in Genesis 50:2, "Then Joseph directed the physicians in his service to embalm his father Israel. So the physicians embalmed him, taking a full forty days, for that was the time required for embalming." The Greek historian Herodotus also wrote of embalming taking place in 484 B.C.. Embalming fell into disuse during the early Middle Ages, but was resumed for royalty and nobility in the late 1200s and continued as such until the 1700s (Welford, 1992).

A special type of interment occurring in Northern and Western Europe during the pre-Christian era was ship burial. Ship burial was based on the belief that the deceased must make a sea journey to the land of the dead. The deceased was buried in a boat, which might then be burned, and finally an earthen mound was raised over the ashes or unburned boat.

Open-Air Disposal. Not all cultures buried the dead. In some cases the corpse was simply left to rot on the ground, in a tree, or on a specially constructed scaffold (see Fig. 5.1). Such open-air disposal was practiced by Australian aborigines, some North American Indian tribes, and many Polynesian societies. The Parsee people of northern India still practice the ancient Zoroastrian rite of placing their dead on scaffolds known as high *dakhmas* ("towers of silence"), where the bones are eventually picked clean by vultures. It is a tenet of Zoroastrianism, an early religion brought to India from Persia, that other methods of corpse disposal defile the basic elements of nature (earth, air, fire, and water).

Water Burial. Certain Pacific Island and early northeastern European cultures apparently did not share the Zoroastrians' concern that dead bodies would contaminate the water. To these seafaring folk, water burial seemed a natural way to dispose of a corpse, and their custom was to place the body in water until the flesh was gone. Water burial also occurs in modern times whenever a person dies at sea and the body cannot be preserved until land is reached.[13]

Consuming the Corpse. Instead of having it picked clean by animals, the practice of certain cultures has been to have the corpse consumed by other humans *(mortuary cannibalism)* or by fire *(cremation)*. In *endocannibalism* parts of the deceased are eaten by members of his or her family. Archaeological evidence of mortuary cannibalism was found in the remains of Peking man of some half-million years ago and in Neanderthal man of roughly 100,000 years ago. In more recent times, certain Australian aborigine tribes and the Luiseño Indians of southern California practiced mortuary cannibalism. They believed that consuming a portion of a dead body endowed one with the virtues (and vices) of the deceased, thus uniting the dead with the living. This magical feature of mortuary cannibalism has been incorporated into various religions. In fact, the Christian sacrament of communion (Eucharist) and the associated ritual of changing bread and wine into the body and blood of Christ *(transubstantiation)* may have a symbolic connection to mortuary cannibalism (Lessa, 1976).

[13]Also of interest with respect to burial and water is the custom practiced by Blacks during the early days along the Atlantic Coast of the United States of locating burial grounds near the ocean. It was believed that by so doing the deceased would be carried back to Africa, "back home to heaven," by the ocean. Indicative of their belief that the world of the dead was a watery world, an upside-down world under the living world, were grave decorations that included dishes, plates, cups, saucers, and other items associated with water (Hillinger, 1989).

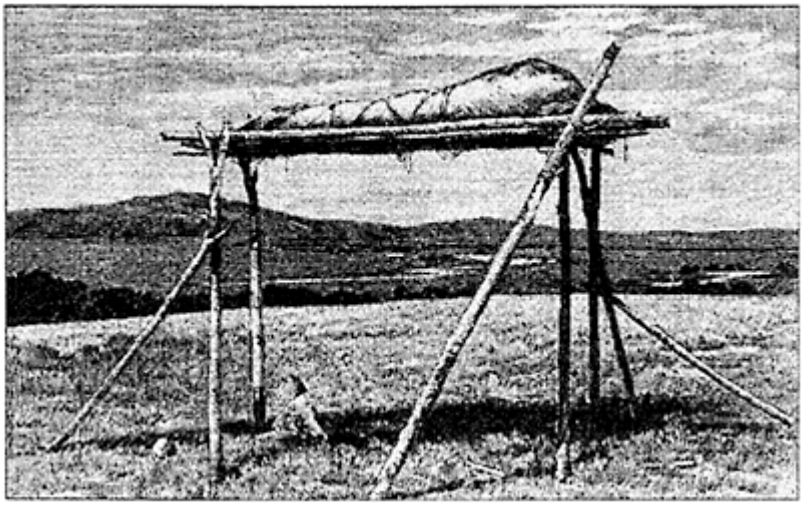

FIGURE 5-1 Scaffold burial of the Dakota Indians of North America

(Picture Collection, The Branch Libraries, The New York Public Library).

Cremation. For thousands of years, burning the corpse has been a common procedure for disposing of it. It was the primary method of corpse disposal during the Bronze Age, especially among the Hindus, Buddhists, and Romans. The Roman practice of *os resectum,* in which a severed finger joint was buried after the rest of the body had been cremated, was probably a symbolic representation of the earlier custom of interring the whole body ("Death," 1997).

The ancient Hebrews considered burial to be the only proper method of corpse disposal, a practice that influenced early Christian doctrine. The rise of Christianity, which, together with Judaism and Islam, opposed cremation, put a stop to the practice in Western Europe for a time. Traditionally, Roman Catholics, like Orthodox Jews and some Protestant groups, have believed that the body is the temple of the soul and therefore should not be destroyed by fire. Until the Second Vatican Council (1962–1963), canon law of the Roman Catholic Church forbade cremation as a proper form of disposing of the dead. However, the Roman Catholic Church now condones cremation, and priests can take part in services for cremated persons. Because the human body is seen as a reflection of God and His creation, and in conformity with Genesis 3:19 ("From dust we came, to dust we return"), cremation is opposed by orthodox and conservative Judaism.[14] Reform Judaism permits cremation and entombment, although burial remains the preferred method. Muslims continue to oppose cremation, because Islamic doctrine holds that the dead, like the living, can feel pain (Bardis, 1981).

[14]Cremation is also repugnant to many Jews because of its association with the Holocaust.

Open-air cremation on a funeral pyre is still practiced in India and certain other countries, but most cremations are now done in a gas or electric crematory. In a typical cremation in modern Western countries, the crematory is heated to 2,000–2,500 °F. Then the coffined body is placed inside the crematory and reduced to five pounds or so of ash (actually, calcified material) in approximately 80 min. The ashes *(cremains)* may be disposed of in various ways, for example, by scattering them on a holy river (in the manner of the Hindus) or on some other natural formation (mountains, desert, etc.), storing them in a special vault, or keeping them in an urn.

Cremation has grown in popularity during the past few decades, especially in predominantly Protestant countries. The practice has several advantages over other methods of corpse disposal, including economy, space conservation, public health considerations, and emotional comfort to people who are horrified by slow decay. In some instances, however, there are legal complications and religious opposition. Because murder is more easily concealed by cremation than by burial, the cause and circumstances of death must be carefully determined before cremating a corpse.

Grave Sites and Structures

In very ancient times people frequently were buried where they fell or, if that was inconvenient, in some randomly selected spot. Stone Age humans had special burial sites, mounds, or pits that were associated with magical and religious rites and beliefs. Fear of spirits and ghosts often led to efforts to keep these burial places secret. Then, as now, a person's status or wealth influenced the location of his or her burial place. The selection of a site also varied with religious beliefs.

The first known use of coffins and the construction of stone tombs took place in the Near East, in particular Egypt and Sumer, during the third millennium B.C. As time passed, more elaborate stone coffins *(sarcophagi)* were constructed. These sarcophagi had various shapes—oval, curved, houselike, humanlike—and were decorated with symbols and pictures of gods to protect the deceased. During Egypt's first dynasty (c. 3000 B.C.), the earlier burials in graves and caves gave way, at least for royalty and priests, to tombs of massive size. The walls of these tombs were decorated with writings and pictures of various kinds, depicting the life and beliefs of the deceased (Lesko, 1999).

Pyramids. The ancient Egyptians became most famous for those wonders of the ancient world—the pyramids. The oldest known structure of this kind, the step pyramid, was built around 2650 B.C..[15] The most widely known, however, are the three pyramids of Giza, which were constructed 150 years later. These three structures and the surrounding pyramids and the Sphinx comprise a *necropolis,* or City of the Dead; other necropolises are at Memphis and Thebes (see Fig. 5.2).

[15]Contemporary with, and in some instances predating, the Egyptian pyramids were the Sumerian *ziggurats,* temples built in a pyramidal shape as a series of terraces. Despite the notion that the existence of pyramid-like structures in Central America is indirect evidence that Egyptian reed boats must have reached that area in ancient times, not only were the pyramids of Central America constructed some 2,000 years after the last Egyptian pyramid was completed, but, unlike their predecessors, the Central American pyramids are capped with temples.

Each pyramid was designed to be the tomb of a pharaoh or other royal personage. In addition to housing the mummy of the deceased, it contained precious objects, foodstuffs, and other materials to ease the deceased's life in the next world. The pyramidal shape was based on the belief that it would be easier for the *Ka,* or soul, of the dead person to climb up to join the gods in the sky (Lesko, 1998). An inspection of the interior of a pyramid reveals a complex maze of many passageways and blind alleys designed to confuse grave robbers. Nevertheless, the robbers (and subsequently, professional Egyptologists) eventually succeeded in extracting the treasures from all the pyramids and other Egyptian tombs about which they knew.

Greek Tombs. Decorative sarcophagi and tombs were also constructed by other ancient groups of people. Most early Greek corpses were placed in simple sepulchers (tombs) cut out of rock or in graves similar to those in use today. As seen in the Tomb of Mausolus at Halicarnassus in Caria, during the classical Greek period the tombs of royalty or heroes were often quite impressive and artistic. The art of *sepulchral iconography* rose to a high peak in such monuments. In addition to bearing a brief inscription, a sepulchral iconograph depicts the deceased performing some action or deed for the last time and the grief of the survivors. The ancient Greeks believed, as did other people during those early historical times, that such sepulchers possessed magical powers and hence should be treated as shrines.

Roman Tombs. The Etruscans, whom the Romans displaced as rulers of the Italian peninsula, were constructing stone tombs and terra cotta sarcophagi around 600 B.C. The Romans were also great builders of tombs. Because burial in the city was forbidden, tombs lined the Appian Way and other roads leading in and out of Rome. The ruins of many of these early tombs, including those of Gaius Cestius, Caecilia Metella, Hadrian, and the tombs at Pompeii, are popular tourist attractions.

FIGURE 5–2 Pyramids

(© Bettman/CORBIS).

The early Roman Christians had no elaborate tombs, but they had the catacombs. The catacombs were a system of underground passageways on the outskirts of the city that were used for burial purposes. According to Roman law, such burial places were sacred sanctuaries, and so the early Christians could take refuge in the catacombs without being pursued inside by the authorities.

Jewish, Christian, and Muslim Tombs. Like the Greeks, Jews who lived during the time of Christ usually cut tombs out of rock. This practice was followed in constructing early Christian tombs, which were fairly simple structures. Christianity subsequently made up for the simplicity of these early funerary monuments, and many of the Christian tombs of later centuries were quite rich and elaborate. None, however, can match the Taj Mahal. This famous Islamic tomb was built in Agra, India between 1630 and 1642 by Shah Jahan for his favorite wife (see Fig. 5.3).

Contemporary Tombs. Almost every modern nation has one or more famous tombs that attract thousands of visitors annually. In the United States are the Tomb of the Unknown Soldier, Grant's Tomb, and the Tomb of George and Martha Washington. The most famous sarcophagi in the world are those of George Washington (United States), Napoleon Bonaparte (France), the Duke of Wellington (Great Britain), and Vladimir Lenin (Russia).

Treatment of the Corpse

Several ancient methods of treating corpses (cremation, eating, etc.) have been discussed. The corpse may also be dismembered, and each of the resulting parts buried at a different location. Such was the fate of the remains of William the Conqueror. The body of this first Norman king of England was buried at Saint-Etienne, the heart in Rouen Cathedral, and the entrails in the Church of Chalus. More typical was the practice of burying the head of a feared or disliked person in one place and the body in another, so they could not be rejoined and work further mischief on the living. Such was the fate of the Lord Protector of England, Oliver Cromwell.

A more typical practice was to groom and adorn the corpse before disposing of it. The corpse was usually cleaned, anointed, and covered with some colored substance. The custom among certain primitive European peoples was to cover or bury the corpse in ocher (iron pigment), perhaps because of the belief that the red color would revitalize the dead. In addition, the various body openings were often plugged and the eyes closed. Early Christians perfumed the body, after which it was either covered with a shroud or left naked. Depending on the social status and wealth of the deceased, ornaments, as well as a more expensive covering such as linen, might be placed on the body. The Chinese pared the nails of the corpse, shaved its head, and dressed it according to rank ("Death Rites and Customs," 1987)

Mummification. As in life, wealth had its privileges in death. In ancient China, dead men of higher social status were buried in better suits (with several spares!) than those of lower social rank. But no cultural group expended more of its material and human resources on deceased persons of high rank than the early Egyptians.

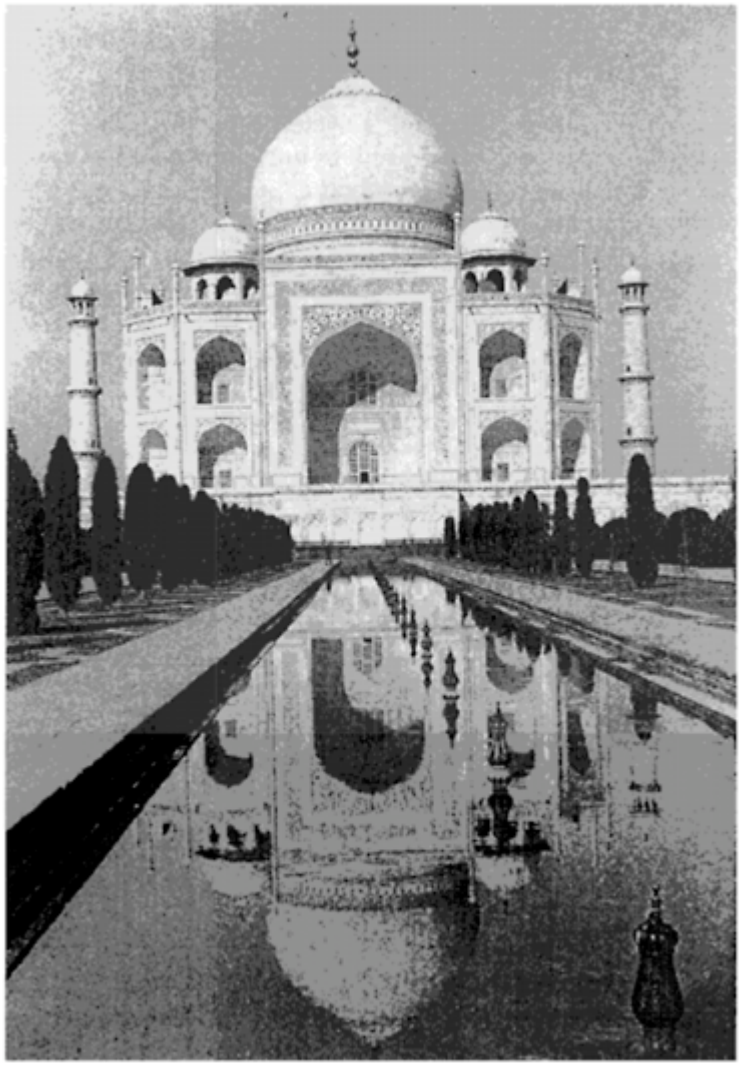

FIGURE 5–3 The Taj Mahal. This white marble mausoleum was built during 1628–1658 at Agra, India, by the Mogul emperor Shah Jahan for his favorite wife.

(© Bettman/CORBIS).

The elaborate treatment accorded a dead pharaoh and the expense of his funeral preparations have rarely been duplicated. Other nations have constructed magnificent tombs for their leaders, but none like the pyramids. Other cultures have embalmed their royalty, but none as expertly nor on such a scale as the early Egyptians.

According to early Egyptian beliefs, preservation of the body was necessary so the soul of the deceased, which took 3,000 years for its round-trip journey across the

heavens, would have a place to stay on its return to earth. The preservation process involved the use of extensive wrappings, gums, and oils in an attempt to exclude all the air and moisture from the body; the resin-soaked bandages were applied in order to reproduce the features, especially the face and genital organs, of the deceased. Before wrapping the body, however, the intestines, liver, stomach, eyes, and brain had to be extracted (Bardis, 1981)

> *First, a metal hook was used to remove the brain. This process was completed by means of encephalic drainage (dissolving the remainder with drugs). Then, with an Ethiopian stone, the side was cut and the viscera were removed (evisceration). After filling the abdomen with palm oil, spices, and aromatic powders, the body was sewn up. Thus, mainly the less corruptible skin, cartilages, and bones remained. These were dehydrated by immersion of the corpse in salt of natron for 70 days. Hundreds of yards of fine gauze and bandages, protective amulets, stone eyes, and more aromatic substances completed mummification. At each stage, which symbolized a step in the death and resurrection of Osiris, the priests recited passages from the sacred texts—for instance: "You will live again, you will live again forever! Behold, you are young again forever!" (p. 20)*

Not included in this description is the rite of opening the mouth of the mummy to restore its ability to breathe, see, and take nourishment. After being wrapped, the mummy was elaborately encased and deposited in the tomb. Painstaking procedures, such as constructing a false tomb above the actual tomb, were often used to hide the mummy and thus protect it from grave robbers.

Just as high social status had its advantages in death and life, low social status had its disadvantages in both states. In every culture, there have been groups of people who were not accorded special death rites or ceremonies and were disposed of with indignity. Among these individuals were infants, slaves, criminals, suicide victims, heretics, and victims of violent death or illness.

Unlike the Egyptians, the Greeks of Homer's time (9th century B.C.) never embalmed corpses. Rather, the corpse was washed and perfumed and, in the case of a hero, cremated together with several servants. Whether or not the deceased was a hero, a coin *(obolus)* was placed in the mouth of the corpse to pay Charon, ferryman on the river (Styx) to Hades. Muslims, who have traditionally opposed both embalming and cremation, pour a mixture of sugar and water into the mouth of the deceased. Then the mouth is tied shut, the two great toes are tied together, and the body is cleaned and perfumed before burial (Bardis, 1981). Preparation of the body in orthodox Judaism requires that it be washed by a burial society in a special purification process *(tahorah)*. The cleansed body is dressed in a plain linen shroud and, for a man, with his prayer shawl. Then the body is placed in a plain wooden casket and, if at all possible, buried before sunset on the day of death.

Posture and Orientation of the Corpse

Traditionally, graves have been dug rather deep, typically 6 feet or so, to prevent seepage, odors, and exhumation of the dead by animals or other grave robbers. In

Western cultures, the pit is dug wide enough for the body to lie horizontally, although certain cultures have interred the body in a sitting position or even upright. Some Australian aborigine tribesmen bury their dead in a vertical position with a space above the head; dead Japanese may be seated in tublike coffins and buried.

During primitive times, the corpse was usually buried in a fetal position. Jonas (1976) maintained that Cro-Magnons were buried in this position because of the belief that it would facilitate rebirth. However, the fetal posture of the skeletal remains of many ancient people is probably due to tying the arms and knees of the corpse to the chest. The purpose of binding the corpse in this fashion was presumably to keep the soul from walking and hence disturbing the living. In later times, the body was buried in a horizontal position.

Concerning the directional orientation of the corpse, in horizontal burials the face was usually turned toward the west, perhaps emphasizing the setting (i.e., death) of the sun. In ancient Egypt from 2500 B.C. onward, however, the body was placed with its head to the north and its face to the east. This easterly orientation of the face was presumably chosen to indicate rebirth of the sun (Lessa, 1976). Early Christian burial was with the feet to the east, so that the "last trumpet," which would presumably be sounded from that direction, could best be heard and responded to more quickly. In addition, the placement of the head to the west symbolized the end of life.

The custom of directing the feet eastward continues in modern England, although some Christians are buried with their feet pointed toward Jerusalem. An associated belief is that, with their feet point toward the Holy City, the dead will more readily rise up and meet Christ there on Judgment Day. Other religions dictate other body orientations. Muslims are buried lying on the right side, head toward the north, feet toward the south, and the face turned toward Mecca. Uncremated Buddhists are buried on their backs with the head facing north, which is believed to have been the Buddha's dying position ("Dead, Disposal of," 1976).

Grave Goods

The presence of various kinds of valuables and other goods found in prehistoric graves suggests a belief in an afterlife. For example, the grave of a Neanderthal man who lived about 70,000 years ago in what is now southwestern France also contained a leg of bison with the flesh still attached. The implication of this finding seems to be that the leg was buried to provide meat for the deceased in the next life. The goods accompanying the dead in later graves included not only food and drink but ornaments, weapons, flowers, and implements of various kinds. Occasionally the objects were quite large, such as those discovered in the Sumerian city of Ur in what is now Iraq. Excavators of one of the 5,000-year-old graves in this city found not only the skeleton of a king, but also a chariot, the remains of a donkey to pull the chariot, various weapons, tools, valuables, and 65 members of the royal court! Apparently the ladies, soldiers, and grooms who made up this cortege had been administered a lethal drug, marched to their assigned positions, and there they died (Woolley, 1965).

The killing of wives and servants to accompany the deceased also occurred among the Scythians, a nomadic people who lived in southern and eastern Europe from 600 B.C. to 100 A.D. This ancient rite was also practiced among the Vikings of northern Europe and in the suttee custom (northern India) of cremating alive the wife of the deceased (see Fig.3.5).

The early Egyptians followed a similar practice, but *paddle dolls* later replaced people in Egyptian tombs. Paddle dolls, shaped from thin strips of board into small canoe paddles, were placed in the tombs to act as servants and companions of the deceased in the spirit world. The tombs also contained jewels, household furnishings, and food. The food was presumably replenished periodically by attending priests.

The burial of goods in graves continued during the time of ancient Greece and Rome and through the Middle Ages. In addition to a coin *(obolus)* as boat fare for Charon, the oarsman, a dead Greek was provided with honeycakes for Cerberus, the three-headed dog that guarded the entrance to Hades. Members of contemporary societies may also place grave goods alongside the dead body, but rather than implying belief in an afterlife, it may merely represent a symbolic gesture or signify termination of the social position occupied by the deceased. Typical grave goods in modern burials include flowers, photographs, small crosses, and Bibles, but such items as fishing rods, shot glasses, cowboy hats, tennis rackets, cigarettes, bottles of whiskey, and golf clubs have been buried with deceased persons who presumably had special attachments to these objects (Elliott, 1990, see Box 5.1).

Prefunerary Rites

Today's emphasis on dying and death as essentially private affairs to be kept from public view, and on rationality and efficiency in disposing of the dead, contrasts sharply with the social nature and extensive preparation for death that occurred in earlier times. Woodcuts of death scenes in medieval Europe depict crowded rooms, with friends, servants, clergy, and even animals attending the dying person.

Throughout history, many cultures have placed much emphasis on proper preparation of both the dying person and his or her associates for the death. As described in the *Tibetan Book of the Dead (Bardo Thedol),* Buddhist teaching provides details on how a dying person should concentrate on the experience in order to have a good reincarnation or to become free of the birth-death cycle. A similar purpose was served by the *Ars Moriendi (The Art of Dying),* a book written in Europe during the latter part of the Middle Ages. It contained advice for both the dying person and his or her relatives, religious sayings, prayers, and answers to questions about salvation.

BOX 5.1 Woman Takes Her Corvair for an Eternal Cruise[3]

Providence, R. I.—Three decades after Ralph Nader portrayed the Corvair as a casket on wheels in his book "Unsafe at Any Speed," 84-year-old Rose Martin was laid to rest in her beloved 1962 model.

"She prearranged with us, and this was her wish. It was very well known throughout Tiverton that she wanted this," said Robert Ferreira, a director of the Oliveira Funeral Home in Fall River, Mass.

The widow and mother of three, who died Saturday, drove the flat-looking rear-engine white car around the town of Tiverton, population 14,000, for 36 years.

"She just loved the car. She didn't care what it cost to fix the car. If the car was broken, she wasn't one to ask you how much. 'Just fix it," recalled Tiverton Auto Body owner George Murray.

Mourners at her burial at Pocasset Hill Cemetery grinned through their tears as six police officers acting as pallbearers slid the inlaid wood coffin into an opening in the rear of the Corvair, which had been altered to accommodate the casket.

The Corvair was a popular car in the 1960s before it was buried by the rise of the muscle car and the 1965 expose written by Nader, who said it had serious steering and control problems,

But to Martin, a talkative and no-nonsense woman who served as a police matron tending to female prisoners at the town jail, the low-slung car with four front headlights was a gem.

She was laid to rest next to her husband, with a headstone showing a picture of her and the car.

[a]From "Woman Takes Her Corvair," 1998). Reprinted with permission of Associated Press.

Traditional Jewish teaching encouraged the dying person to put his or her spiritual life in order by confessing and repenting. By expressing personal fears in open communication with loved ones, the dying person obtained both social and spiritual support. In addition, the survivors received instructions from the rabbi on how the dying person should be treated and how his or her affairs should be handled.

Dying persons of the Roman Catholic faith traditionally received the sacrament of *extreme unction* (now called *anointing of the sick*). In this ritual, which was performed as much in the hope of curing the sick or injured person as in preparing his or her soul for the next world, the dying person's eyes, nose, mouth, ears, hands, and feet were anointed with sacred olive oil while prayers were said for his or her health. In addition to receiving the sacrament, it was very important to confess one's sins to a priest. It was believed that if the last rites were not performed, the unconfessed or otherwise unprepared soul would be seized by demons as soon as the last breath occurred. On the other hand, a properly prepared soul would be taken immediately by the angels.

In medieval and Renaissance Europe, a continuous vigil known as a *deathwatch* was usually maintained beside the bed of a dying person, and a death knell (bell) sometimes sounded as soon as the person died. In some societies, the deathwatch continued even after the person had expired, perhaps in the hope (or fear) that the deceased might return to life. The modern-day Irish wake harks back to the early custom of filling the house of the dead with entertainment to "rouse the ghost." Similarly, a time-honored practice among Southern Blacks in the United States is to stay awake all night beside the body, praying, singing spirituals, and recalling pleasant memories of the deceased. Friends and relatives would bring cooked hams, fried chicken, salads, and home-made pies for the all-night vigil (Hillinger, 1989).

Other prefunerary practices in medieval Europe, some of which have persisted into modern times, include opening all doors and windows and hanging wreaths on the doors

of the deceased's home, turning mirrors toward the wall, covering anything made of glass with a black cloth, stopping all clocks in the home of the deceased, removing tiles from the roof, and either emptying all water receptacles or filling them for use by the deceased. The exact origins of these customs are not known but presumably had to do with superstitious beliefs concerning the activities of spirits and protection against their influence. As archaic and quaint as these practices may seem, they provided people with ways of coping with their fears of death. They also brought the survivors closer together, creating a sense of community that is often lacking in the prefunerary practices of today.

Funeral Transports and Processions

In addition to methods of disposing of the body, funeral rites and customs dictate special ways of transporting the corpse to the grave, the apparel and treatment of the mourners, and their behavior in the funeral procession and afterward. Great care may be taken to make certain that the spirit of the deceased does not return to haunt the living. For example, the corpse may be blindfolded, taken from the house feet first so it cannot see the door as it leaves or by a special door that is later sealed, and carried to the grave by an indirect route; thorns may be strewn along the pathway from the grave back to the house or town. Loud sounds and bad odors, or, in exceptional circumstances, dismemberment of the corpse, have also been used to ensure the nonreturn of the deceased's spirit. Finally, in some instances it was considered taboo to speak the name of the deceased for fear that it might arouse his or her ghost from sleep (Lessa, 1976).

Although most cultures have devised ways to discourage the activities of ghosts, the custom in traditional Mexican families on November 1st and 2nd is to welcome the spirits of dead loved ones into their homes. Candles are burned in the cemetery, flower petals are sprinkled in a path to the home, and the family stays awake all night waiting for the dead to return. A special altar is built in the home for the "faithful dead" and adorned with the traditional elements of water, sugar cane, incense, salt, chocolate, and a special sweet "bread of the dead" (Darling, 1992).

Contemporary American funeral customs date back several thousand years to early Judeo-Christian beliefs, which themselves were influenced by earlier practices and beliefs. The custom of walking in a funeral procession was introduced in Britain at the time of the Roman invasion of 43 A.D., but it did not originate with the Romans. A highlight of a Roman funeral procession was the parade of the death masks of the deceased's ancestors (see Fig. 5.4). Today people of many different religions —Hinduism, Judaism, Christianity, Islam—march in procession to the place of burial or, in the case of Hindus, to the place of cremation. The Romans were also responsible for introducing into Britain the funerary practices of wearing black and raising a mound over the grave (Fulton, 1999). Mourners in other cultures might wear black or white, but their garments usually were colorless.[16] Also of interest is that the older practice among Roman Catholic priests of wearing only black to funerals and using black candles gave way to white vestments and white candles after the Second Vatican Council (1962–1963; "Death Rites and Customs," 1987).

[16]It is noteworthy that the first ready-to-wear women's clothing available in stores were mourning clothes.

The funerals of pharaohs in ancient Egypt also included a journey by the deceased, first to the Nile River and then across the river in a boat. A gathering of people on the west bank of the Nile voted to decide whether the dead pharaoh had been a good or bad king. The outcome of the vote determined if the body was buried in a tomb or merely dumped into the river (Hardt, 1979).

Lamentations and Other Mourning Behaviors

The behavior of survivors during and after funerals has often been quite dramatic and disturbing. They may cover their faces with mud (ancient Egypt), tear their clothing (Jews, Muslims),[17] let their hair become unkempt (Muslims), turn their clothing inside out and walk backward (Australian aborigines), and even mutilate themselves (various cultures). Mourners may wear special clothing and adorn themselves with ashes, black arm bands, and other death symbols; they may observe food taboos and physically seclude themselves. Physical isolation of a widow or widower is regarded as a sign of the marginal status of the survivor, who is considered contaminated, unclean, perhaps even dangerous, and hence taboo. Also included in the rites are attempts to determine the cause of the death—whether it was due to the actions of God, the wrath of ancestors, the envy or spite of others (magic, witchcraft), or to scientific or medical factors.

[17]In many modern Jewish funerals, the ritual of rending or tearing one's clothing has been replaced by ripping a black ribbon and attaching it to the clothing.

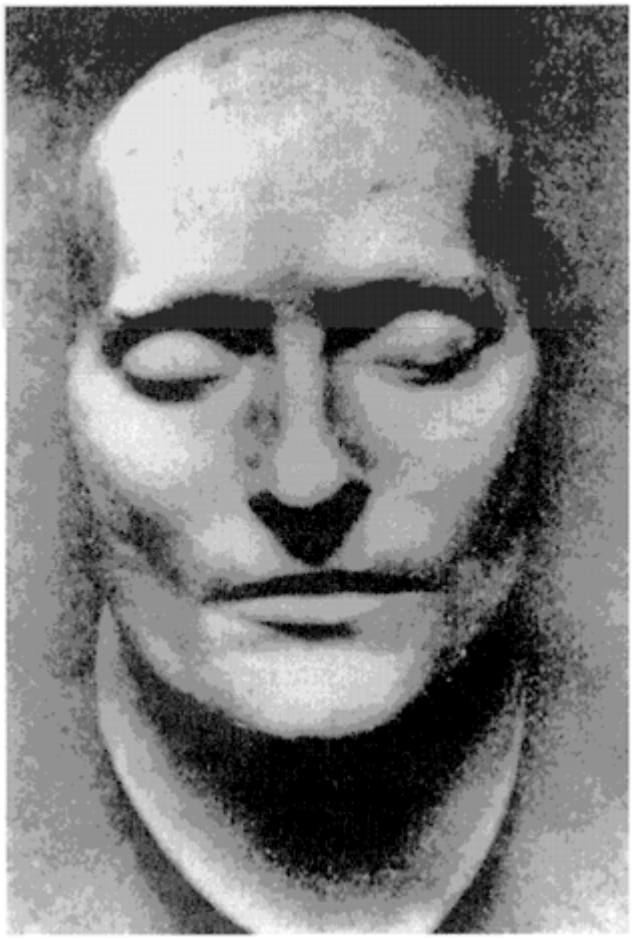

FIGURE 5-4 Death mask of Napoleon Bonaparte

(© Bettman/CORBIS).

Characteristic of mourners in many cultures are wailing, shrieking, and other wild actions. Since ancient times, societies have also hired professional mourners—usually women who are highly gifted in simulating hysterics—to walk and otherwise "perform" in funeral processions. Kamerman (1988) noted the following:

> *The actor Rudolph Valentino's death in 1926 resulted in riots around the funeral home in New York. For publicity, actresses were hired to wail outside the funeral home, which precipitated the riot. Those inside feared that the casket, the body, the flowers, and the home itself might be ripped apart by the crowd anxious to carry off some shred to preserve the memory for their fallen idol. (p. 85)*

Besides the hysterical wailing of professional mourners, lamentations may be expressed in dirges (funeral songs and songs commemorating the dead), dances, art, and writings. The ancient Greeks and Romans also honored the dead with funeral games and banquets. The end of mourning, which might last as long as a year, included purification of the mourners and sharing of a sacrificial meal by the deceased's relatives. Jewish custom prescribed a "meal of recuperation" for mourners, a practice also followed by certain Christian denominations (Middleton, 1998).

Pre- and post-funerary rituals were not always sad affairs. Chinese and Irish cultures, to name just two, emphasized the more optimistic aspects of death, celebrating it on occasion with festivity and revelry. To add to the festivities, animal and even human sacrifice was a funerary practice in certain ancient cultures. It was the custom among Blacks in the Southern United States to meet on a Sunday after the burial for a memorial service. During the service, families and friends arranged themselves in a circle around the grave or burial site, shouted praises to the Lord, clapped their hands, flailed their arms in the air, sang spiritual songs, and performed a special "ring shout" dance in which no person crossed his or her feet. Not crossing the feet while dancing was considered a sacred practice rather than a secular one (Hillinger, 1989; see also Barrett, 1993).

MODERN FUNERAL PRACTICES

Historically, the purposes of funeral rites were to honor the dead, supply them with the necessities for the next world, and gain favor with the gods. The first of these aims, honoring the dead, still forms part of the funeral rituals today, but the emphasis has shifted somewhat from the deceased to the survivors. Thus, a primary function of the modern funeral is to provide a mechanism for those who were close to and/or admired the deceased to work through their own feelings associated with the death. Honoring the deceased and grieving for her or him at the funeral and during the subsequent period of mourning serve both to affirm the deceased's value and provide an opportunity to attain emotional closure with respect to the life and death of the departed individual.

Wake, Service, and Committal

The time between the death of a person and consignment of the body to its final resting place traditionally has been divided into three intervals or activities: wake, funeral service, and committal. Mourners are no longer summoned to the wake by bidders or to the funeral service by bell ringers, as they were in earlier times. Rather, a notice is usually placed in the obituary column of a newspaper, and relatives and close friends are informed by telephone, telegram, or in person.

During the wake (visitation, viewing), the groomed and often embalmed corpse is on display in a funeral home, a church, or (rarely) a private home. A variety of social activities, depending on the customs of the social group of which the deceased was a member, may take place during the wake. In general, family, friends, and others who knew or admired the deceased come to express their feelings and comfort the bereaved. The principal activity of the wake, however, is to visit the deceased and view the remains. Because

working people other than members of the immediate family are usually not excused from work to attend the funeral, they are more likely to attend the wake, which is held in the evening, than the funeral, which takes place during the day. A wake does not have to be held, especially when the casket, for whatever reason, is kept closed. In general, wakes have been favored more by the working class and Blacks than by the upper socioeconomic class and Whites (Salomone, 1968).

Unless the deceased was terribly disfigured by accident or disease, the body is usually on display during the wake and, depending on the wishes of the family, during the funeral. In order to be displayed, it is legally required that the body first be embalmed. Modern funeral directors maintain that having the casket open during the wake and the funeral provides viewers with a "memory picture" of the deceased. The picture should be positive and lifelike, thus justifying the cost of embalming and cosmetically preparing the corpse. Beautification of the corpse to make it seem almost alive, however, appears to impress some religious groups (e.g., Protestants) more than others (.e.g., Catholics; Khleif, 1976).

The nature and location of the funeral service itself vary with the cultural and religious background of the participants (see Box 5.2). Most funerals are attended only by family members and close friends. Catholics are reportedly more favorably disposed toward funerals, followed by Protestants, Jews, nonaffiliated respondents, and Unitarians. Catholics are also more likely to hold a funeral service in a church, whereas Protestants are just as likely to hold it in a funeral home as a church (Khleif, 1976). Wherever it is held, the funeral service still provides an opportunity for a group of people to acknowledge the value of the deceased and to affirm their social and religious ties. The trend during this century, however, has been to tone down the more emotion-arousing features of the funeral service and to deritualize the mourning process. Another modern trend has been away from large church funerals and toward simpler funerals or memorial services.

The deemphasis on funerary rituals in the late 20th century was interpreted by Aries (1981) as a manifestation of the denial of death that has come to characterize Western culture, a deemphasis seen more in England than in the United States and Canada. In all three of these English-speaking, primarily Protestant, countries, neither the funeral service nor the procession from the place where the service is held to the final resting place is as dramatic or flamboyant as it once was. But like the kings of old, some individuals still prefer to end their lives in lavish, spectacular fashion.

In most cases, the final resting place of the deceased is a private cemetery maintained by a religious order, another nonprofit organization, or a commercial enterprise. If the body has been cremated, the cremains may be scattered aerially on top of a mountain or other natural setting, by boat on a large body of water, launched into outer space, or saved in an urn or vase. Multistoried walls divided by vaults or niches *(columbaria)* are quite popular in certain areas of the world in which land is scarce. Each niche bears a commemorative plaque containing a picture and the name of the deceased, in addition to the date of death. *Athenaeums,* which look like air-conditioned houses and are built near cemeteries, are becoming popular in Europe as places to house the remains of the dead.

Approximately 80% of the corpses in the United States are disposed of by burial and the remaining 20% by cremation. Cremation is most popular in the Pacific and Mountain regions and least popular in the South. It is also more popular in Canada than in the United States, particularly Western Canada, and most popular of all in Japan and certain other Asian countries. It is estimated that by the year 2010 over 30% of the corpses in the

United States and 60% of those in Canada will be cremated (Cremation Association of North America, 1997). Among the purported advantages of cremation are sanitation, space economy, emotional comfort to the family, avoidance of decay, and reduced cost. Another advantage is convenience, in that an urn can be transported more easily than a casket.

BOX 5.2 Funeral Rituals Among the Hmong People of Southeast Asia[a]

In Laos, most Hmong believe in spirits and the supernatural world. The Hmong believe that the souls of the dead live in the world of the supernatural. These spirits decide just how long a person will live in the earthly world. When that time runs out, the person will die. These same spirits are also the souls of the Hmong people still waiting to be born. Someday these souls will reenter the earthly world,

A person is believed to have three souls which separate upon death. One goes to heaven, or the "place of the dead"; one remains in the grave; and one becomes re-embodied. The departing souls must be shown the right "roads" to reach heaven. The funeral ceremonies vary according to tribe or clan, but a period of exorcizing the evil spirits from the dead before burial is common and considered important.

When an old person dies, the corpse is kept inside the house for three to ten days and, in certain circumstances, even longer, The corpse must be kept in the house until the deceased's children and relatives arrive and until the right day for burial,

Relatives and neighbors of the dead person come to visit and to comfort the inhabitants of the house, fulfilling a social function for relatives. They exchange news about people and crops and discuss the prosperity of various villages. Today this is done at the funeral home where the rooster, the children's blessing and the big drum all play a role,

The corpse is usually buried in the afternoon. The spirit of the dead person should depart as the sun sets, so that the soul will not come back often to make a nuisance of itself,

Within a year after the death, a ceremony must be held to release the soul of the dead person. Otherwise, the spirit may cause harm because it cannot be reborn.

[a]From web site *www.laofamily.org/hmongculture3.htm.* Reprinted by permission of Lao Family Community of Minnesota, Inc.

The Funeral Business

Prior to the 19th century, there were no undertakers, morticians, or funeral directors. Families, with the assistance of friends and other members of the community and church, were responsible for disposing of their own dead. In less affluent families, the corpse was

laid out on the kitchen or dining room table, where it was washed, clothed and otherwise prepared for burial while a surviving male or local carpenter constructed a coffin and others dug the grave. The cost of an elaborate funeral, even in the Middle Ages, could be quite high and potentially ruinous to the survivors. However, the existence of mutual-aid societies and burial groups helped keep costs under control for those who were willing to settle for less extravagant ways of disposing of the dead.

Undertaking first became a skilled occupation in the early 19th century. The first undertakers were craftsmen or carriage hirers who obtained transportation and coffins (Aries, 1981). The titles *mortician and funeral director* came into use later in the century, underscoring the growing commercialization of funerary activities. These activities are now handled quite professionally by a team of specialists, including not only funeral directors and embalmers, but also doctors, lawyers, ministers, florists, grave diggers, and many others. Although the preprofessional education of most funeral directors, morticians, and embalmers is little more than high school level, a license to practice in these fields requires the completion of certain professional training courses, an apprenticeship, and the passage of a state examination.

Depending on its nature, elegance, and location, a funeral in the United States can cost quite a bit of money. The average price of a funeral and burial in California is $5,060, the total cost depending on the specific items and services requested. An itemized list of average costs includes: cemetery plot=$480, cemetery vault= $430, cemetery marker=$430, endowment care=$200, opening of the grave= $125, closing of the grave=$125, marker set fee=$75, casket=$1,800, funeral= $1,395.[18] However, many memorial societies have arranged funerals costing around $1,000.

A major item in the cost of a funeral is the casket, with prices ranging nationwide from $600 to top-of-the-line caskets costing as much as $25,000. The cheapest casket is made of particle board, and the most expensive of ornate bronze on the outside, a velvet liner on the inside, and an adjustable inner-spring mattress that can be tilted to make the corpse more visible when on display. Caskets in an intermediate price range are made of steel or copper. Other expenses include embalming, other preparation of the body, use of facilities for viewing and funeral ceremony, and nondeclinable professional services. Charges are also incurred for transporting the body to or from another funeral home and to a gravesite; for acknowledgment cards, memorial folders or prayer cards, and register book; for flowers; and for using other facilities. If a religious service is held, the minister must also be paid and perhaps given a gratuity. The cost of the gravesite and headstone may, of course, may run into thousands of dollars more. A substantial savings is possible when these items are ordered on a preneed basis, that is, some months or years before death.

Religious and cultural customs dictate to some extent what items are included in a funeral and what they cost. For example, Orthodox Jewish custom requires that hand-tooled wood and no metal be used in making the casket and that the corpse not be embalmed. Funeral cost differentials are also related to sex, age, and social status. Women tend to spend more than men on funerals, older adults spend more than younger adults, and lower and middle class people spend relatively more than upper class people (Pine & Phillips, 1970).

[18]As quoted by the Neptune Society.

Legal Regulation of the Funeral Industry

In the 1960s, exposes written by Jessica Mitford (1963), Ruth M.Harmer (1963), and other influential individuals led to public concern about the funeral industry in the United States. Allegations of exorbitant prices and high-pressure salesmanship inflicted on confused, grief-stricken consumers by self-styled "grief-therapist" morticians proved all too accurate in some cases. As critically expressed by Mitford (1963):

> *O Death, where is thy sting? O grave, where is thy victory? Where indeed. Many a badly stung survivor, faced with the aftermath of some relative's funeral, has ruefully concluded that the victory has been won hands down by a funeral establishment—in a disastrously unequal battle, (p. 15)*

Subsequently, the U.S. Federal Trade Commission (FTC) took up the cause of bereaved consumers in a series of recommendations concerning the choices and prices offered by funeral homes. Under these regulations, instead of selling a preselected package to consumers, funeral directors are required to provide itemized lists of goods and services and their prices. Prices must be given over the telephone on request, and misrepresentation of state laws governing embalming and cremation is prohibited. Funeral providers may not make claims that expensive products are necessary for cremation, that embalming is required by law when it is not, and that particular items have greater preservative effects than they do. They must reveal the individual cost of flowers, death notices in newspapers, provision of hearses and limousines, pallbearers, guest registers, and other services (Funeral Industry Practice [Funeral Rule], 1985). These regulations, which went into effect in 1984, were objected to by the funeral industry as being biased against the traditional American funeral. The requirement that an item-by-item list of funeral costs be provided has been particularly irksome to many funeral directors.

Although the FTC regulations have helped, the responsibility for policing the funeral industry continues to fall to some extent on private consumer organizations. One important service that such organizations and other interested parties perform is to make the public aware of exactly what the laws of various states require and do not require in connection with funerals. For example, no state requires an outer burial container, a casket for cremation, or routine embalming. According to the Centers for Disease Control, embalming serves no public health purpose. Still, a few states require embalming when death occurs from a highly communicable disease such as anthrax, and some states also require embalming or refrigeration after 24–48 hr when the body is to be shipped out of state or the funeral is delayed for other reasons. Furthermore, embalming, which adds $500 or so to the funeral bill, does not preserve the body forever but merely retards decay for a time.[19] It is noteworthy that the United States is the only country in which the funeral industry promotes embalming. It is rarely done is most other countries, even when the body is on display during visitations, at no risk to public health.

The funeral laws in a large majority of states prohibit misrepresentation of prices and services and misrepresentation of cemetery and legal requirements connected with burial. On the other hand, few states require funeral establishments to make available to

consumers a preselected, itemized price list, price information over the telephone, a separate casket price, or an outer burial container price list. Nor do most states require explicit permission to embalm, truthful disclosures of service charges for cash advances, or that a majority of the members on the state funeral board be individuals who are not connected with the funeral industry.

Changing Attitudes and Practices

Because of a number of factors, including exposes of the funeral industry, inflation and economic hard times, and changes in public attitudes toward death, the traditional funeral business in the United States has declined during the past 30 years. The decline has been especially marked in metropolitan areas on the East and West Coasts, where cremation is also more popular. For example, compared with a U.S. figure of slightly over 20% of the deceased being cremated in 1996, over 40% of those who died in the Pacific states were cremated (Cremation Association of North America, 1997).[20] The national cremation rate is expected to exceed 30% by 2010, which will still place it significantly below the rates for Canada, England, and Japan.

The increasing popularity of cremation is only one factor in the decline of the funeral business in the United States. Many authorities believe that the main reason for the decline is a change in public attitudes toward death and funerals. Public discussions of death and light treatments of the topic by the media have helped Americans become more comfortable with death. Simultaneously, the population has become more mobile and experimenting, and as a result traditional family and religious ties have weakened. The greater openness about death and the loosening of cultural constraints have contributed to a fundamental change in attitudes and a consequent trend toward simpler, more economical funerals.

In the forefront of the movement toward simpler funerals are not only intellectuals and social reformers but also religious authorities. Sharing the mistrust of superstition and irrational sentimentality that characterize lavish funerals, these individuals agree in pointing out that a memorial service is not only simpler and more economical but also quite dignified and meaningful to the survivors. Also noteworthy is that the Roman Catholic Church, which for centuries strongly opposed cremation, removed its objection to the practice in the 1970s.

RELIGIOUS BELIEFS

Living as they did in a world where death was ever present and realizing that all living things die, primitive humans were still unprepared to accept death as the end of personal existence. Being close to nature, and therefore aware of seasonal cycles in which death in winter is followed by rebirth in spring, undoubtedly influenced their interpretation of

[19]See web site *http://vbiweb.champlain.edu/famsa.faq.htm*.

death as a transition from one stage of life to another (Cavendish, 1977). Thus death was perceived as a kind of rite of passage from this world to the next. Many early customs and myths characterize life and death as a cyclical process similar to the growth, death, and revival of plants.

Myths and Beliefs Concerning Death

Every culture has had *myths,* stories concerned with the creation of things (e.g., the world, human beings, gods) or with the explanation of events such as sickness and death. To people of another culture, such myths may be viewed as interesting but fanciful folktales and legends. To members of the culture in which they originated, however, the myths may be sacred. Myths are a significant part of the spiritual life of many societies and a forerunner of institutionalized religion. Most myths concern the actions of supernatural or divine beings, who possess human characteristics but superhuman powers. These beings may look human, at least in part or in idealized form, and they interact, both socially and sexually, with real people. The actions of these godlike creatures often go back to primordial time, as in myths concerned with the creation of the world from a primal substance (Babylonian and Hebrew myths) or from a giant egg (Chinese and Hindu myths). Supernatural beings are believed to be responsible not only for creation but also for death; people die because of the actions of mythical beings (Long, 1998; see Box 5.3).

Rather than viewing death as a natural occurrence signaling the end of an individual's existence, like the mythologies that preceded them most religions have depicted death as resulting from the actions of supernatural beings. Also unlike the scientific viewpoint, religions do not consider death as final or complete; the body is destroyed but the soul continues to exist after death.

Concern with death and life after death has varied extensively with culture and religion. For example the early Sumerians (c. 5000 B.C.) were more interested in life than in life after death. They believed that since the gods had assigned death to man when he was created they would not help him in death. As we have seen, the ancient Egyptians gave much more attention to death than the Sumerians. The Egyptians enjoyed life, but sadness and tears accompanied the death of a loved or revered person. They thought of death constantly, and although they had no god of death as such, two Egyptian goddesses (Sekmet and Bastet) were associated with death. The ancient Greeks, on the other hand, placed the responsibility for death squarely on the shoulders of a single male deity—Thanatos (Bardis, 1981).

BOX 5.3 The Forbidden Fruit[a]

Disobedience to divine commandments results in the death of the offenders and their descendants. This is the theme of the forbidden fruit, which is common in both Africa and the South Sea Islands. The theme explains the origin of death and not the origin of sin as in the Book of Genesis. The

[20]See web site *http://www.cremation/org/stats.htm*.

Wachagga, who live in the Kilimanjaro region, believe that death occurs from eating a certain tree's fruit that their supreme god has forbidden.

A Hawaiian legend relates how Kumuhomua, the first man, lived with his wife, Lalohomua, in the land of Kane, until she met the Great Seabird. She was induced to eat the sacred apples of Kane, after which she and her husband were carried away by the Great Seabird into the jungle. There they were lost, and death became the penalty for both Kumuhomua and his wife for not obeying God's command.

The same idea is found among the pygmies. Death came to early people in the form of a cataclysm that obliterated the ancestral paradise at the source of the Nile. The following is one of the many versions. God, who made the first man and woman, allowed them to live forever as long as they would not pick the fruit of the tahu tree. When the woman became big with child, she decided that she must eat the fruit and no other. Her husband warned her that God had forbidden them to eat the fruit, but the woman argued, cried, and screamed. In desperation, in order to quiet his wife, the husband picked the fruit, and they ate it together and hid its peel under the leaves. God sent a wind to blow the leaves away and saw the peel. He became angry and punished both by condemning them to hard work, illness, and ultimate death. He punished the woman even more for initiating the problem and gave her the pain of childbirth.

In Australia, some tribes have a slight variation on the forbidden fruit theme. Death is blamed on women who have gone to a forbidden hollow tree containing a bee's nest, searching for honey. A huge bat, the spirit of death, was released from the tree, and the bat roamed the world, providing death to all it could touch with its wings.

[a]*Note.* From "How Death Came to Mankind: Myth and Legends," by A.Corcos and L.Krupka, in *The Find Transition* (pp. 165–166), R.A.Kalish (Ed.), 1984, Farmingdale, NY: Baywood Publishing Company. Reprinted with permission.

Similar to the ancient Egyptians, the early Chinese enjoyed life, but, at the same time, they were concerned about dying. Historically, the Chinese valued longevity, and the death of an elderly person was as much an occasion for rejoicing as for mourning. Consistent with their reverence for long life was the belief that the death of a young person is a sign of an evil spirit at work, and hence a threat to other people. They also believed that, at death, the body-soul system is dispersed and the dead person becomes a sacred ancestor.

Islam is fatalistic about death: The time of a person's death is believed to be fixed in advance. Mohammed taught that because a person's death is predetermined, it should be accepted joyfully and without fear. Of particular interest are those who die in defense of Islam, as in a *jihad* (holy war); they are assured of a place in heaven. This credo is similar to the early Greek and Viking beliefs that warriors who die bravely in battle go to a special place (Elysian Fields, Valhalla). Muslims also be lieve that death is caused by a

supernatural being—the Angel of Death—who steals the soul of the deceased (Adams, 1999; Bardis, 1981). In an Islamic funeral procession, the coffin of the deceased precedes the mourners, since the Angel of Death is believed to be at the front of the line. Islam has many other beliefs and teachings in common with those of other cultures and religions, Judaism and Christianity in particular. In addition to being monotheists, Muslims view the Koran not as nullifying the Bible but rather as correcting the version of the scriptures followed by Jews and Christians. Abraham was the patriarch who, through his sons Isaac and Ishmail, is said to have given rise to both the Jewish and Arab peoples. Furthermore, many of the Old Testament prophets, and even Jesus Christ, are recognized by Islam as holy men. However, Muhammed is the principal prophet of Islam.

The Judeo-Christian view of death and afterlife developed over many centuries, and the word *death* appears hundreds of times in the Bible. The attitude toward death expressed in the books of Job, Proverbs, Psalms, and Ecclesiastes is one of fatalistic resignation. Job 7:9–10 expressed the pessimistic attitude that "As a cloud vanishes and is gone, so he who goes down to the grave does not return. He will never come to his house again; his place will know him no more."[21]

In early Judaism, as among the ancient Greeks, the emphasis was more on perpetuation of the community or social group rather than the eternal existence of the individual. Because Abraham did what the Lord asked him, the Lord promised the following:

> *I will surely bless you and make your descendants as numerous as the stars in the sky and as the sand on the seashore. Your descendants will take possession of the cities of their enemies, and through your off spring all nations on earth will be blessed, because you have obeyed me. (Genesis 22:17–18)*

The perpetuation of Abraham's seed, not personal immortality, was what God promised. Thus, Judaism became a religion of faith, faith in God's promise to preserve the Jewish people as a nation and enable them to fulfill their common destiny. Similarly, among the early Greeks it was the *polis* or city state that would survive, not the individual member of that state.

From the time of Job to that of Ezekiel and Daniel, the resigned attitude toward death gradually changed to one of hope that the dead are merely sleeping and will awaken one day. The Lord now promises that "I am going to open your graves and bring you up from them; I will bring you back to the land of Israel" (Ezekiel, 38:12). Whether the awakening of the dead will result in everlasting life or everlasting disgrace will vary with the individual. Thus, in Daniel 12:5 it is promised that "multitudes who sleep in the dust of the earth will awake: some to everlasting life, others to shame and everlasting contempt."

Despite these Old Testament promises of revitalization of the dead, it remained for Christianity to express the idea of personal resurrection to its greatest degree. There is no specific passage in the first three Gospels of the New Testament (the synoptic Gospels) in which Jesus discusses the subject of death. Rather, it is in the writings of Paul of Tarsus that death is described as man's last and greatest enemy, an enemy whose power results from man's sinfulness.

[21]The biblical quotations in this chapter are from *The Holy Bible, New International Version* (International Bible Society, 1984).

Paul taught that, except for the intervention of Jesus Christ, who died on the cross to atone for man's sins, death would mean obliteration. By the resurrection of Christ, Paul maintained, man has attained victory over death. In Paul's words, "just as Christ was raised from the dead through the glory of the Father, we too may live a new life" (Romans 6:4). Several centuries later, St. Augustine, in *The City of God,* interpreted Paul's writings on the subject as meaning that death is a punishment for sin and that only divine grace can free man from the fear of death. In Augustine's view, humans were created by God in His image. When Adam sinned, however, all humanity fell from grace, and hence everyone is born in sin and spiritually flawed. A consequence of that sin is death—an experience that every person must undergo in order to restore his or her previous state of perfection.

Immortality and the Soul

As witnessed in the elaborate process of mummification and the writings in the Egyptian Book of the dead, the ancient Egyptians believed in a life after death. This belief is seen in the myth of Osiris, the god of the underworld, who was reassembled and came back to life after being cut into 14 pieces. Henceforth, immortality was assured by the intervention of Osiris. The ancient Greek and Roman myths also describe a life after death, and even earlier peoples (e.g., Neanderthals) apparently believed in rebirth after death. Such a belief is, in fact, much older than the idea of personal extinction, which appeared first in early Buddhism (6th century B.C.). According to the latter idea, at death a person no longer continues to exist as a distinct personality but becomes, as before birth, one with nature and the cosmos.

The Soul. Most religions maintain that something of the individual survives death, but they differ in their beliefs of what that something is. As revealed in attempts to ensure immortality for the pharaohs by preserving their bodies, the early Egyptians did not clearly distinguish the spirit or soul from the physical structure of a person. The ancient Egyptians had a word, *Ka,* roughly equivalent to the English *soul,* which lived in the person's mummy after death. In contrast, the dualistic notion of a discardable physical body and an inner, immortal soul, which was proposed in the ancient Greek philosophy of Orphism, greatly influenced Greek thought and religious beliefs. The Orphists taught that the immortal soul retains the personality of the deceased. Incorporating certain elements of Orphism, Pythagoras (572–497 B.C.) subscribed to the doctrine of the *transmigration of the soul,* or *metempsychosis,* also believed by Hindus. Pythagoras taught that the soul is freed from the body at death and reenters another body, continuing this process from lifetime to lifetime until it has become purified.

Pythagoras was not the only Greek philosopher who thought about the soul. Socrates, Plato, Aristotle, Epicurus, and others came to various conclusions with regard to its origin and destination. To some, the soul is immortal and maintains its individuality after death, to others it dies with the body. Still others saw the soul as immortal but as losing its individuality after death (Prioreschi, 1990). But unlike his more famous predecessors —Socrates, Plato, and Aristotle, Epicurus did not believe in a soul. This was also the belief expressed over two centuries later by the Roman philospher-poet Titus Lucretius Carus (97–55 B.C.) in *De Rerum Naturae*.

The Pentateuch, or first five books of the Old Testament, contains no specific discussion of personal immortality or the idea of a soul. Genesis 3:19 states that: "by the sweat of your brow you will eat your food until you return to the ground, since from it you were taken; for dust you are and to dust you will return." The book of Genesis may be interpreted as implying that either (a) man's mortality was part of God's original plan of creation, or (b) man was originally created as immortal, but God took away the immortality as punishment for man's disobedience. The ancient Hebrew belief was that people are mortal and whatever immortality they may attain is collective rather than personal. God did not promise Abraham personal immortality but rather perpetuation of his line through a multitude of descendants. Thus, in ancient Judaism there is no such thing as a personal afterlife. The individual's life acquires meaning only by its contribution to the mission of the People of the Covenant (Gatch, 1980).

Social or national immortality was the dominant theme among the Jews well into the Common Era (Christian Era). During the 2nd century B.C., due presumably to the influence of Zoroastrianism, belief in immortality of the individual soul gained strength among the Pharisaic Jews. After the destruction of the Second Temple at Jerusalem in 70 A.D., the idea of resurrection of the dead became a part of Orthodox Jewish faith. As indicated by Gatch (1969):

> *The notion of resurrection and of the restoration of an elect people continued to be prominent. But the idea of a disembodied afterlife for the soul was also current and led to the conception of some sort of afterlife between the separation and the reunion of soul and body. From a picture of death as the inauguration of a sleep which would last until the divinely instituted resurrection, there emerged a picture of death as the beginning of quiescence for the body and of a continued life for the soul, the nature of which remained more or less undefined, (p. 78)*

Like the Old Testament, the synoptic Gospels of the New Testament contain no specific reference to a soul or nonphysical aspect that survives death. Plato and certain other Greek philosophers made a distinction between the body (soma), which is material and ends at death, and the soul (psyche), which is immaterial and everlasting. According to Paul, however, it is not merely a noncorporeal soul that is resurrected but a corporeal body—a changed body, but a body nevertheless:

> *Listen, I tell you a mystery: We will not all sleep, but we will all be changed—in a flash, in the twinkling of an eye, at the last trumpet. For the trumpet will sound, the dead will be raised imperishable, and we will be changed. For the perishable must clothe itself with the imperishable, and the mortal with immortality. When the perishable has been clothed with the imperishable, and the mortal with immortality, then the saying that is written will come true: 'Death has been swallowed up in victory. Where, O death, is your victory? Where, O death, is your sting?' (1 Corinthians, 15:51–55)*

Many Christians subsequently subscribed to Plato's body versus soul distinction, but in so doing they were more Platonist that Paulist. Paul and other early Christian thinkers also saw damnation and salvation of the soul as determined by the actions of a person during his or her lifetime, but that even a sinner can be saved by the unmerited favor and love bestowed by God on His human creations (God's *grace*).

Reincarnation. The Christian doctrine of a single physical lifetime contrasts with the multiple lifetimes of Eastern religions.[22] In many religions, Hinduism and Buddhism in particular, life and death are likened to points on a constantly moving wheel. Each person has a succession of lives, being reborn or reincarnated after death into a life form determined by the person's character and actions during the previous lifetime *(karma)*. According to the doctrine of *reincarnation,* souls *(jivas)* pass through *(samsara)* a succession of human and animal forms. Each successive life form is determined by a person's thoughts and actions and the lessons he or she learned in the previous life. For example, behaving like an animal and failing to learn to be obedient may result in being reincarnated as a dog.

Both traditional Hinduism and Buddhism teach that only when the soul is purified and the individual finds identity and unity with the cosmos (*nirvana,* enlightenment; *Brahman,* the Universal Power) can it break the continuous cycle of life, death, and rebirth (Bouquet, 1998). Then, and only then, all ignorance and craving disappear and the individual flame goes out as the spirit merges with the cosmos.

Unlike Christianity and Hinduism, *Theraveda (Hinayana)* Buddhism subscribes to the "nonsoul doctrine" that at death both the mind and the body disintegrate. Only a "stream of life," or character disposition, rather than a permanent soul, remains to be reborn in another living being. The stream of life continues until nirvana is attained. In contrast to the older Hinayana sect, the pan-Asiatic form of Buddhism *(Mahayana)* subscribes to the doctrine of an Eternal Absolute—the immortal Buddha born of a virgin birth. Some adherents to Mahayana Buddhism also teach that enlightened individuals survive death and maintain their individuality, personalities, and perhaps even their physical selves after death (Prioreschi, 1990).

Resurrection. The concept of reincarnation in traditional Hinduism and Buddhism is not a resuscitation of the dead in the same form but rather a metamorphosis or change. However, the belief in physical *resurrection,* or the return of the dead to life in bodily form, existed in part among the ancient Egyptians. The process of mummification and associated rites were supposed to enable the deceased to live forever in his or her well-equipped tomb. The Zoroastrians of ancient Persia also believed in resurrection of the dead, a belief communicated to and absorbed by Pharisaic Judaism and subsequently by Christianity and Islam (Toynbee, 1984). It was Paul's message that the resurrection of Jesus Christ in both body and spirit contains the promise of personal resurrection of body and soul to all who believe in Him and have attained salvation. In John 12:25–26, Jesus says to Martha, "I am the resurrection and the life. He who believes in me will live, even though he dies; and whoever lives and believes in me will never die."

[22]Belief in reincarnation of the soul also existed in Christianity from the 3rd to the 6th century A.D.. Introduced into Christianity by the early Christian philosopher Origin, the doctrine was condemned by the Byzantine emperor Justinian as well as by the Second Council in the mid-sixth century.

The Land of the Dead

Many myths and religious stories describe the soul after death as traveling to a land of the dead. This realm maybe in the sky, deep within the ground, on top or inside a high mountain, in the ocean, or in some unspecified place. Belief in the first two locations prevailed in ancient Egypt. The sun god Ra lived in the heavens, and the god Osiris ruled in an underworld entered by way of the grave. At night, the soul (Ka) either followed Ra on his journey across the sky or, according to the dominant viewpoint, remained in Osiris's underground fields. At dawn, Ka returned to its mummy and spent the day in the tomb.

Wherever the underworld or land of the dead might be, the trip involved obstacles and dangers—rivers to be crossed by bridge or barge, monstrous animals to be faced, pain and humiliation to be endured. The gradual unfrocking of the goddess Ishtar of Babylonian mythology as she descended to the land of the dead and the labors of Hercules in Hades are cases in point (Bardis, 1981). Having entered the underworld, it was no easy matter to leave. This is illustrated by the myth of Orpheus's pursuit of his wife Eurydice into the land of the dead. By charming Hades with his music, Orpheus obtained permission to lead Eurydice away, providing she did not look back until they returned to earth. Unfortunately, like Lot's wife of Biblical fame, Eurydice looked back at the last moment and thereby was lost to Orpheus forever.

On arriving at the land of the dead, the ancient traveling spirit was likely to find it a dreary abode of shadows where the spirit-residents would prefer not to remain. As Achilles said to Odysseus in *The Odyssey,* "speak not smoothly of death, I beseech you, O famous Odysseus. Better by far to remain on earth the thrall of another…rather than reign sole king in the realm of bodyless phantoms." Detailed descriptions of this realm were offered by the ancient Greeks and in the 14th-century epic poem, *The Divine Comedy,* by the Italian poet Dante Alighieri. The god Hades (Pluto) and his queen Persephone (Proserpina) ruled the Greek land of the dead, a dreadful place that had to be approached by a river (the Styx or Acheron). The fee paid to the boatman Charon for ferrying a soul across the river was an obolus (coin) carried in the mouth of the deceased. The deceased also brought along some honeycakes to bribe the ferocious, three-headed dog (Cerberus) that guarded the entrance to the underworld.

After passing through the gates of Hades and being judged, the soul was assigned to one of three sections—Tartarus (the worst section), the Plains of Asphodel (an intermediate section), or the Elysian Fields (the best section). The Elysian Fields, or Isles of the Blessed, were the abode of heroes and others favored by the gods. As indicated previously, the Greek hero Achilles still found the Elysian fields unpleasant compared with life on earth. Nevertheless, dissatisfaction with his accommodations must have been mild compared with that of Sisyphus, who, as punishment for deceiving the god Hades, was condemned forever to Tartarus. There, according to legend, Sisyphus must spend eternity rolling a huge stone to the top of a high hill, after which it rolls back down the hill and poor Sisyphus must begin again ("Death rites and customs," 1987).

Somewhat similar to the model of Greek mythology, the great religions of the world describe the land of the dead as consisting of two, three, or even more sections. Comparable to the Greek land of the dead are the Mesopotamian *Land of No Return,* the Hebrew *Sheol,* and the Scandinavian *Hel*. The sorrows and tortures endured by souls consigned to Tartarus are shared by those forced to abide in the Muslim and Christian hells. According to the Koran, there are seven layers of hell *(alnar)* and seven layers of heaven; each layer merits lesser rewards or greater punishments than the one above it (Long, 1987). The sufferings of the damned are also vividly and fearfully portrayed in *The Inferno,* the first part of Dante's *Divine Comedy*.

Paradise and Purgatory

In contrast to the sufferings of sinners' souls in hell are the delight and peace experienced by those who have attained salvation and gone to heaven. Both Christian and Islamic texts describe heaven as a gardenlike paradise where the spirits of the blessed or righteous go after death. It is the abode of God (Allah) and the angels and is permeated by the divine spirit.

Early Protestant theologians, such as Martin Luther and John Calvin, maintained that the dead, depending on how they are judged, are consigned to either heaven or hell and no place in between. However, both Catholic and Muslim theologies provide for a third region *(purgatory)* for souls undeserving of either heaven or hell. In purgatory, the souls of those who confessed their sins before dying are purified of venial sins or undergo temporal punishment for mortal sins that have been forgiven. Roman Catholicism also provides for a region on the border of heaven or hell known as *limbo,* a place inhabited by unbaptized infants or righteous people who died before the coming of Christ.

The existence of an intermediate zone between heaven and hell did not originate with Christianity or Islam. Dante's *Purgatory* is reminiscent of the Plains of Asphodel of Greek mythology and the 10 hells of Chinese Buddhism. However, Christianity and Islam connected the notion of purgatory to that of the last judgment. According to this notion, persons who commit unremitted mortal sins go directly to hell. But persons who are judged guilty of venial (pardonable) sins or whose mortal sins have been remitted can atone and suffer temporal punishment in purgatory while awaiting final judgment.[23]

Testing and Judgment

Both Eastern and Western religions view life as a time of testing for the individual: A person's actions in this life influence what becomes of him or her in the next one. For example, the Egyptian papyrus of Hunifer pictures the Hall of Judgment and the Great Balance for weighing the soul against the feather of truth. Below the scales, awaiting the unjust, is the Devourer of Souls; awaiting the just is Horus, who is prepared to lead them to Osiris and a pleasant afterlife.

[23]Belief in a literal hell lost many adherents during the 20th century, particularly among Protestant denominations. To many people it seemed inconceivable that a God of love could permit sinners to suffer eternal horrendous torment of the sort described in traditional Christian and Islamic doctrine. For some believers, rather than being a place of unbearable physical punishment, hell was reinterpreted as separation from God (Walter, 1997).

The standards by which a person's life is evaluated have varied with religion and cultural context. Christianity and Islam have tended to demand a more ascetic or austere life than Hinduism and Buddhism, which stress the importance of contemplation and mysticism. As in Christianity, asceticism in Islam varies with time, place, and sect. In general, Islamic teaching holds that since life on earth is the seedbed of an eternal future, a person should try hard to be good and helpful to others and to trust in the justice and mercy of Allah to decide his or her fate (Adams, 1999). Still, earthly punishments, such as stoning for adultery and execution for heresy, tend to make Islam seem a rather unforgiving religion.

Except for the existence of purgatory, the outcome of the "life test" is final in Christianity. In Eastern thought, however, a failed life test can be taken again in a subsequent reincarnation. Thus, the outcome of the test might be described as "pass/fail" or "all or none" in Christianity, compared with a "pass/try again" (until you get it right) philosophy of Hinduism (Pardi, 1977). Like Christianity, Zoroastrianism subscribes to a pass/fall system, but the test is less difficult than in Christianity. The prophet Zoroaster taught that a moral life is sufficient to attain life after death and that it is not necessary to be an ascetic who subjects himself or herself to self-flagellation or other torments of the flesh.

Asceticism and Damnation. Eastern religions do not necessarily deny the importance of asceticism and personal suffering. Certain Buddhist sects, for example, are quite adamant in their belief that bodily deprivations and pain are important to moral uprightness. Furthermore, the emphasis in Christianity on asceticism has varied with the particular sect and time period. Asceticism reached a high point during the Middle Ages, when life was characterized as a "place of trials" that one must endure and a "vale of tears" through which one must pass stoically in order to attain a heavenly reward. The consequences of failure to follow the teachings and ascetic example of Christ, whatever the personal cost, were vividly described as endless torment and mortification in hell. There, one would suffer not only severe physical punishment but would be forced to listen to his or her evil deeds recounted gleefully and perpetually by a horde of demons. Because damnation was likely if one were deprived of the last rites of the Church, a sudden death was to be avoided at all costs and was constantly feared during the Middle Ages (Aries, 1974).

Predestination and Assurance. The notion that Christianity represents a pass/fall system is not entirely accurate, at least if one assumes that the examinee's voluntary actions ensure his or her fate. Though medieval theology emphasized the importance of good works in attaining salvation, the Calvinist doctrine of predestination holds that whether a given person ends up in heaven or hell is *predetermined.* One's future fate is sealed beforehand, and there is absolutely nothing that can be done about it. According to the *doctrine of assurance,* a person can never be certain of being chosen for salvation, but can only hope that God's grace will save him or her. In actuality, Protestants of various denominations

came to believe that avoiding temptation, being pious, participating in the punishment of sinners and the destruction of evil, and even working hard (the *Protestant ethic*) could improve one's chances of going to heaven rather than hell (P.D.Anthony, 1977; Weber, 1958).

Battle of Good and Evil. Many ancient myths influenced the development of the world's great religions. One of these myths is that, before the world ends, a last great battle will be fought between good and evil (God vs. Satan, Ahura Mazda vs. Ahriman, etc.). Revelation 16 states that this battle will be fought at a place in central Palestine known as Armageddon. Once the battle begins, a savior figure will arise to save the day for the forces of good. Then, as described in Zoroastrian, Hebrew, Christian, and Islamic myths, the living and the dead will be judged and sent to heaven or hell.

Last Judgment. Belief in a judgment after death, the outcome of which will determine where the soul goes, existed among the Egyptians, Persians, Greeks, Hebrews, and many other ancient peoples. The Egyptian judge was Orisis, god of the underworld; the Zoroastrian judge was Ahura Mazda, the god of light. The three judges of Greek mythology were Minos, Aeacus, and Rhadamanthys, divine residents of Hades. The biblical Old Testament proclaims a day of coming of the Lord, at which time the Israelites will be called to task for their sins, and Israel and the other nations of the world will be judged. But this day will not necessarily be a pleasant one (Amos 5:18–20):

> *Why do you long for the day of the Lord?*
> *That day will be darkness, not light.*
> *It will be as though a man fled from a lion*
> *only to meet a bear,*
> *as though he entered his house*
> *and rested his hand on the wall*
> *only to have a snake bite him.*
> *Will not the day of the Lord be darkness,*
> *not light—*
> *pitch-dark, without a ray of brightness?*
> *(Amos 5:18–20)*

Early Christian theology described judgment in two stages: an initial judgment immediately after the death of the person and a final judgment after the second coming of Christ. At the time of the last judgment, when the world has ended, souls will be reunited with their bodies and a final decision will be made to send the individual to heaven or hell. Similar to Christian belief is the Islamic credo that on the last (judgment) day of the world, everyone will be presented with a record of his or her earthly deeds. If this Book of Deeds is placed in the person's right hand, he or she has been judged "good" and will go to heaven. If the record book is placed in the left hand, the person has been judged "bad" and will be sent to hell (Adams, 1999).

SUMMARY

Historically, death has been both a personal and a social event. Death produces existential anxiety and fear of the supernatural but also leads to group reorganization and increased cohesiveness. The death system of a society consists of a composite of rituals and beliefs by which the society attempts to cope with death.

Human beings are not the only creatures to bury their dead, but they certainly do so more painstakingly than other animals. Funeral customs or rites, which go back at least to the Stone Age, serve four purposes: disposal of the corpse, helping the soul find rest and peace, honoring or paying tribute to the deceased, and reaffirming or reorganizing the social group. The primary methods of corpse disposal are inhumation (burial in the ground or in a cave) and cremation. However, open-air disposal, water burial, and eating by other humans or animals have also served as means of disposing of dead bodies.

The practice of using coffins and tombs dates back to the 3rd millennium B.C. The most elaborate stone coffins and tombs from ancient times are the sarcophagi and pyramids of Egypt. Many of these structures, including the sarcophagi and tombs designed by the Greeks, Romans, Christians, and Muslims, were elaborately and beautifully decorated. The ancient Egyptians also practiced mummification of the corpses of royalty and priests, as did the ancient Peruvians.

The position in which the body is placed in the grave has varied with religious beliefs and social customs. It has also been the practice since Neanderthal times to bury various objects (food, weapons, ornaments, other people, etc.), referred to collectively as grave goods, with the corpse.

The traditional emphasis on the funeral as a rite for honoring the dead has changed somewhat in the modern era to a concern with the feelings of survivors. The three phases of the traditional funeral—wake, service, and committal—have been simplified and made less emotional. The elaborateness of funerals today, however, varies greatly with the sociocultural background, sex, age, and place of residence of the participants.

Exposés of the funeral industry and changes in society's attitudes toward death have led to awareness of problems in the funeral industry. Until the mid-1980s, however, efforts by the federal government to require openness in advertising and selling on the part of the funeral industry were not very successful. In any event, changing attitudes and funeral practices in U.S. society, including the trend toward simpler and less costly funerals, have encouraged greater sensitivity to consumer needs by the funeral industry.

In addition to religious sacraments, prefunerary rites have included a variety of superstitious rituals to pacify or confuse the ghost of the deceased person. Funerary rites, such as transporting the corpse and marching in procession to a holy place or burial site, are found in many different cultures. These rituals have also included lamentations, religious services, and, in some instances, festivities (games, banquets, etc.).

As suggested by the presence of grave goods and other indicators, primitive humans apparently believed in a life after death. The later development of myths is based on this early belief, in addition to other beliefs concerning the creation of the world, natural phenomena, and death. Cultural myths, which are concerned with the activities of superhumans or gods, were the antecedents of formal systems of religious beliefs. Like myths, religions offer explanations of natural phenomena, including the origin and fate of the universe, and human beings in particular, as well as guidelines for human conduct.

The Sumerians, Egyptians, Greeks, and other ancient cultures had many myths and associated religious beliefs, but the principal religions have been Hinduism, Buddhism, Judaism, Christianity, and Islam. The teachings of these religions developed and changed

over the centuries, influencing each other and hence having many elements in common. One shared belief is that human beings have immortal souls. Hindus and Buddhists subscribe to the doctrine of reincarnation, whereas Jews, Christians, and Muslims believe in resurrection.

Beliefs regarding the location and character of the land of the dead vary with the particular mythological or religious system. Best known in Western cultures are the underworld of ancient Greek mythology and the heaven (paradise)/purgatory/hell (inferno) stratification of medieval Christianity. In Greek mythology, Chinese Buddhism, Islam, and certain other mythologies and religions, the land of the dead consists of several sections or zones reserved for souls of different character.

Both Eastern and Western religions teach that life is a time of trial and testing: An individual's actions in life affect his or her next condition or destination. Hinduism and Buddhism teach that it is a person's karma to be reincarnated after death as an animal or another human being, depending on the person's deeds in the previous incarnation. The cycle continues until the individual finds identity and unity with the cosmos. Christianity and Islam, on the other hand, hold that the soul goes to heaven, hell, or some intermediate place, depending on the person's record of sins. Protestant (especially Calvinistic) theology maintains that whether or not one attains salvation and goes to heaven depends on God's grace rather than on one's temporal actions. Still, many Christians believe that their chances of going to heaven are improved by good works on earth.

The eschatology, or doctrine of last things, in many religions maintains that the world will end with a final battle between good and evil. The battle will be won for good when a savior figure appears to lead the forces of good to victory. After the battle is over, a last judgment of souls—both living and dead—will be made to consign the individual to heaven or hell.

QUESTIONS AND ACTIVITIES

1. Ask your course instructor to arrange a trip to a funeral home, including a guided tour of the facilities and a description of services by the social director or funeral director. In particular, ask to see the casket room, the embalming room, the crematorium, and the chapel. After the trip, discuss your impressions and what you learned from the tour with your instructor and other members of the class. Was the experience pleasant or unpleasant? Informative or uninformative?

2. Describe the funerals and memorial services that you have attended. Who were the deceased persons, and how did the people in attendance react? Was there a great deal of emotion and excitement, or was the funeral a sedate, quiet affair?

3. During the 1960s and 1970s the funeral industry in the United States was the target of a great deal of criticism by certain writers and members of the general public. Among other things, the industry was criticized for deceiving the public as to prices of funeral services, and which services were necessary, taking advantage of bereaved persons when they were most vulnerable, overemphasizing the professional qualifications of funeral directors, embalmers, and other members of the funeral home (mortuary) staff, and confusing the roles of salesman and professional. Interview several people who

have had experiences with mortuaries or funeral homes, and ask them whether they felt pressured to purchase certain caskets, gravesites, or other goods and services offered by funeral establishments. Then interview a funeral home director to get his or her opinions on the FTC rulings and the reputation of funeral homes.

4. An *epitaph* is a commemorative inscription on a tomb or mortuary monument concerning the person buried at that site. During former times, and even more recently, it was the practice for some people to write their own epitaphs, either in prose or poetry form. Some epitaphs or writings on tombstones have been humorous, such as, "I told you I was sick," "Now do you believe me?", and "I'd rather be here than in Chicago/' Others have expressed feelings of love of family or religious thoughts. Still others have expressed a love of life or the sea and a conception of death as a journey or a return, as seen in the following epitaph by Robert Louis Stevenson (1850–1894):

Under the wide and starry sky
Dig the grave and let me lie.
Glad did I live and gladly die,
And I laid me down with a will.

This be the verse you grave for me:
Here he lies where he longed to be;
Home is the sailor, home from sea,
And the hunter home from the hill.

Most people are not as poetic as Stevenson, but try your hand at writing you own epitaph, either in poetry or prose. What features of your past life or expectations for a future life do you choose to include in the epitaph? Should it be a short statement of what you were, what you accomplished in life, or what you hope for in afterlife? What attitude toward your demise should be incorporated in your epitaph — resignation? Hope? Should you concentrate only on your own self and feelings or also try to take into account the thoughts and feelings that other people who read your epitaph after you have gone may have about you?

5. By consulting encyclopedias and others sources, investigate the similarities and differences in the conceptions of death in Hinayana (Theravada), Mahayana, Tantrayana, and Zen Buddhism. How does Buddhism differ from Hinduism in its conception of death and afterlife?

6. Refer to the topic of death in the concordances (alphabetical indexes) of various versions of the Bible (e.g., *The Jerusalem Bible, King James Version of the Bible, New International Version of the Holy Bible, Catholic Bible*). Note the similarities and differences in references to this topic in the various books.

7. Ask several people of various nationalities or religious faiths about the funeral customs in their own countries and religions, and compare them with the funeral customs in your own country and religion. In what ways are the customs and rituals similar, and how are they different? What purposes do the customs and rituals serve, and how have they changed over the years?

8. Under what circumstances are the religious beliefs and customs a comfort to a dying person? To the loved ones or survivors? Under what circumstances are such beliefs and customs a cause of discomfort or fear to such people?

9. Contrast the Christian, Jewish, and Islamic positions on heaven and hell, the last judgment, and immortality. Besides reading about the differences in various books, ask several Christian, Jewish, and Islamic persons about their beliefs concerning these topics.

10. Answer the following questions concerning your own death:
What kind of funeral will you have?
Who will attend your funeral?
How will your body be disposed of?
Where will your remains be placed?
Who will your mourners and survivors be?
What do you think people will say about you when you are dead?
What do you think will happen to your spirit after you have died?

11. Administer the following questionnaire to various individuals of both sexes and several religions. Compare the answers of (a) males and females, (b) Catholics, Jews, Protestants, members of other religions, and those who have no religious faith or preference.
Do you often think about your own death?
Do you think that your behavior would change in any way if you were absolutely certain that there is no life after death?
Do you have a strong desire to live again after you have died?
Does the question of life after death worry you?
Do you feel that religious practices (i.e., intercession by means of prayer or gifts to the church) by the living can help those who are already dead?
Do you anticipate being reunited with your love ones and friends in an afterlife?

12. A story is told about a man's wife and mother-in-law who traveled from Philadelphia to Denver, where the mother-in-law died of some ailment or other. The distraught wife telephoned her husband for funeral directions: "Should we embalm, cremate, or bury her?" asked the wife. After some deliberation, the husband replied, "Just to make certain, you'd better have her embalmed, cremated, and buried."
According to another story, a young Englishman accompanied his mother on a trip to Egypt, where she died. The young man decided to ship his mother's body back to their home in London. After returning to London and opening the casket, he was shocked to discover the body of a Russian general who had also died in Egypt at about the same time as the mother. A day after informing the Russian embassy of the mixup, the young man received the following telegram from Moscow: "Buried your mother yesterday with full military honors. Do what you like with the general."
Last but perhaps not least is the story of a clergyman who awoke one morning to find a dead donkey in his front yard. He had no idea how it got there, but he knew he had to get rid of it. He called the sanitation department, the health department, and several other agencies, but no one seemed able to help him. In desperation, the good reverend called the mayor and asked what should be done. The mayor, who must have been having a bad day, answered "Why bother me? You're a clergyman.

It's your job to bury the dead." The pastor lost his cool. "Yes," he snapped, "but I thought I should at least notify the next-of-kin."[24]

Do you think that any of these stories is amusing? Why or why not? Does appreciation of such mortuary humor reveal anything about the personality of the individual?

13. Web exercise: If you don't want to remain in the dark any longer and are burning for more information about cremation, log on to the following web sites: *www.cremation.com* and *www.cremation.org*. Find a cremation society or specialist in your geographical area and read out about their services. If you like to get mail, send away for free information that may be provided by the organization, but prepare yourself for a lot of "junk mail" as well.

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[24]From the America Online Seniornet Jokes folder.

6
THE ARTS AND PHILOSOPHY

TOPICAL OUTLINE OF THE CHAPTER:

Death in the nonverbal arts
- *Funerary monuments*
- *Themes of death*
- *Representations of death and immortality*
- *Music*

Death in literature
- *Mythological origins*
- *Personifications of death in literature*
- *Inevitability and universality of death*
- *Realism and romanticism*
- *Immortality*

Death in philosophy
- *Philosophical interest in death*
- *Greek and Roman philosophers*
- *Philosophers of the Renaissance and Enlightenment*
- *Schopenhauer*
- *Existentialism*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *What role does an awareness of death play in artistic accomplishments?*
- *What death themes are expressed in the nonverbal and verbal arts, and how has the emphasis on different themes varied with the historical period?*
- *How is the figure of death represented in the nonverbal arts and literature? Why?*
- *What differences between realism and romanticism have been expressed in the verbal and nonverbal arts since ancient times?*
- *What are some of the ways in which the topic of immortality is treated in literature, and how has the treatment varied with the specific culture and historical period?*
- *What are the similarities and differences in attitudes toward death and belief in immortality expressed by philosophers?*
- *In what ways have Eastern religious writings influenced the thinking of Western philosophers on the topics of death and afterlife?*

Human beings are restless, striving creatures whose activities over the past 5,000 years have altered the shape of the planet. Evidence of these changes, this reconstruction of the environment, can be seen almost everywhere. Many factors—economic, political, social, personal—have motivated these human efforts and creations, not the least of which is an awareness of personal impermanence and the associated fear of death. Perhaps it is for this reason that inventiveness and creativity seem to flourish during war, political upheavals, and other periods of social unrest and insecurity.

The realization that one's days are numbered and that death may be waiting just around the corner has challenged people since antiquity to make the most of their lives and leave their mark upon the world. Awareness and fear of death also prompted attempts to understand the human condition and to find some meaning in existence. As discussed in chapter 5, the uniquely human struggle to find purpose and meaning in life contributed to the great religions of the world. Like the arts and philosophy, these theological systems are the products of human discovery and creativity.

Sigmund Freud, the founder of psychoanalysis, believed that many achievements of human culture stem from the psychological defense mechanism of *sublimation,* the channeling of (sexual) energy into socially acceptable forms (see Freud, 1947). Included among these achievements are the arts, the sciences, philosophy, religion, and even civilization itself. Freud emphasized the central role of sexual energy, *libido,* in all higher order activities. Interpreted in its broadest sense, *sexual* means *life* or *creative* energy.

As recognized by Freud and other influential thinkers, the creative impulse (Eros) is the opposite of the death instinct (Thanatos). Death means destruction, and, unless one is convinced of a life after death, the death of an individual implies personal extinction. In any case, creative artists and philosophers have been and still are concerned with death. They have theorized about it; constructed funerary monuments, painted, sculpted, and etched death scenes, composed elegies, requiems, and tales about death; and staged dramas concerned with death and dying. It is interesting to speculate whether many famous artists, composers, and writers would have attained their high levels of creativity and productivity without sensitivity to their own mortality (Goodman, 1981). Knowing that their time was limited undoubtedly served as a stimulus for greater exploration and achievement. An awareness of death prompted them to make something special of their lives, to convert their potentialities into actualities. As a consequence, they were able to reach the end of life with fewer regrets about what they had failed to accomplish.

To the creative person, even greater than the fear of death is the fear of living an incomplete life. Such a life seems too short or rapid to do the things the person is capable of doing. This feeling is not unique to artists and philosophers, but rather something they have in common with all people who strive toward self-actualization.

DEATH IN THE NONVERBAL ARTS

The depiction of death in the nonverbal arts (the visual arts and music) is at least as ancient as the Stone Age drawings on cave walls. The themes of death and life after death, for both religious and commemorative purposes, have been represented in painting, sculpture, architecture, and music for thousands of years. Artists have designed memorial monuments, gravestones, coffins, and even cemeteries and death announcements.

Mythological beings and their activities provided motivation and content for much of the world's art, including masterpieces in painting, sculpture, music, and poetry. Many works of art also stemmed from religious motives and therefore contain religious themes. In addition, they express the living person's fear of death, the democracy of death, and other secular and moralistic themes. These works range from the sublime to the ridiculous and from the inspirational to the obnoxious, depending on the tastes of the viewer or listener. They also reveal something about the artist and his or her time, especially fears of annihilation and punishment, hopes for an afterlife, and a desire to understand and represent the human condition.

Funerary Monuments

Tombs, sarcophagi, and the associated art of sepulchral iconography were discussed briefly in chapter 5. From the time of ancient Egypt and Greece, down through the Middle Ages and into the modern era, many of the sculptured scenes on tombs and caskets have been essentially commemorative. They were designed to keep alive the memory of the dead in the minds of the living. In other cases, funerary monuments were constructed to serve magical or religious purposes.

In one common scene appearing on funerary monuments, both ancient and medieval, the deceased is depicted performing some activity. He or she is usually represented as in life, healthy and dressed according to social standing. In the *memento mori* ("Remember, you must die") tombs of the late Middle Ages (13th–15th centuries), an effigy of a naked, decaying corpse or skeleton is shown below the figure of the deceased as he or she appeared in life. The purpose of this double image was to illustrate the corruption of death and its egalitarian nature ("Death," 1997).

Among other mementos of the dead are death masks (see Fig. 5.4), which are plaster casts of wax molds made of dead faces. Since ancient times, such masks have served as aids to portraitists as well as models for sculptors of tomb effigies. Death masks were also used for effigies at royal funerals and kept as mementos of the dead. Some of the best examples of death masks are those of Edward VII, Isaac Newton, Ludwig von Beethoven, Oliver Cromwell, and Napoleon Bonaparte ("Death masks," 1997).

Themes of Death

Memento mori tombs are only one indicator of the preoccupation or obsession with death that characterized the late Middle Ages. This preoccupation is not surprising, considering that the period from the 13th through the 15th century in Europe was a time of almost continuous armed conflict/starvation, and disease—a time in which death and destruction were common sights. It has been estimated, for example, that during a 5-year period during the mid-14th century the population of Europe declined by at least 25% because of the ravages of the Black Death (bubonic plague). The plague arrived in Europe at a port on the Black Sea in 1347 and continued to ravage the continent periodically until the latter part of the 18th century.

Death was everywhere in medieval Europe. Because it was nearly impossible to live the ascetic life that would merit a heavenly reward, people were threatened with an afterlife in hell that was even worse than the one they were experiencing on earth. Themes and scenes of the Last Judgment and the tortures inflicted upon sinners in hell were common in painting and sculpture, especially during the early part of the period. Such scenes exerted a powerful effect on the public fear of eternal damnation, and undoubtedly assisted the Church's efforts to dominate human thoughts and actions.

The Triumph of Death. In addition to the memento mori tombs, the late Middle Ages was a time when the *triumph of death,* the *danse macabre (dance of death),* and the *Ars Moriendi (Art of Dying)* were featured in all the arts. The first of these features is represented in Francesco

Traini's (1350) fresco entitled *The Triumph of Death*. The painting shows three young knights on horseback who encounter three coffins containing corpses at progressive stages of decay (see Fig. 6.1). A similar theme is depicted in a painting of a beautiful young girl staring at her skeletal reflection in a mirror. These paintings and similar works of art (e.g., *The Tomb of Cardinal Lagrange* in the Musee Calvet, Avignon) dealt with the *vanity theme,* which was inspired not only by the bubonic plague but also by the Hundred Years' War. This intermittent war, in which England lost all its French possessions except Calais, lasted off-and-on from 1337 to 1453 and resulted in the slaughter of thousands of soldiers and civilians.

The Dance of Death. The danse macabre, or dance of death, refers to an allegorical dance in which dead figures lead a procession of living persons, arranged according to their social position in life, to their graves (see Fig. 6.2). Many of the followers are high-status members of the nobility or clergy as well as children, clerks, and hermits, demonstrating the democracy of death. The message is that no matter how attractive a person may be or how high his or her station in life, the person will soon be a rotting corpse. By illustrating the democracy of death—that the proud and humble, rich and poor, good and bad, are all equal in death—the vanity theme of medieval art was interpreted in somewhat secular fashion as implying that one's situation or conduct has no bearing on his or her fate in the afterlife.

The dance of death was first illustrated in a series of early 15th-century paintings in France. German versions of the theme, popular only north of the Alps, are seen in 16th-century woodcuts and paintings (e.g., Hans Holbein's *Die Totentanz*). Sixteen-century poems (e.g., "La Danz General de la Muerte") and music *(Totentanz)* also represent the idea. More recent depictions of the dance of death are Juan Posada's *calaveras,* the Mexican Dance of Death of skeletons engaged in everyday human activities and illustrating the follies of human existence. Another example is Ingmar Bergman's film *The Seventh Seal*.

Ars Moriendi. The Ars Moriendi is a written treatise, apparently prepared by German monks, that provides details on how to die in a dignified, holy manner. The scenes of devils, fornication, murder, and robbery with which the treatise was illustrated, however, both whetted and satisfied the appetites of people of the time for ghoulish, macabre art. Despite the visibility of death almost everywhere, the artists of the time dwelled on the themes of violence and mortuary putrescence. Popular paintings focused on the "maggotry of death"—the mutilation of corpses, worms crawling through decaying bodies, and ugly bulbous toads squatting on glassy human eyeballs. It was a time of artistic preoccupation with death that has never been equaled. As such, it stands in stark contrast to the beautification, romanticism, and denial of death that characterized later times.

FIGURE 6–1 Francesco, Traini, Triumph of Death.

(Pisa, Camposanto. Alinari/Art Resource, NY).

Preoccupation with death during the late Middle Ages was not limited to famous works of art. Death also became a popular art theme depicted on jewelry and in woodcuts, statues, poems, and dramas. In ancient Egypt and Rome, silver skeletons and miniature coffins were sometimes given to the guests at feasts to remind them of their mortality and to encourage them to have a good time while they still could (*carpe diem,* or "seize the day"). But such party antics did not reflect the feelings of the mass of people during ancient times and hence were not indicative of a general "cult of the dead" of the sort that existed in Europe during the Middle Ages (Boase, 1972; Tuchman, 1978).

Similar memento mori and "playing with death" activities are found in certain modern cultures. In a historical sense, such bravado in the face of death has often been the stuff of which heroes are made. In many cultures daring or challenging death is socially admired behavior, at least up to a point. However, taking extreme risks ("laughing in the face of death," "spitting in the eye of the devil") may also be viewed as extremely foolish or irrational.

FIGURE 6–2 Danse Macabre. Fresco, Church of St Robert. Death with Youth, Doctor of the Sorbonne, Troubadour, Benedictine, Serf

(Photographic Giraudon/Art Resource, NY)

The Middle Ages was not the only historical period in which death influenced art. Representations of death in the visual arts and poetry were common in early Greece (Vermeule, 1979), and, as in the Middle Ages, these representations were not merely symbolic. Early Greek art depicts the dead undergoing horrifying physical tortures in the underworld, the rape and slaughter of humans and deities, and the mutilation of heroes in battle. Nevertheless, the general atmosphere in early Greek art is heroic rather than necrophilic. The theme of human fortitude and competence in the face of mortality, which was characteristic of early Greek art, became fashionable again during the Renaissance period (16th-17th centuries). New geographical and scientific discoveries led people to believe that they could prevail against nature, an optimism reflected in all art forms of the time.

The theme of death appears extensively in the nonverbal arts, albeit often in romanticized form, down through the 19th century. Unlike their counterparts in previous centuries, 20th-century painters have dealt with the subject of death rather sparingly. This is a reversal of the popularity of the theme during the Middle Ages, which has in common with the 20th century the slaughter of millions of people. Even when 20th-century painters deal with the subject of death, unlike the reality of the 19th century it is typically indirect or symbolic (Gottlieb, 1959). An exception is the art of the Norwegian painter and graphic artist Edvard Munch. Munch's mother and sister died of tuberculosis and another sister became mentally ill. Throughout his life, Munch was preoccupied with the specter

of death and terminal illness. Death was a principal theme of his work, best illustrated in the paintings *The Sick Child, The Death Chamber, By the Death Bed,* and *The Dead Mother*.

Representations of Death and Immortality

From the Bronze Age to the Atomic Age, death has been personified and symbolized artistically in a variety of ways. The most widely known personifications are the Angel of Death,[25] the Rider on a Pale Horse, the Grim Reaper, and the Twin Brother of Sleep. Death may be a skeleton, a mummy, a shrunken body, or an old man or woman. It may be naked, covered with a white or black shroud, or dressed in some other distinctive attire. It may be standing menacingly, riding a horse, or lying in a coffin, often grinning or leering. It may be carrying a scythe, a sword, a dart, a bow and arrows, or some other weapon to deliver the mortal stroke that terminates a human life.

Death has also been represented symbolically, usually by obvious symbols such as coffins, cemeteries, amputated limbs, deathbeds, skulls, and bones. One of the earliest representations, which was found in a Neolithic settlement located in modern Turkey, shows gigantic black, vulture-like birds attacking headless human corpses (Cavendish, 1983). Other easily understood symbols for death are an inverted torch and a clock set at the hour of death, 12 pm–1 am. The association of death with time also occurs in Hans Holbein's painting *Totentanz,* in which death is depicted as a skeletal figure with an hourglass. In another painting, Albrecht Dürer's *The Knight, Death, and the Devil,* the figure of Father Time carries a scythe. Other common symbols of death are environmental scenes such as winter landscapes, ruins, leafless trees, trees struck by lightning, dead birds, and vultures (Gottlieb, 1959). Motion pictures frequently contain gray skies, rain, and thunder in graveyard or burial scenes to make them appear more ominous or frightening.

Birds and certain insects (butterflies, beetles) have been used since ancient Egyptian and Greek times to represent the soul and immortality. To the ancient Egyptians, the butterfly and beetle (scarab) symbolized the soul (Ka) and immortality (resurrection). Birds were often used to represent the soul, the soul bird being a common artistic symbol in early Greek art. Reptiles that shed their skins, and thereby are assumed to be immortal, are symbols of immortality in certain primitive cultures. But the Judeo-Christian tradition views snakes as symbolic of evil rather than immortality. Another lower animal, the fish, was a symbol of Christianity. Presumably this symbol was derived from the Greek letters for Christ, which somewhat resemble a fish; it is also associated with Christ's injunction that the apostles be "fishers of men." The cross, however, is the most time-honored symbol of the Christian religion and resurrection, just as the crescent moon is a symbol for Islam.[26]

[25]Not to be confused with the Nazi doctor Joseph Mengele, who was also called the "Angel of Death."

[26]A variety of crosses—Latin cross, heraldic dagger, crossed Latin crosses, cross with equal arms—are iconographic symbols of death. Among other death symbols are lightning bolts, the symbol for Pluto (god of the underworld) in astrology, the death's head in alchemy, and the runes for ass and Tyr in the script for writing ancient Germanic languages (see web site *www.symbols.com*).

As represented in the visual arts, the figure of death is usually masculine. Some famous works of art and the death symbols incorporated in them are as follows: Francesco Traini's *Triumph of Death* (corpses; see Fig. 6.1), Hans Baldung Grien's *Three Ages of Woman and Death* (skeletal figure with hourglass), Albrecht Dürer's *Apocalyps* (see Fig. 6.3 & Box 6.1) and *The Knight, Death, and the Devil* (rider on a pale horse), Marc Chagall's *Gate to the Cemetery* (cemetery), Albert Ryder's *Death Bird* (dead bird), Pablo Picasso's *Vanities With Skulls* (human skulls) and *Woman Kissing a Crow* (crow), and Salvador Dali's *Persistence of Memory* (broken watches; Gottlieb, 1959).

Music

Music has a peculiar ability to strike emotional chords connected to death and dying and to make life and death seem meaningful. Classical music has incorporated the vanity theme and the dance of death (e.g., Franz Liszt's "Totentanz" and Charles Camille Saint-Saëns's "Danse Macabre"). Grand opera and ballet are also replete with death themes (murder, suicide, etc.).

As with funerary monuments, throughout human history the role of music in death has been closely associated with religion. The masses of Johann Sebastian Bach, several of George Frederick Handel's oratorios, requiem masses or masses for the dead (such as those by Mozart, Verdi, and Berlioz), the hymns of Charles Wesley, and many other musical compositions are sacred in nature. Thousands of chants, dirges, elegies, and songs have been composed to express sorrow, longing, and love for the dead. The "Dies Irae" ("Day of Wrath") section of the requiem mass, which musically pictures the terrors of the last judgment, has become a symbol for death.

Funeral music is common throughout the world, assuming different forms in different cultures. For example, many American Gospel songs (e.g., "If I Could Hear My Mother Pray Again," "Precious Memories," "Oh, Mary Don't You Weep," "When the Saints Go Marching In") contain themes of death such as loss, mourning, and afterlife. Many country/western

BOX 6.1 The Four Horsemen of the Apocalypse

I watched as the Lamb opened the first of the seven seals. Then I heard one of the four living creatures say in a voice like thunder, "Come!" I looked, and there before me was a white horse! Its rider held a bow, and he was given a crown, and he rode out as a conqueror bent on conquest.

When the Lamb opened the second seal, I heard the second living creature say, "Come!" Then another horse came out, a fiery red one. Its rider was given power to take peace from the earth and to make men slay each other. To him was given a large sword.

When the Lamb opened the third seal, I heard the third living creature say, "Come!" I looked, and there before me was a black horse! Its rider was holding a pair of scales in his hand. Then I heard what sounded like a voice among the four living creatures, saying, "A quart of wheat for a day's wages, and three quarts of barley for a day's wages, and do not damage the oil and the wine!"

When the Lamb opened the fourth seal, I heard the voice of the fourth living creature say, "Come!" I looked and there before me was a pale horse! Its rider was named Death, and Hades was following close behind him. They were given power over a fourth of the earth to kill by sword, famine and plague, and by the wild beasts of the earth.

Note. From *International Bible Society,* 1984 (Revelations 6:1–8).

FIGURE 6-3 The Four Horsemen of the Apocalypse: Pestilence, War, Famine, and Death (Refer to Box 6.1 for the associated biblical passage).

From *Apocalypse,* by Albrecht Dürer, 1498 (©Bettman/CORBIS).

and folk songs ("The Wreck of the Old 97," "John Henry," "Where Have All the Flowers Gone") are based on death caused by illness, accident, murder, or suicide. These themes also permeate rock music, as in Elton John's "Candle in the Wind" (written originally for Marilyn Monroe and revised for Princess Diana), and James Taylor's "Fire and Rain."

DEATH IN LITERATURE

Beginning with the oldest known poem, the *Epic of Gilgamesh,* throughout human history death has been an enduring topic in literature. Transcending both time and place, poems, stories, essays, and other written compositions on death and dying have been exceeded in popularity only by works concerned with romance and love. The themes of love and death are universal; they appeal to the emotions of readers of all ages and in various circumstances. Both themes transport the reader through the entire gamut of human emotions, from ecstasy to despair. They have also inspired the noblest and vilest of human actions, ranging from heroism to cowardice, from generosity to greed, and from altruism to narcissism. In many enduring favorites, such as the stories of Romeo and Juliet and Antony and Cleopatra, the themes of love and death are blended into a single romantic tale.

Mythological Origins

Mythology has served as a source of inspiration for much of the world's great art and literature. The *Epic of Gilgamesh,* which has been preserved since ancient Babylonian times (c. 2000 B.C.) but was rewritten during the first millennium B.C., deals with the activities of mythological beings, both human and divine. The hero of the epic, Gilgamesh, is initially an oppressive Sumerian king. The gods create a wild man, Enkidu, to challenge Gilgamesh in battle, but the two men become friends and share many adventures. After Enkidu dies, Gilgamesh, who is obsessed by the death of his friend, begins searching for the secrets of knowledge and immortality. He is successful in obtaining a branch of the tree of knowledge and another branch from the tree of immortality. Unfortunately, he drops the second branch while crossing a river, and a water snake eats it. In another version of the story, Gilgamesh leaves his clothes and the immortality plant on the shore of a lake and goes swimming. While he is swimming, a snake, smelling the plant, comes out of a hole and eats it. Both versions of the story end with humankind gaining knowledge but losing immortality. There are obvious similarities between this story and the biblical tale of Adam and Eve in the Garden of Eden. There is also a great flood in the *Epic of Gilgamesh,* like the one experienced by the biblical Noah (Kramer, 1998; Weir, 1980).

Many cultural groups have believed that people were meant to be immortal and that death is an unnatural intruder. Although several cultures have incorporated the forbidden-fruit theme in their explanations of how death came to humanity (see Box 5.3),

several other themes are also common. According to one type of myth, death arrived as the result of a mistake—a garbled or wrongly delivered message, a punishment for human disobedience, ingratitude, or just plain stupidity. An illustration from Africa is the myth that God sent the chameleon to tell humans that they were immortal, but the chameleon dawdled along the way and the lizard—the messenger of death—arrived first (Cavendish, 1983). Another myth views death as the outcome of a debate or contest between divine beings or the first humans. The waxing and waning of the moon, the skin-shedding of snakes, lizards, and shellfish, and the banana tree (which dies after it has produced fruit) are images of immortality prevalent in the Pacific Islands. Other explanations include the overpopulation theme, the equitable-distribution-of-property theme, and the theme of anger, jealousy, or other strong emotions expressed by gods and men (Corcos & Krupka, 1984).

The skin-shedding or molting animal theme maintains that humans once had the power to shed their skins *(ecdysis)* and thereby rejuvenate themselves, but for some reason the gods decided to take away this power. Variations on this theme occur in several Pacific Island cultures. Primitive people, who undoubtedly observed snakes shedding their skins and seemingly rejuvenating themselves in this manner, presumably came to the conclusion that people originally had a similar ability. One myth that includes both the mistake and skin-shedding themes comes from Africa. According to this myth, God sent a serpent to deliver the message to human beings that all they had to do to be young again was to shed their skins. The serpent repeated the message to a bird, but the bird failed to deliver the correct message. In similar myths, insects or other animals are told to inform people of their immortality, but the messengers go astray or the messages are garbled in some way. In another skin-changing story, a child cries when it sees its mother changing her skin; the mother either dies immediately or climbs back into her old skin, thus losing the opportunity for immorality.

As in the Old Testament story of Adam and Eve, death may be perceived as a punishment for human transgression. Many cultures have myths of this type, in which women most often figure as the transgressors or culprits. According to an Australian aborigine myth, a tribe was forbidden by God to steal honey from a beehive located in a certain tree. The men obeyed God, but the women approached the tree, and when one hit it with an axe the bat of death flew out.

A woman is also the culprit in a Blackf foot Indian myth of death as the result of an argument and a trick, a myth that also contains the overpopulation theme. According to this story, there was a debate between the first old man and the first old woman. The man wanted people to live forever, but the woman argued that this would result in more people than the world could hold. They agreed to settle their dispute by a game of chance. If a piece of buffalo meat thrown into the water floated, then humans would be immortal. However, the old woman used her magical powers to change the meat into a stone. So when the buffalo meat (stone) was thrown into the water, it sank, thereby condemning humanity to mortality (Cavendish, 1983).

Tales such as these formed the bases of oral stories, and ultimately literature, in ancient cultures. Explanatory myths concerned with the origin of death and the destination of the dead, for example, were sources of much ancient Greek poetry and art (Vermeule, 1979). As seen in the poetry and sculpture of Greece during the Bronze Age, memories and tales of dead ancestors and heroes had a significant influence on early Greek civilization. It would be incorrect to characterize these effects as a cult of the

dead, but the dead were revered and featured extensively in stories and poems. The resulting classical literature not only reflected death but also helped determine Greek interest in it. For example, the scenes of the underworld (land of the dead) and its torments described in Homer's *Odyssey* undoubtedly had a profound effect on the attitudes and behavior of the ancient Greeks.

For the most part, the ancient Greeks and Romans were fatalists who believed in an all-powerful force of destiny that controlled the affairs of both men and gods and bent them to its will. Many of the popular myths of early Graeco-Roman culture involve schemes to avoid one's fate, but fate always prevails in the end despite the strength or sagacity of the protagonist. Perhaps it was this theme, combined with the realization of the inevitability of death, that accounted for the resignation or stoicism that is frequently encountered in Greek and Roman literature.

Personifications of Death in Literature

Death in ancient Egypt was occasionally represented as a jackal-headed god named Anubis. Homer used another animal—the mythological winged Harpy—to depict death in the *Iliad*. The jackal and other animals with pointed ears, horns, long snouts, and splayed tails also represented evil, and death sometimes combined with evil in the same form.

A connection between death and the Devil is seen in the mythological descent of Christ into hell; death is often depicted as a skeletal figure prostrate beneath the victorious Christ (Cavendish, 1983). The literature of certain cultures describes death as a monster with multiple heads and hands, a villain who uses a built-in flamethrower or other weapon to attack humans. Ancient Mesopotamians called the monstrous death god Uggae, perhaps an appropriate name!

As in the nonverbal arts, personifications of death in the ancient literature of both the Occident and the Orient included a humanlike entity dressed in black or red and carrying a scythe, spear, rope, timepiece, and so on. Later Greek mythology depicted death as a winged youth with a sword, and the literature of the Vedic period of Hinduism (1500–450 B.C.) describes death as Yama, the first man. A Hindu poem of a somewhat later period, the *Mahabharata,* characterizes death as a beautiful, dark-eyed woman, Mara (or Mrtya). According to the poem, Mara came from within Brahma, creator of the world, who ordered her to kill all the world's creatures. Because the god Shiva interceded, the deaths were not permanent; the slain individuals were reincarnated as other forms of life. Another deathlike figure in Hindu literature is the goddess Kali, the consort of Shiva; Kali is a black person with three eyes and four arms who gorges herself on the blood of her victims.

Ancient Persian literature associates death with time, so the god of time, Zurvan, is also the god of death. Islam, the major religion of modern Persia (Iran) and the entire Arab world, holds that an artist who paints or forms something lifelike is trespassing on the divine right of Allah (Ettinghausen, 1999). The Koran refers to an Angel of Death, but Islam strictly forbids depicting death as a person in painting or sculpture.

In Hebrew literature, death is an angel known as Sammael (the drug of God). In the New Testament, death is described as the "last enemy to be destroyed" (1 Corinthians 15:26) and as riding on a pale horse (Revelations 6:7).

Death has been personified in modern Western drama and literature as a pale-faced man in a long-black cloak (Ingmar Bergman's *The Seventh Seal*), a hunter who stalks human beings (Carlos Casteneda's *Journey to Ixtlan*), and as a blundering fool dressed in a black-hooded cape and skin-tight black clothes who is challenged by his victim to a game of gin rummy (Woody Allen's *Death Knocks*) Weir, 1980).

Inevitability and Universality of Death

Many death themes and scenes have appeared in literature, including the inevitability of death, the universality of death, the fear and love of death, murder and suicide, romanticized death, deathbed scenes, bereavement, and immortality. Interestingly enough, people in many primitive cultures appear to be unaware of the naturalness and inevitability of death. Living in a culture in which people usually die of accidents or diseases rather than old age, it is understandable how death could come to be viewed as an unnatural consequence of something going wrong. Even in more developed countries, there is a pronounced tendency to act as if death were not inevitable—at least not for "me"—until something happens to disturb one's feeling of invulnerability or exemption.

Though many writers have been tempted by the human tendency to deny the inevitability of death, other playwrights, poets, and novelists have succeeded in di-recting the reader's attention to the fact that death comes to everyone (Stewart, 1984; Weir, 1980). Realization of the certainty of death is seen in Jean-Paul Sartre's *The Wall* and *The Victors,* and in the famous verse from Thomas Gray's "Elegy Written in a Country Churchyard":

The boast of heraldry, the pomp of power,
And all that beauty, all that wealth e'er gave,
Awaits alike the inevitable hour.
The paths of glory lead but to the grave.

Acceptance of death's inevitability can be a disturbing, or at least sobering, experience and a source of great anxiety. However, it can also be a source of strength and motivation to make the most of whatever time one has left.

Realism and Romanticism

Historically, the fear induced by the realization of death has been handled in various ways, for example, by reveling in or laughing at death, by romanticizing it, and by denying or suppressing thoughts of it. None of these reactions has proven to be totally satisfactory, but each has been emphasized in the art and literature of different periods. As in the nonverbal arts, emphasis on the physical aspects of death—blood, decaying fish, worms, and other "realistic" images—was a preoccupation in the literature of the Middle Ages. The memento mori, the dance of death, and interest in the maggotry of death can be interpreted as a kind of anxiety-extinction process: By absorbing oneself in the paraphernalia of death, one gradually becomes less terrified of it. Such "wallowing"

in death is exemplified by illustrations from the *Ars Moriendi* treatise of the late Middle Ages: emotional deathbed scenes, grave diggers uprooting bones, and vicious black devils fighting with angels over the naked corpse or soul of the deceased. Other literary indicators of this cult of the dead are scenes in plays and mysteries in which, for example, the body of Christ is viciously hacked by Roman soldiers, a mother roasts and eats her own child, or a woman's belly is sliced open so an emperor can see the place where children are conceived. Besides the maggotry and decomposition of death, an erotic-morbid theme in which the ecstasy of orgasm combines with the agony of death occurs in some of the poetry of the time (Tuchman, 1978).

Tuchman (1978) argued that anxiety over the expected end of the world contributed to the cult of the dead during the Middle Ages. A belief in the approach of Judgment Day was prompted not only by the massive number of deaths caused by war, disease, and famine during the 14th and 15th centuries but also by a widespread feeling that sin was becoming rampant and that the human soul was aging.

The maggotry of death was, of course, not unknown in other historical periods. This maggotry theme was still very much in evidence in the 19th century, as seen in Edgar Allan Poe's poem "The Conqueror Worm":

It writhes!—it writhes!—with mortal pangs
The mimes become its food,
And the seraphs sob at vermin fangs
In human gore imbued.

For the most part, however, 18th- and 19th-century literature expressed hatred of ugly, violent death and a preference for beautiful, tame death. The great romances of the Middle Ages *(Chanson de Roland, Le Morte d'Arthur, Tristan and Iseult)* emphasized acceptance of death and the proper way to die. But the romantic poets of the 18th and 19th centuries pictured death as a bittersweet or even an attractive destiny, and occasionally expressed a desire for it (Simpson, 1977). The romantic view of death seen in poems by William Wordsworth, Stéphane Mallarmé, Lord Byron, Percy Bysshe Shelly, and the younger Johann Wolfgang von Goethe is also a kind of denial of mortality: The poet will be reunited with his lady love in the hereafter.

Death scenes have figured prominently in both ancient and modern literature (e.g., *Epic of Gilgamesh,* Erich Segal's *Love Story*) and in many different cultures (e.g., *Dream of the Red Chamber* in Chinese literature). Especially popular in literature during the Romantic era of the 18th century were scenes of the death of a beautiful young woman, a child, a wife, or another loved one, and the resulting grief that stressed the sweet sadness and poetic nature of the attractive death. The film critic Roger Ebert labeled the beautiful death as the "Ali McGraw Disease," from the film adaptation of *Love Story:* The heroine becomes progressively more beautiful while dying, until, at the moment of death, she is absolutely breathtaking.

It was difficult to maintain a denial of death in real life. The English king Henry VIII was reportedly so afraid of sickness and death that he repeatedly moved around from one location to another within his realm. And the German poet J.W. von Goethe was so

anxious about death that he avoided deathbeds, funerals, and any contact with it whenever possible (Simpson, 1977). Fear of death during the 18th and 19th centuries was also associated with the fear of premature burial, as seen in many stories of the time. Aries (1981) described the "shelters of doubtful life," or funeral parlors, in 19th-century Germany. Bells were attached to the extremities of the deceased, who was kept for several days until there was no possibility of reanimation. A similar practice is described in Crichton's (1975) story, *The Great Train Robbery*. Coffins were equipped with bells on the outside and pull-chains on the inside; the chain could be pulled and the bell rung by the supposedly decreased person if he or she happen to revive in the coffin.

Deathbed scenes, elegies, and the topic of death went out of fashion in Anglo-American culture during the early 20th century. Whereas sex was an unmentionable topic in polite Victorian society (later 19th century), when a request for a chicken *leg* or *breast* was considered embarrassing, death scenes were popular set pieces. In contrast, sex became a popular topic in the 20th century, and death themes became muted in art, literature, and drama. The ugly facts of death were disguised and cosmetized during the early part of the century. Rather than being buried, people "passed on," or were "laid to rest" in lovely lawns or gardens (Gorer, 1984).

Despite the modern tendency to deny or at least avoid the subject of death, it has proven impossible in a time of millions of victims of war and genocide. Whatever theme of romanticism that remained in poetry written during the early part of World War I, for example, was extinguished by the reality of wholesale human slaughter in the trenches of France. The time-honored belief that it is gallant and noble to die for one's country and the associated chivalrous images of warrior knights battling for honor, country, and ladies fair gave way to the anger, bitterness, and sorrow of soldier-poets such as Robert Graves and Wilfred Owen:

> *If you could hear, at every jolt, the blood*
> *Come gurgling from the froth-corrupted lungs*
> *Bitter as the cud*
> *Of vile, incurable sores on innocent tongues—*
> *My friend, you would not tell with such high zest*
> *To children ardent for some desperate glory, The*
> *old lie: Duke et decorum est*
> *Pro patria mori.*[27]

The realism in literature stimulated by the events of World War I persisted in 20th-century poetry, with modifications. Many poets, especially those of the Confessional School (Robert Lowell, Sylvia Plath, Ann Sexton) revealed a fascination with death and especially suicide. Much of this poetry is autobiographical and self-centered, bordering occasionally on the pathological. Theirs is a subjective art form that describes universal truths in terms of the poet's own experiences and expresses little social conscience or concern for other people. This is particularly true of the poems of Sylvia Plath and Anne Sexton, both of whom committed suicide.

[27]Reprinted from Lewis, 1963, p. 55 by permission of New Directions and the Owen estate. The last (Latin) sentence of the excerpt, translated as "a sweet and noble thing it is to die for one's country," is a quotation from the Roman poet Horace.

Immortality

Some people end their lives voluntarily, but probably a much larger number would prefer to live forever. Both the religious and secular literature of Eastern and Western cultures have developed the theme of immortality. The doctrine of the soul (Ka) appeared in the Egyptian *Book of the Dead* at about the same time (c. 2000–1800 B.C.) as the *Epic of Gilgamesh,* the earliest written story concerned with immortality. However, Plato's philosophical writings on the soul (psyche) exerted a greater influence on Western religion and literature.

Hindus and Buddhists have no single sacred text such as the Bible that explains the nature of their beliefs in reincarnation. Ancient Hindu scriptures are contained in the Vedas, at least one part of which—the *Upanishads*—has influenced the thinking of many Western philosophers and writers. The Hindu idea of reincarnation is best explained in the sacred writings known as the *Puranas*. Two other sacred writings in Hinduism, the *Ramayana* and the *Mahabharata,* are long epics containing mythical stories and philosophical principles. One Buddhist treatise, the Tibetan *Book of the Dead (Bar Thedol),* provides minute details on the state of consciousness that exists between death and reincarnation.

In the West, epic stories, such as Homer's *Odyssey,* Vigil's *Aeneid,* and Dante's *Divine Comedy,* expressed and helped to determine conceptions of immortality and the afterlife. On the more modern scene, a belief in immortality is expressed in J.W. von Goethe's *Faust,* Alfred Lord Tennyson's "Crossing the Bar," Robert Browning's "Prospice," Miguel de Unamuno's fiction, Federico Garcia Lorca's' dramas, and many other poems, stories, and plays. Perceptions of life after death are provided in D.H.Lawrence's "Ship of Death," Thornton Wilder's *Our Town,* and Amos Tutuola's "The Palm-Wine Drunkard."
The writings of many Western poets reveal a conflict over the notion of personality immortality. Though they are not completely confident of a life after death, hope remains, particularly among poets who have been deeply frustrated and unfulfilled in their own lives. Certain poets have stressed the attainment of biological immortality through one's descendants. Others wrote of social immortality through the enduring influence of one's work on the memory of one's life and personality in the minds of the living. Still others appear to be content with a more nature-centered conception of immortality through the survival of the basic elements comprising the human body.

DEATH IN PHILOSOPHY

Philosophy, which literally means "love of wisdom," originally encompassed all fields of human intellectual endeavor. *Natural philosophy* included the natural sciences, *mental philosophy* dealt with psychological topics, and *moral philosophy* was concerned with ethics and religion. During the Renaissance and the Industrial Revolution, many

specialized areas of knowledge separated from the parent discipline of philosophy and formed their own fields of investigation (physics, biology, psychology, etc.). However, the academic discipline of philosophy is still concerned with the nature of reality *(metaphysics),* the basis of human knowledge *(epistemology),* principles of right and wrong conduct *(ethics),* laws of valid inference *(logic),* and the nature of beauty and aesthetic judgments *(aesthetics)*.

Philosophy is similar to literature because it is a creative field, and the results of philosophical analysis are usually recorded in written form. Furthermore, many creative writers are, like philosophers, careful observers and thinkers who desire to understand and explain some phenomenon of nature or human action. But literary writers focus more than philosophers on entertaining or at least interesting their readers in what the have to say. In addition, poets, novelists, and other creative writers are usually less concerned than philosophers with the logic and reality of their works. Creative writers concentrate as much on the form as on the substance of a written composition.

Philosophical Interest in Death

Whereas literary writers in all countries and cultural periods have shown continuing interest in death and afterlife, philosophers have often appeared unconcerned with these topics. There was no lack of interest in death among the philosophers of ancient Greece and Rome, but philosophical writings pertaining to these matters declined after the fall of the Roman Empire. It may be argued that European philosophers of the Middle Ages assumed that questions regarding mortality and immortality had been answered by Christianity and consequently were the province of religion rather than philosophy (Bardis, 1981; Choron, 1963). Be that as it may, Christian thinkers such as Augustine, Thomas Aquinas, Ignatius Loyola, John Calvin, and Hugo Grotius were both theologians and philosophers.

Even during the Renaissance period, when the power of the Roman Catholic Church began to wane, philosophers continued to devote little formal thought to death. Certain famous philosophical thinkers, such as Benedict de Spinoza, included almost nothing on the topic in their formal writings. Spinoza disposed of the subject of death in one sentence: "A free man thinks of nothing less than of death and his wisdom is a meditation not of death but of life" (quoted in Choron, 1963, p. 121 from Spinoza, *Ethics* XXIII). Not until the 19th century was death once again viewed as a suitable subject for philosophical analysis. Arthur Schopenhauer was the first philosopher in modern times to pay serious attention to death in his writings, which provided a background for discussions of death by existentialists in the late 19th and early 20th centuries (Bardis, 1981).

Professional philosophers, or anyone interested in philosophical matters concerning death, might wish to ponder the following questions:

1. How does the fear of death originate? Should efforts be made to conquer this fear, and, if so, how?
2. Does death imply permanent extinction, or does something of the individual survive in an afterlife? If something does survive, what is it (corporeal? noncorporeal? both?) and what is the nature of the afterlife?

3. Does God exist? If so, how do human beings become aware of God, and why should He (She?) care about humanity?
4. How should one live, knowing that he or she will most assuredly die sooner or later?
5. Under what circumstances, if any, is taking one's own life or the life of another person justifiable and acceptable?

Some such philosophical questions are metaphysical, some are epistemological, and still others are moral in nature. Consequently, a search for answers involves several philosophical (and nonphilosophical) fields.

Traditionally, philosophers have not shown an overwhelming interest in death, but the writings of many of them express something of their attitudes toward the topic. Tables 6.1 and 6.2 provide very brief descriptions of the attitudes toward death and suicide expressed by selected philosophers. With regard to Table 6.2, Albert Camus's opinion of the topic of suicide as "the one truly serious philosophical problem" is not one that has not been universally shared.

Greek and Roman Philosophers

The list of philosophers in ancient Greece who had something to say about death begins with Anaximander (610–547 B.C.) and continues through Pythagoras (572–497 B.C.), Heraclitus (533–475 B.C.), Parmenides (c. 475 B.C.), Empedocles (495–435 B.C.), Anaxagoras (500–428 B.C.), Socrates (469–399 B.C.), Plato (427–347 B.C.), Aristotle (384–322 B.C.), Epicurus (341–279 B.C.), and Zeno of Citius (c. 340–265 B.C.). Plato, who lived to the ripe old age of 80, expressed his optimism concerning life after death in the *Phaedo:*

> *He who has lived as a true philosopher has reason to be of good cheer when he is about to die, and…after death he may hope to receive the greatest good in the other world… For I deem that the true discipline of philosophy…is ever pursuing death and dying; and if this is true, why, having had the desire of death all his life long, should he repine at the arrival of that which he has been always pursuing and desiring?*

Despite their interest in death, the artists, poets, and philosophers in ancient Greece believed in enjoying life while it lasted, though not necessarily in an uncontrolled, exhibitionistic manner. This was specifically the philosophy of Epicurus, who held that "the external world is a series of fortuitous combinations of atoms and that the highest good is pleasure, interpreted as freedom from disturbance or pain" (Oates, 1940). The first Western philosopher to conclude that death means personal extinction, Epicurus maintained that people should:

TABLE 6.1 Attitudes Toward Death Expressed by Some Famous Philosophers

Philosopher	*Attitude Toward Death*
Socrates (469–399 B.C.)	Death may be better than life, and the true philosopher is cheerful in the face of it.
Plato (427–347 B.C.)	Death is the release of the soul from the body.
Aristotle (384–322 B.C.)	A brave man is one who is fearless in the face of a noble death.
Epicurus (341–270 B.C.)	So death, the most terrifying of all ills, is nothing to us, since so long as we exist death is not with us, but when death comes, then we do not exist.
Zeno of Cyprus (335–263 B.C.)	We should never oppose unavoidable evils, including death.
Lucius A.Seneca (4 B.C.–65 A.D.)	The best way to diminish the fear of death is by thinking about it constantly. (Death is) a punishment to some, to some a gift, and to many a favor.
Benedict de Spinoza (1632–1677)	A free man thinks of nothing less than of death and his wisdom is a meditation not of death but of life.
Georg W.F.Hegel (1770–1831)	Death is the reconciliation of the spirit with itself, a reuniting of the individual with cosmic matter.
Arthur Schopenhauer (1788–1860)	Death is the true aim of life and the muse of philosophy.
Ludwig A.Feuerbach (1804–1872)	Life must be lived fully in spite of death.
Bertrand A.Russell (1872–1970)	When I die, I shall rot and nothing of my ego will survive.
Martin Heideger (1889–1976)	A person's life becomes more pur poseful when he faces his own death.
Jean-Paul Sartre (1905–1980)	Constant awareness of death intensifies the sense of life.

Note. Material summarized from *Death and Western Thought,* by J.Choron, 1973, New York: *Collier Books and History of Thanatology* by P.D.Bardis, 1981, Washington, DC: University Press of America.

> *Become accustomed to the belief that death is nothing to us. For all good and evil consists in sensation, but death is deprivation of sensation. And therefore a right understanding that death is nothing to us makes the mortality of life enjoyable, not because it adds to an infinite span of time, but because it takes away the craving for immortality. For there is nothing terrible in life for the man who has truly comprehended that there is nothing terrible in not living. (Epicurus, Letter to Menoeceus)*

Unlike his more famous predecessors—Socrates, Plato, and Aristotle, Epicurus did not believe in a soul. This was also the position expressed over 2 centuries later by the Roman philosopher-poet Titus Lucretius Carus (97–55 B.C.) in *De Rerum Naturae*.

Both the Epicurean and Stoic philosophers were interested in how the fear of death can be overcome. Epicurus taught that freedom from the fear of death can be

TABLE 6.2 Attitudes Toward Suicide Expressed by Some Famous Philosophers

Plato (427–347 B.C.)	Committing suicide contradicts God's will and, in so doing, forfeits one's chance for a pleasant afterlife. Thus suicide should be punished by the state.
Aristotle (348–322 B.C.)	To die to escape from poverty or love or anything painful is not the mark of a brave man but rather of a coward.
Epicurus (342?–270 B.C.)	Those who find no flavor in life should not hesitate to take leave of it.
Lucretius (97?–54 B.C.)	Opposed to suicide, even in misfortune, he maintained that "we must heal by the grateful recollection of what has been and by the recognition that it is impossible to make undone what has been done."
Zeno (c 340–c 265 B.C.)	The question of suicide is not one of moral right or wrong, but of a rational decision as to what is preferable in a given situation, life or death.
Epictetus (C 60–c 120 B.C.)	Suicide for trifling reasons is inadmissible. "Men as you are, wait upon God. When He gives the signal and releases you from your service, then you shall depart to Him."
Montaigne (1533–1592)	Unbearable pain and a worse death seem to be the most excusable incentives to suicide.
Descartes (1596–1650)	We should not really fear death, but also we should never seek it.
Spinoza (1632–1677)	"No one, I say, from the necessity of his own nature, or otherwise than under compulsion from external causes, shrinks from food or kills himself.… That a man, from the necessity of his own nature, should endeavor to become non-existent is as impossible as that something should be made out of nothing."
Hume (1711–1776)	No one throws away his life as long as it is worth keeping, but "prudence and courage should engage us to rid ourselves at once of existence when it becomes a burden."
Kant (1724–1804)	As a natural being, as an "animal creature," man's first duty is self-preservation, and suicide therefore is a vice.
Schopenhauer (1788–1860)	Although vigorously defending the right of every individual to a voluntary death, Schopenhauer maintained that suicide is opposed to the achievement of the highest moral goal, in that it substitutes an imaginary deliverance from this vale of tears for the real one.
Nietzche (1844–1900)	"The thought of suicide is a strong consolation; it helps to get over many a bad night."
Camus (1913–1960)	Although life has no meaning, suicide is not justified.

Source: From materials in Choron, J. (1984). Philosophers on suicide. In E.S.Shneidman (Ed.), *DeathCurrent Perspectives* (3rd ed., pp. 341–361). Palo Alto, CAMayfield.

attained by seeking moderate pleasures, especially the pleasures of friendship, and avoiding pain. However, the philosophy of "eat, drink, and be merry, for tomorrow we die," was not precisely what Epicurus had in mind and is wrongly attributed to him. The Epicureans, like the Stoics, preached and practiced moderation in all things and did not approve of the notion that one should have fun at all costs (Pardi, 1977). Certainly the drabness with which the afterlife was depicted by the ancient Greeks and Romans made hedonism and the idea of *carpe diem* ("seize the day") attractive, but this attitude was not espoused by Epicurus.

Zeno of Citius, the first Stoic philosopher, believed that the principles of logical thought reflected the existence of a cosmic reason in nature. He maintained that "people should be free from passion, unmoved by joy or grief, and submit without complaint to unavoidable necessity" (Flexner, 1987). Zeno advocated a life based on reason and self-control in the face of death, a life of calm, austere fortitude. A later Stoic, the Roman statesman and writer Lucius Seneca (C. 4 B.C.-65 A.D.), maintained that only by thinking about death constantly can one be prepared for it. Somewhat fatalistic in outlook, Seneca and Marcus Aurelius (121–180 A.D.), who was Emperor of Rome from 161–180 A.D., believed that preparation for death was the only proper goal of philosophy. The Stoics did not place much faith in an afterlife, but rather emphasized the importance of living a satisfying life with no regrets, a life that would not bring shame upon one's family (Bardis, 1981; Choron, 1972). Understanding how nature works and that humans are a part of nature presumably facilitates a stoical attitude toward death.[28]

Philosophers of the Renaissance and Enlightenment

As indicated previously, little philosophical writing on death appeared from the time of the decline of the Roman Empire until the 19th century. A few statements about death appear in the writings of Michel de Montaigne (1533–1592), Benedict de Spinoza (1632–1677), René Descartes, Gottfried Wilhelm von Leibnitz (1646–1716), Immanuel Kant (1724–1804), and Georg Wilhelm Friedrich Hegel (1770–1831). During the 17th century, the French philosopher and mathematician Blaise Pascal (1623–1663) proposed his famous wager concerning the existence of God. According to Pascal, if you bet that God exists and He does not exist, then you have lost nothing. But if you bet that God does not exist and He does exist, you have lost everything. So, given no choice but to bet, the wiser strategy is to bet that God exists and behave accordingly.[29]

[28] This viewpoint is similar to the Taoist principle in Buddhism, which states that human beings can find happiness and completeness in life only when they discover "the Way" *(Tao)* of nature and surrender to it (Pardi, 1977).

[29] Pascal's wager was formulated in the context of his interest in the mathematics of games of chance, an interest stimulated by his correspondence with the French nobleman Chevalier du Meré. One wonders how God might view such a wager, or whether He would approve of Einstein's famous dictum that "*God* doesn't shoot craps." Other mathematicians and logicians have offered so-called formal proofs of the existence of God and immortality. One interesting proof given in Aldous Huxley's novel *Point Counterpoint* claims to demonstrate how God could have created the universe from nothing. Let $\infty = \text{God}$, 0=nothingness, and 1=the universe.Because anything divided by 0 equals infinity, $1/0 = \infty$. By cross-multiplication, we have $\infty \times 0 = 1$, proving that God (∞) could have created the universe (1) from nothing (0). Like Pascal's wager, there is a problem with this proof. What is it?

Philosophers in the Age of Enlightenment were certainly concerned with immortality, especially during the 18th century (Choron, 1973). However, even the great philosophers Immanuel Kant and Georg Hegel had little to say about death. The precedent set by Spinoza during the 17th century was that there are much more interesting philosophical questions, and these do not invade the domain of the theologians or step on the toes of ecclesiastics.

Schopenhauer

According to the German philosopher Arthur Schopenhauer (1788–1860), only the cessation of desire can solve the problems arising from the universal impulse of the will to live (Schopenhauer, 1883/1948). He made the awareness of death, which he called "the muse of philosophy," a central part of his philosophical system. Schopenhauer was a pessimistic atheist who viewed life as dominated by pain, but he maintained that an awareness of death facilitates indifference to this pain. Schopenhauer did realize that one cannot be indifferent to death itself, which every animal fears instinctively. Although he characterized life as a struggle for existence—a struggle that eventually must be lost—and did not believe in personal immortality, Schopenhauer maintained that the idea or "will" of the species survives death. Thus, he taught that the species is indestructible and that there is an immortality of nature. This conclusion is, of course, reminiscent of early Judaism and the philosophy of Buddhism, which influenced Schopenhauer's thinking (Choron, 1973).

Schopenhauer was succeeded by other philosophers, some of whom agreed and some of whom disagreed with his viewpoint. The German philosopher Friedrich Wilhelm Nietzche (1844–1900), who maintained that the will to power is the primary motivating force of the individual and society, attacked the idea that death is the muse of philosophy. Many of the philosophers and philosopher-scientists who came after Schopenhauer and were interested in the problem of death were agnostics or even atheists. Nietzche was an admirer of Zoroastrianism, whereas Sigmund Freud, Bertrand Russell, and Jean-Paul Sartre were acknowledged atheists (Bardis, 1981).

Existentialism

Rooted in the 19th-century writings of Søren Kierkegaard and Friedrich Nietzche, existentialism answers the age-old question of "What or who am I?" with "You are what you do." To Kierkegaard, the meaning of existence is to be found in the actions of people as participants rather than spectators in the game of life. People cannot sit idly by and simply watch the passing parade if they wish to find meaning in their lives. They must get into the game and take chances.

The primary maxim of existentialism, "existence is prior to essence," implies that the theories and methods designed by empiricists to help understand the substance, or "objectiveness," of human beings and other phenomena are inadequate to the task. Science, with all its techniques and laws, will never succeed in telling people who they are and what their lives mean. People must discover meaning by *being-in-the world (Dasein),* by engaging in their own search and finding their own meanings through what they do and how they live.

Social upheavals and human tragedies during the 19th and 20th centuries gave a particular impetus to existential thought. The decline of religious faith and the pursuit of materialism, new styles of working and living resulting from mechanization and mass production, two world wars, genocide, and other sudden changes and disasters led to widespread doubt about whether "God's in His heaven and all's right with the world."

Existentialism was the first philosophical school to make a detailed study of death and its meaning to the individual. Martin Heideger, Jean-Paul Sartre, Albert Camus, and other existentialists stressed that an awareness of mortality makes people anxious and concerned about whether their lives have any significance. From an existentialist perspective, genuine human happiness is impossible to attain, but the meaning of a person's life develops from an awareness of its inevitable ending. While admitting that death is absurd—a kind of cosmic joke on reasoning humanity—existentialism maintains that people do not fear death so much as they fear a meaningless, valueless life. By exercising the freedom to choose and create one's own life, the person loses much of the fear of death and comes to see his or her life as productive and meaningful. Everyone is alone, life lacks any real sustained meaning, and death is inevitable. Nevertheless, each person has the freedom to make of life what he or she will. The realization that life may end at any moment frees the individual to interpret personal experiences and act on them as he or she sees fit. However, freedom of choice does not guarantee that the choices or decisions will be wise ones. A person who acts freely must assume the responsibility for those actions and their consequences. Accepting this challenge and the associated risks requires courage, the courage *to be* and to live an authentic life.

Sartre did not believe that there is a providential order in nature or personal immortality. Like Schopenhauer, however, he accepted the notion of social immortality and that the life of each person can contribute to that immortality. And how does the individual come to make such a contribution? Sartre's answer is that, faced with the inevitability of a personal ending, the individual tries to live a life that will have some social significance (Bardis, 1981)

Thus, this chapter has come full circle on the subject of creativity and death. It began with Goodman (1981), who, after interviewing almost 700 prominent artists and scientists, concluded that greater than the fear of death is the fear of living an incomplete life, a life in which one has not had an opportunity to experience or accomplish all that he or she wished to. If life must be experienced and acted upon to the limit of one's potential in order to be most meaningful, then the parallel between Goodman's research and existentialism is apparent. Prominent artists, scientists, and philosophers, however, are not ordinary people, and perhaps this select group cannot speak for the feelings and attitudes of the average person. Unfortunately, as Prioreschi (1990) concluded, "twenty-five centuries of [philosophical] thought have not found a satisfactory answer capable of relieving the fear of death and the terror of annihilation" (p. 101) expressed by many people

SUMMARY

Research suggests that awareness of personal mortality has prompted efforts to create something of lasting value. People fear not so much the idea of death per se but rather that they may die without having satisfied their desires and achieved their goals. In fact, many people view death as preferable to a meaningless, tormented existence.

The dual themes of death and immortality are expressed in all art forms. Tombs, sarcophagi, and other funerary art forms have served magical, religious, and me-morial functions. Particularly noteworthy in the sepulchral iconography of medieval times are memento mori tombs that depict the deceased as both living and dead. These images were designed to reveal the corruption of death and to suggest its egalitarian nature (the great leveler). Other artistic themes that illustrate the preoccupation with death during the Middle Ages are the triumph of death, the danse macabre, and the *Ars Moriendi*.

Death has been personified and symbolized in art in a multitude of ways since the Bronze Age. Common personifications are the Angel of Death, the Rider on a Pale Horse, and the Grim Reaper. Common symbols of death are cemeteries, skulls, clocks, and dead birds.

The origins of much of the nonverbal art and literature concerned with death are found in mythology. One of the earliest mythical stories was the *Epic of Gilgamesh,* an ancient tale of a Sumerian king and his search for immortality. Many myths in primitive cultures attempt to explain how humans came to be mortal—as the result of a mistake, as a punishment inflicted by deities, or as the outcome of a great debate.

Representations of death in Western literature include grotesque animals and monsters and a humanlike individual dressed in black and carrying a scythe, another weapon, or a timepiece and perhaps riding a pale horse. Similar personifications are contained in the literature of the Middle and Far East.

Literary themes of death include the inevitability and universality of death, the beautiful and romantic death, deathbed scenes, grief, immortality, and unnatural death (murder, suicide, death in combat). The obsession with death during the Middle Ages is seen in the preoccupation with the maggotry of death in painting, poetry, and drama. A romantic view of death characterized much of the literature of the 18th and 19th centuries, giving way initially to a denial of death and then to a greater realism during the 20th century.

Philosophers in classical Greek and Roman times were quite interested in the topics of death and the afterlife, but philosophical interest waned during the Middle Ages. Not until the 19th century was death once again considered a topic worthy of philosophical analysis. Arthur Schopenhauer was the first modern philosopher to pay serious attention to the topic, a precedent that greatly influenced the philosophical school of existentialism during the late 19th and early 20th centuries. Heidegger, Sartre, Camus, and other existentialists apparently concurred with Schopenhauer that death is the muse of philosophy. Expanding on this theme, they argued that an awareness of death gives meaning to life. The realization that eventually they must die motivates people to strive to live meaningful, self-actualizing lives.

QUESTIONS AND ACTIVITIES

1. Discuss attitudes toward death during the Middle Ages in Europe, citing evidence from the literature and art of that time to support your assertions.

2. Contrast the attitudes toward death of the Epicureans, the Stoics, and the Existentialists.

3. What novels or other fictional accounts of dying, death, and bereavement have you read? Describe any features that these works have in common. Were these accounts romantic, realistic, or a combination of both?

4. What can painting, sculpture, music, and other nonverbal arts tell people about death that is not expressible in poetry or other written works of art?
5. What do carpe diem, memento mori, the triumph of death, and the danse macabre all have in common? What evidence can you cite to show that these themes are more or less prevalent today than they were during the Middle Ages?
6. What purpose was served in medieval art by emphasizing the maggotry of death and the vanity theme? In what way were these themes a reflection or product of the times?
7. Describe as many ways as you can of how death is personified in classical literature and the contemporary media. Which of these personifications is the most popular? Which are the most apparent, and which are more abstract or abstruse?
8. List the titles and describe popular songs that you have heard and films that you have seen with a central theme of death. What features or characteristics of death and dying are emphasized in these "works of art?" What have you learned from listening to the songs and viewing the films?
9. Certain works of art in early Greece and medieval or early Renaissance Europe combined the themes of love and death in the same work. In several paintings (e.g., *Death and the Young Woman,* by Deutsch, 1517 A.D.), eroticism and mortality are combined. Can you find examples of the mixture of sex and death in contemporary popular music, films, or television programs (e.g., MTV)? What is the purpose of this mixture? What is the artist or creator of the work trying to represent or communicate, or does the work represent nothing more than a desire to attract attention? Is the desired effect merely one of arousal or shock, or is there a real message in the medium?
10. The Middle Ages were, of course, not the only historical period of popular interest in the maggotry of death, violent death, and horror. Since the early days of Hollywood, there has been a huge market for horror films featuring ghosts, mummies, vampires, and other creatures that prey upon the living. How many horror films have you seen, and what psychological purposes do these films serve? To what extent do you believe that the scenes and themes of such films can lead to an acting out of frustrations and fantasies in real-life violence?
11. Web exercise: How does art deal with death? To answer this question, in addition to reading the sections on art in chapter 6, log on to the following web site: *www.library.advanced.org/16665/howart.htm*. Click on the "Timeline," "Film," and "Music" headings for illustrations of how death and dying have been represented in certain art forms.

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7
LEGAL PRACTICES AND ISSUES

TOPICAL OUTLINE OF THE CHAPTER:

Cause of death and disposal of the body
- *The death certificate*
- *Coroners and autopsies*
- *Disposal and disinterment of the corpse*
- *Organ donation*

Abortion
- *Methods of inducing abortion*
- *A controversial issue*
- *Abortion legislation*

Euthanasia and natural death
- *Religious opposition*
- *The Cruzon case*
- *Natural death act and advance directive*

Capital punishment
- *Number of executions*
- *Methods of execution*
- *Court decisions*
- *Death row*
- *Pros and cons of capital punishment*

Wills, taxes, and insurance
- *Influence of the church*
- *Modern wills*
- *Death taxes*
- *Gift taxes*
- *Avoiding probate*
- *Trusts and life insurance*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *What are the major legal issues concerning death?*
- *Why is it important to determine an exact moment of death, and how is the determination made?*
- *What functions are served by a death certificate and what information does it contain?*
- *When are abortion and euthanasia legal and what are some of the issues connected with these matters?*
- *What are natural death acts and what are their merits and shortcomings?*
- *What are the origins of capital punishment statutes in the United States?*
- *What are the arguments for and against capital punishment?*
- *What is the history and nature of the will as a legal document?*
- *What are death taxes and what purposes do they serve?*
- *What is the purpose of probate, and what can be done to avoid it?*

> *Death is unique. It is unlike aught else in its certainty and its incidents. A corpse in some respects is the strangest thing on earth. A man but yesterday breathed and thought and walked among us has passed away. Something has gone. The body is left still and cold, and is all that is visible to mortal eye of the man we knew. Around it cling love and memory. Beyond it may reach hope. It must be laid away. And the law—that rule of action which touches all human things—must touch also this thing of death. It is not surprising that the law relating to this mystery of what death leaves behind cannot be precisely brought within the letter of all the rules regarding corn, lumber, and pig iron. And yet the body must be buried or disposed of. If buried, it must be carried to the place of burial. And the law, in its all-sufficiency, must furnish some rule, by legislative enactment or analogy, or based on some sound legal principle, by which to determine between the living questions of the disposition of the dead and the rights surrounding their bodies.*
>
> *—Louisville & N.R. Co. v. Wilson (1905)*

The survival of individuals and groups demands that certain basic needs be satisfied. For thousands of years human beings have known that both competition and cooperation play a role in need satisfaction, but these complementary processes are much more effective for society as a whole when they take place in an orderly fashion. The existence of order implies rules and sanctions, which when formalized and codified are called *laws*.

Although people are proud of their freedom and autonomy, much of their behavior is governed by customs, mores, and laws. There are laws concerning almost every aspect of human interaction, whether the actors are living, dying, or dead. *Dead* generally means biologically dead, but the laws of Western society also distinguish biological death from civil death and presumptive death. *Civil death* is a term in English common law that was formerly used to designate the legal status of a person who had lost his or her civil rights. *Presumptive death,* on the other hand, refers to a situation in which a person has, for some unexplained reason, been physically absent from his or her place of residence and out of contact with family and acquaintances for several years. The legal determination of death in such cases is made by a court of inquiry, after which the property and familial rights and duties of the missing individual become those of a dead person. For example, a soldier who has been missing for 7 years is presumed dead. Consequently, the survivors of this presumptively dead individual are entitled to the same legal rights (of inheritance, remarriage, etc.) as they would be if direct proof of the soldier's death were available.

First and foremost, the law is charged with protecting people from untimely death. When direct evidence that a person has died exists, the major legal issues are as follows: determining when death occurred and what caused it, disposing of the body in a decent manner, taking or shortening human life for medical or legal reasons, and disposing of the decedent's property according to his or her wishes. The first three matters are concerns of both medicine and law, whereas the fourth is primarily of legal interest. These matters are not necessarily independent; the manner in which a decedent's property is disposed of, for example, may be affected by how and when the death occurred.

CAUSE OF DEATH AND DISPOSAL OF THE BODY

The exact moment of death must be known in a number of legal situations, such as civil and criminal liability lawsuits, processing insurance claims and determining survivors' benefits, and matters of inheritance. When two people have died, it may be necessary to determine which one died first. Furthermore, when body organs are donated, to make certain that a viable organ is obtained it is important to know when the donor actually died.

It would seem to be a straightforward matter to determine when a person is dead, except that death can be defined in so many ways and different parts of the body "die" at different times. As discussed in chapter 2, among the physiological indicators of death are a drop in body temperature (algor mortis), stiffening and rigidity of the muscles (rigor mortis), and the presence of a waxy substance (adipocere) in the blood produced by the decomposition of animal tissues. Unfortunately, these indicators are rather crude and furnish only an approximate time of death.

Ambiguity in the definition of death and the consequent uncertainty of establishing a precise moment of death have led many states to adopt the provisions of the Uniform Determination of Death Act (1975). As stated in this act,

> *An individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead. A determination of death is to be made in accordance with acceptable medical standards. (President's Commission…, 1981, p. 73)*

The Uniform Determination of Death Act, which has been adopted by the majority of states, clarifies the definition of death to some extent but has not eliminated conflicting interpretations and lawsuits.

The Death Certificate

Not only a time but also a cause of death must be determined. Both the estimated time and cause of death are recorded on a *death certificate,* a medicolegal document that must be completed and signed by a physician prior to registering the death. Death certificates vary in format from state to state but usually follow the U.S. Standard Certificate of Death (Fig. 7.1). Death certificates constitute legal proof of death in a host of situations concerned with burial, insurance and pension payments, inheritance claims, and prosecution of homicides. Several copies of a death certificate should be obtained by the survivors or executor of the deceased's estate for filing insurance claims and other legal procedures. Death certificates are also useful in research on genealogy and in obtaining knowledge about the incidence of diseases and other fatal conditions. A copy of the death certificate is filed with the local and state vital statistics branches of the Department of Health and Human Services. After it has been filed, a death certificate constitutes official registration of the death and is a necessary preliminary to disposal of the corpse.

The first four sections of a death certificate are for recording descriptive information on the decedent (name, sex, date of death, race, etc.), the names of the deceased's parents, how and where the remains were disposed of, and medical certification of death. The last section is for filling in the cause of death: accident, suicide, homicide, undetermined, or pending investigation. A natural death is assumed if none of these terms is entered on the form. This classification system has been criticized as too simplistic

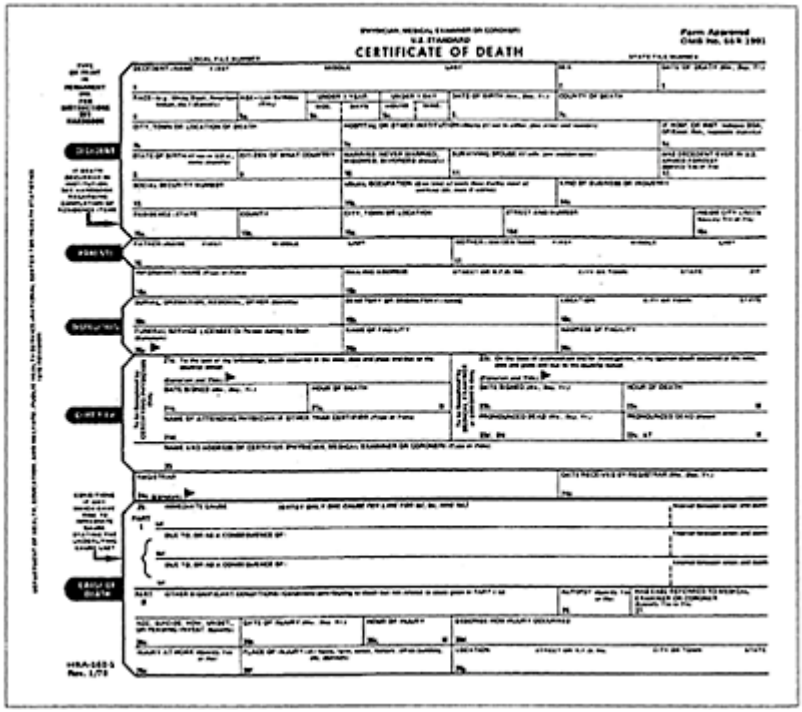


FIGURE 7-1 U.S. Standard Certificate of Death.

(source: U.S. Department of Health and Human Services, Public Health Service).

(Shneidman, 1980a), but it is fairly standard in the United States and Europe. Thanks to the efforts of the World Health Organization, a uniform death certificate has been adopted by various nations throughout the world.

Legal problems concerning death are most likely to arise when the identified cause is accident, suicide, or homicide. When the death was caused by accident or homicide, for example, the survivors may have a legal claim against the person or persons responsible for the mishap or crime. These rights stem from Lord Campbell's Acts (1846) in British law, which legally entitled the surviving kin to monetary benefits from the guilty party equal to those they would have received if the decedent had lived. Certain insurance clauses and benefits are also activated in the event of accidental death (e.g., double indemnity provisions, workers's compensation death benefits). In the case of any voluntary and

unlawful taking of life, the guilty party is not entitled to benefits that he or she might otherwise have received for the death of the victim. When death is self-inflicted, life insurance policies are generally declared void and accidental death benefits are likewise barred (Schroeder, 1998).

Coroners and Autopsies

Three other items of interest on the certificate of death are the coroner's certification, an indication of whether an autopsy was performed, and information on how, where, and by whom the corpse was disposed of.

In medieval England, *coroners* (from *crowners,* appointed by the Crown) were agents commissioned by the king to determine the cause of death and, in murder cases, to collect revenues from forfeiture of the property of the murderer. In the United States, coroners now are usually elected officials who, depending on the locality, may or may not be medical doctors. Functions similar to those of a coroner are performed by a *medical examiner,* who is a physician usually trained and certified in forensic pathology and appointed to the job by a government official or commission.

The task of a coroner or medical examiner is to examine deaths resulting from unclear causes, cases in which the cause of death is either unknown or unnatural (accidental, suicide, or homicide). The coroner or medical examiner may conclude that there is sufficient doubt as to the cause of death to necessitate a postmortem examination (an *autopsy*). An autopsy involves inspection and dissection of the corpse, including removal and examination of the internal organs. Following completion of the autopsy, organs that require no further examination are returned to the body cavity and all incisions are closed. Traditionally, permission of the next of kin was needed to perform an autopsy. One reason for requiring permission is that sometimes there is a conflict between an autopsy and religious beliefs concerning mutilation of the body. For example, Orthodox Jews believe in immediate burial, but it may be necessary to delay the burial for some time when an autopsy is performed. Certain religious groups also view a dead body as the temple of the soul, and that it should not be mutilated by an autopsy. Be that as it may, a coroner or medical examiner can order an autopsy when it appears that the deceased was in good health prior to his or her demise, or whenever the death has not been satisfactorily explained.

The results of an autopsy, conducted by a pathologist, are recorded on appropriate legal documents. In certain cases, this may be followed by a legal inquest in which witnesses are heard and other evidence pertaining to the cause of death is presented. An *inquest* is a preliminary investigation rather than a trial, although in some localities coroners are authorized to issue arrest warrants based on the results of an inquest. The typical outcome of an inquest is issuance of a death certificate or other official report concerning the cause of death and related information.

Disposal and Disinterment of the Corpse

Historically the burial of corpses was controlled by the Church, and not until the 17th century did the legal concept of a right to a decent burial develop (Schroeder, 1998). Though no one actually "owns" a dead human body, the law now requires the next of kin

or executor/executrix of the decedent's estate to make arrangements for disposal of the body. Because the corpse is not property in the legal sense, any directions that the deceased may have made concerning funeral arrangements and method of disposing of his or her body (burial, cremation, etc.) may be taken into account but are not legally binding. Not only do members of the family have a right to bury the deceased; they are legally required to do so as quickly and appropriately as possible. In the usual situation, the next of kin or personal representative obtains a burial permit when the death is registered (see Fig. 7.2) and then engages a funeral director or mortician to take care of the details of the funeral and disposal of the body. The cost of burial is charged to the estate, except when the deceased is destitute or the relatives have authorized use of the body for scientific or educational purposes.

A dead body may be embalmed, cremated, or treated in other ways (e.g., frozen) The laws relating to disposal vary from state to state. In 80% of the cases the body is embalmed, a procedure that dates back at least to 4 B.C. *Embalming* was first used in France and England in the 1600s and in the United States during the Civil War. It entails removal of the blood and injection of a special preservative mixture into the arteries. This procedure retards putrefaction of the body for only a few days and is not usually required by law. However, it may be legally required whenever the body is to be transported for a long distance before being buried.

Because cremation can be used to conceal a crime, a more detailed legal inquiry usually precedes issuance of a permit to cremate than issuance of a permit to bury. There are also laws pertaining to exhumation or disinterment of a buried body. In general, it is a misdemeanor to mistreat or disinter a corpse, but disinterment can be legally authorized to obtain evidence for prosecuting civil or criminal cases.

Organ Donation

Under the provisions of the Uniform Anatomical Gifts Act (1968, 1987, 1993), which has been enacted in some form by all states in the United States, any adult can donate his or her own body upon death to a medical facility or physician to be used for medical purposes, including research and organ transplantation. In order to put the donation into effect, a document similar to a will must be completed by the donor and then signed and witnessed by two persons. The form contains a statement such as "In the hope that I may help others, I hereby make this anatomical gift, if medically acceptable, to take effect upon my death." The donor then indicates whether he or she gives all needed organs or parts, or only specified ones. According to the Act, if such a written document has not been prepared by the deceased, the Act sets out a priority list of relatives who may donate the body for medical purposes. A Revised Uniform Anatomical Gift Act, which became law in 1987, simplified the donation process, requiring no witnesses and stating that medical attendants can rely upon a "document of gift," without having to obtain the consent of other persons.

APPLICATION AND PERMIT FOR DISPOSITION OF HUMAN REMAINS

USE BLACK INK ONLY—NO ERASURES, WHITEOUTS OR OTHER ALTERATIONS

SPECIAL INSTRUCTIONS REGARDING CREMATION

THE FOLLOWING STATUTORY PROVISIONS ARE APPLICABLE TO THE DISPOSITION OF CREMATED HUMAN REMAINS OTHER THAN IN A CEMETERY AND BURIAL AT SEA AFTER CREMATION AS PROVIDED IN HEALTH AND SAFETY CODE SECTIONS 7054.6, 7054.7, 7117, 10376 AND 10376.5.

NO PERSON SHALL DISPOSE OF OR OFFER TO DISPOSE OF ANY CREMATED HUMAN REMAINS UNLESS REGISTERED AS A CREMATED REMAINS DISPOSER BY THE STATE CEMETERY BOARD. THIS ARTICLE SHALL NOT APPLY TO ANY PERSON, PARTNERSHIP, OR CORPORATION HOLDING A CERTIFICATE OF AUTHORITY AS A CEMETERY, CREMATORY LICENSE, CEMETERY BROKER'S LICENSE, CEMETERY SALESMAN'S LICENSE, OR FUNERAL DIRECTOR'S LICENSE, NOR SHALL THIS ARTICLE APPLY TO ANY PERSON HAVING THE RIGHT TO CONTROL THE DISPOSITION OF THE CREMATED REMAINS OF ANY PERSON OR THAT PERSON'S DESIGNEE IF THE PERSON DOES NOT DISPOSE OF OR OFFER TO DISPOSE OF MORE THAN 10 CREMATED HUMAN REMAINS WITHIN ANY CALENDAR YEAR. (BUSINESS AND PROFESSIONS CODE SECTION 9740.)

CREMATED REMAINS SHALL NOT BE SCATTERED OVER INLAND WATERS OR OVER LAND UNLESS IN A DEDICATED CEMETERY IN A GARDEN AREA USED EXCLUSIVELY FOR SUCH PURPOSES.

FIGURE 7-2 Application and Permit for Disposition of Human Remains.

(source: State of California, Department of Health Services, Office of State Registrar).

Forms for making organ donations are found on documents such as driver's licenses and senior citizen cards, or as separate documents. Furthermore, a revision of the Uniform Anatomical Gift Act (1993) requires hospitals to request incoming patients to consider making a "document of gift."

Although the survivors may act to donate if the deceased owner of the organ has not, the latter's request supersedes all others. But even when the donor has authorized it, physicians usually refuse organ donations when surviving family members object. The donor may also revoke the gift, or it may be refused by the intended recipients.

Rather than donating the entire body for educational or research purposes, typically a dying person or the relatives of the deceased will donate one or more organs to help a living person. Many different organs (eye, heart, kidney, liver, pancreas, pituitary gland, lung) and tissues (bone, bone marrow, skin, tendon, blood vessels) may be transplanted. Some donated organs, such as corneas, pituitary glands, and skin, can be stored in organ banks until needed. Also in great demand are vital organs (e.g., heart, kidney, liver), which must be transplanted immediately to avoid tissue damage. A national computerized system has been in operation for several years to facilitate the process of matching organs with persons. However, problems in coordinating information concerning the availability of organs continue to exist.

One medicolegal concern with respect to organ donation is that overeagerness on the part of an attending physician to obtain a transplant organ as quickly as possible could lead to a premature decision to terminate life-support for a patient. Consequently, the restriction that no member of a transplant team should be involved in the terminal care or death determination of a patient/donor is a reasonable precaution.

ABORTION

The most general definition of *abortion* is any procedure that results in the death of an unborn child. An abortion may be *spontaneous,* in which case it is referred to as a *miscarriage,* or it may be *induced* by some external agent. In the United States, every year an estimated 25% (1 million +) of pregnant women decide to end their pregnancies through abortion. The abortion ratio—the number of abortions per 1,000 abortions and live births—is lower for Whites than for all other races combined, lower for women between the ages of 25 and 39 than for other age groups, and much lower for married than for unmarried women. The rate also varies with geographical area, being much higher in the District of Columbia and substantially lower in Wyoming than in other states (U.S. Census Bureau, 1999).

Methods of Inducing Abortion

Abortions can be induced by either chemical or surgical means. In addition to emergency contraception (the "morning-after pill"), nonsurgical, chemically induced abortions using methotrexate and misoprostol may be used up to about 5 weeks gestation, and the RU-486 (mifepristone) abortion pill can be used up to about 7 weeks gestation. Traditional medical procedures used through the first trimester (first 12 weeks gestation) consist of either scraping the fetus from the uterus (dilatation and curettage) or aspirating the fetus from the uterus by means of a special suction pump (manual vacuum aspiration). After the first trimester, aborting the fetus becomes increasingly more hazardous to the health of the mother.

Rarely used and usually restricted to emergencies late in gestation (i.e., to save the mother's life), but a political firestorm, has been partial birth abortion. Despite the seeming cruelty of the procedure, federal legislative efforts to ban partial birth abortion have generally been unsuccessful because of the failure in either the House or the Senate to override a Presidential veto.

The maternal mortality rate for aborting the fetus during the first trimester is even lower than for childbirth, but the rate increases dramatically for later abortions. After the first trimester, the traditional abortion technique consists of injecting a hormone-like substance (prostaglandin) or a saline solution into the amniotic fluid surrounding the fetus. When all other methods have failed, a hysterectomy is performed. This procedure is essentially a caesarean section and may result in the fetus being born alive (Cavanaugh, 1998).

A Controversial Issue

The controversy over induced abortion revolves around the issue of taking a human life. Although it was opposed by Hippocrates, Plato and Aristotle viewed abortion as a useful method of population control. Taking its position from the Sixth Commandment ("Thou shalt not kill"), organized Christianity historically has opposed induced abortion. Similar opposition has been expressed by Buddhism, Hinduism, and Judaism. British common law and the laws of many other countries also consider abortion to be a crime when induced after the onset of "quickening" (4th to 5th month of pregnancy), because the fetus is legally regarded as a person after it has begun to move. In U.S. law, a third-trimester fetus is considered a citizen, and a death certificate must be filed when it dies.

Protestant and Jewish positions on abortion have become less conservative during the 20th century. If the procedure is needed for saving the life or preserving the health of the mother, it is now generally acceptable to those religions. The Bible does not address the question of abortion directly, but the Roman Catholic Church, arguing from a 16th-century doctrine that "ensoulment" occurs at the moment of conception, has continued to oppose it. Roman Catholic doctrine maintains that abortion is unjustified even if the life of the mother is threatened.

Public opposition to abortion is not restricted to the religious community; many professional and lay groups are also opposed to it. The major point in opposition to abortion is that an unborn child is actually a human being and, hence, abortion is tantamount to murder. Antiabortionists ("pro-lifers") believe that this is certainly true of the fetus (3rd month to term) and, according to some opponents of abortion, even of the embryo and the fertilized egg.

Organized opposition to induced abortion is not as strong in other countries as in the United States. For example, abortions by qualified physicians are performed with virtually no restrictions in eastern Europe, Russia, Japan, and China. In Russia and Romania, for example, where contraceptives are in short supply, abortion rates exceed 60%. Interestingly enough, abortion is also legal in heavily Roman Catholic Italy. In the United States, it is legal in many states to abort for reasons of the mother's or fetus's health, or when pregnancy is caused by rape or incest. Most of the million plus abortions that take place in the United States every year are, however, prompted by reasons other than health or unlawful sexual intercourse.

During the past few years, the social and political issue of abortion has polarized activists in the United States into pro-life (antiabortion) group and pro-choice (proabortion) groups. Both groups have been stridently vocal and at times quite aggressive, leading to the bombing of abortion clinics and murder. The debate has un-doubtedly influenced U.S. public opinion and politics on the issue. The results of national polls indicate that the public is deeply divided on the complex abortion issue, which shows no immediate signs of being resolved. With regard to the feelings of women who have had abortions, in national polls some have said that the loss and resulting grief had profoundly affected their lives, whereas others were grateful that abortion was available (Doka, 1989; Tumulty, 1989).

Abortion Legislation

Most of the current controversy over abortion is the result of the 1973 decision by the U.S. Supreme Court in the case of *Roe v. Wade* (1973). In that decision, the Court ruled that (a) states cannot prohibit abortion during the first 3 months of pregnancy, but beyond that period they may regulate abortion in ways that reasonably relate to maternal health, and (b) states may prohibit abortion in the final 10 weeks of pregnancy except when the mother's life is at stake. In justifying its decision, the Court stipulated that an unborn child is not a person within the meaning and protection of the term *person* in the Fourteenth Amendment of the U.S. Constitution. Furthermore, a woman's right to privacy implies that a decision of whether to have an abortion during the first 3 months of pregnancy should be left to her and her doctor. During that same year, in the case of *Doe v. Bolton* (1973), the Court removed the earlier requirement that abortions can be performed only in hospital settings.

Pressure on state and federal legislators to liberalize abortion laws has continued, especially by women's rights groups. The civil-rights argument of these groups is that the fetus is part of a woman's body, and that she has a legal right to control her own body. Pro-choicers also argue that making abortion illegal will lead to unsafe practices and have a disproportionate effect on poor people who cannot afford to travel to places where abortion is legal. Pro-lifers, on the other hand, argue that abortion is murder, a violation of the fetus's right to life, and that it may even lead to the acceptance of infanticide and a disregard for human life in general—a "slippery slope to Auschwitz" (Schur, 1998).

The pro-choice interpretation of a pregnant woman's right to have an abortion that characterized Supreme Court decisions in the 1970s was reversed by a more conservative Court in the late 1980s. In *Webster v. Reproductive Health Service* (1989), the Court upheld a Missouri law banning abortions in public hospitals and forbidding public employees to assist in abortions except when the woman's life is in danger. The Court also ruled that the state of Missouri may require physicians to test women who are at least 20 weeks pregnant to determine if their fetuses are viable, and to prevent abortions if they are. Although the Missouri law did not forbid abortions in private medical facilities (where the vast majority take place), the Supreme Court ruling was viewed as a step in a series of efforts by the Court to limit access to abortion and thus slowly rescind the decision in *Roe v. Wade* (1973). Additional efforts in this direction occurred in *Ohio v. Akron Center for Reproductive Health* (1990) and *Planned Parenthood v. Casey* (1992).

EUTHANASIA AND NATURAL DEATH

Euthanasia (easy death) is the act of painlessly putting to death an individual who is suffering from an unbearably painful incurable disease or condition. *Passive euthanasia* is simply letting a terminally ill person die without applying lifesaving mea-sures to keep him or her alive. *Active euthanasia,* on the other hand, entails using active measures to end a suffering person's life.

Throughout human history, active euthanasia has been practiced sporadically on certain groups of people: infants, the elderly, the chronically ill, the physically or mentally deformed, and even certain socially unpopular ethnic or religious groups. Mercy killing of infants, for example, was common in ancient Greece and some Middle Eastern countries. Historically, Christianity, Islam, and Judaism have opposed euthanasia, but a number of eminent philosophers, scientists, and other famous people have supported the practice in moderation. For example, Plato, Aristotle, David Hume, and Immanuel Kant all endorsed euthanasia under specific circumstances. In modern times euthanasia has sometimes been associated with *genocide,* as in the extermination of millions of European Jews by the Nazis during World War II. However, genocide is not only active, but also involuntary in that it is done without the consent of the victims.

Public approval of euthanasia is seen in the 68% "Yes" responses of a national sample to the question "When a person has a disease that cannot be cured, do you think doctors should be allowed by law to end the patient's life by some painless means if the patient and his family request it?"[30] Despite the support of a majority of the general public, the history of euthanasia has been at least as stormy as that of abortion. The debate has not centered on the voluntary-involuntary distinction, because it is generally conceded that involuntary euthanasia is merely a euphemism for murder. Rather, the most frequently debated issue is whether active and passive voluntary euthanasia are morally and legally justifiable. The laws of the United States, Canada, and most European countries define active euthanasia—taking active measures to shorten the life of a person whether or not that person approves—to be a crime. Shortening one's own life is defined as suicide, and shortening the life of another person is murder. Active euthanasia that permits a physician to end the life of a consenting terminally ill patient is legally countenanced under certain circumstances in Holland and Uruguay.

Though not technically legal, physicians in the Netherlands can perform mercy killing through lethal injection if a strict procedure established by the Dutch medical profession is followed. The conditions of this procedure are as follows:

1. The person must express an enduring, freely decided wish to die.
2. The person must be in unbearable physical or emotional pain that shows no signs of abating.
3. The person is not mentally distributed.
4. The person's death does not cause harm to others.
5. Anyone who assists in the death is a qualified health professional, and the lethal drug is administered by a medical doctor.
6. The helper should consult with colleagues before assisting in the death.
7. The death should be fully documented and the documents made available to appropriate legal authorities.

[30]See web site *http://www.icpsr.umich.edu/GSS99/codebook/cappun.htm*.

Following these steps, physician-assisted suicide has become fairly common in Holland. More than 6,000 people, including many AIDS victims, commit suicide with medical help each year (Diekstra, 1987).

Certain organizations, such as Exit in Great Britain and the Society for the Right to Die in the United States, were established to lobby for changes in laws pertaining to euthanasia, so far without notable success. Noteworthy in the United States for encouraging euthanasia is Derek Humphry's National Hemlock Society and his how-to-die manual *Final Exit* (Humphry, 1991). Also of interest are the efforts of Dr. Jack Kevorkian, unaffectionately referred to as "Dr. Death," who achieved some notoriety for assisting terminally ill patients to die more easily.

Public support for physician-assisted suicide has grown during the past few decades. In a public opinion poll conducted in 1996 (American Attitudes, 1998), 68% of a U.S. sample indicated that they were in favor of giving to the incurably ill the option of having a doctor end their lives. The percentage in favor was higher for men than for women, for Whites than for Blacks, for respondents under age 60 than those over 60, and for those with more formal education.

Despite expressed public support, at present in only one of the 50 states —Oregon—can terminally ill patients legally have help in dying, although the enactment of such legislation has come close in other states. As noted in chapter 3, for personal, ethical, or religious reasons, or fear of malpractice suits, most American physicians have been reluctant to help terminally ill patients to die. Again, a notable exception is Dr. Jack Kevorkian, whose efforts resulted in a second-degree murder conviction and a long sentence in a Michigan prison.

Religious Opposition

One reason why citizens may report feeling one way but vote another on euthanasia is religious opposition. Christianity, Judaism, and Islam have traditionally been opposed to suicide and euthanasia, the objections being directed more toward active than passive euthanasia. Roman Catholic opposition to euthanasia stems not only from the Sixth Commandment but also from St. Augustine's maxim that the Scriptures do not authorize the destruction of innocent human life. But as seen in the *Ars Moriendi* treatise and the "double-effect" principle of the Middle Ages, Roman Catholic theologians have tended to be more interested in saving souls than in preserving lives. According to the *double-effect principle,* an action that has the primary effect of relieving human suffering may be considered justifiable even when it shortens human life (Wasmuth, 1998). The administration of narcotics to relieve pain in terminally ill patients, which can lead to respiratory depression and thereby hasten death, is not inconsistent with this principle.

Modern Catholic theologians have also addressed the matter of passive euthanasia (e.g., when should a respirator be turned off or when should lifesaving medical measures on behalf of a patient cease?) Dealing with the question of whether the respirator should be turned off in the case of a patient in an irreversible coma, Pope Pius XII concluded in a 1957 statement that there is no moral obligation to keep the respirator on in such circumstances (Address of Pope Pius XII, 1957). A case in point was that of Karen Ann

Quinlan, an irreversible coma patient during the late 1970s and early 1980s. Her Roman Catholic parents, presumably after consulting with Church authorities, decided to have their daughter's respirator turned off. But even when the respirator was turned off, Karen continued to live and breathe for some months. Her parents had decided against the removal of the feeding tube, however, which would have led to a much quicker termination of her life.

The Cruzon Case

Another famous case concerning the right-to-die question was that of Nancy Cruzan, a 32-year-old Missouri woman. After nearly suffocating in an automobile accident, she was, like approximately 10,000 other Americans, in a persistent vegetative state—a permanent unconsciousness in which she was able to breathe on her own but had to be fed through a feeding tube. In similar cases in several other states, the courts had ruled that life-support measures could legally be terminated. These rulings were consistent with the belief that it is not unethical to discontinue all means of life-prolonging medical treatment for patients in irreversible comas, including artificial feedings. However, the Missouri court held that "the burden of continuing the provision of food and water" was "emotionally substantial for Nancy Cruzan's loved ones," but not for her. In the face of "the uncertainty of Nancy's wishes and her own right to life," the court concluded that "We chose to err on the side of life, respecting the rights of incompetent persons who may wish to live despite a severely diminished quality of life" (Steinbrook, 1989). Nancy's parents appealed this decision to the U.S. Supreme Court, but the Court ruled that the parents of a comatose woman do not have an automatic right under the U.S. Constitution to insist that hospital workers stop feeding her (Hamel, 1990). Nancy eventually died, but only after a long and bitter legal battle.

Natural Death Act and Advance Directive

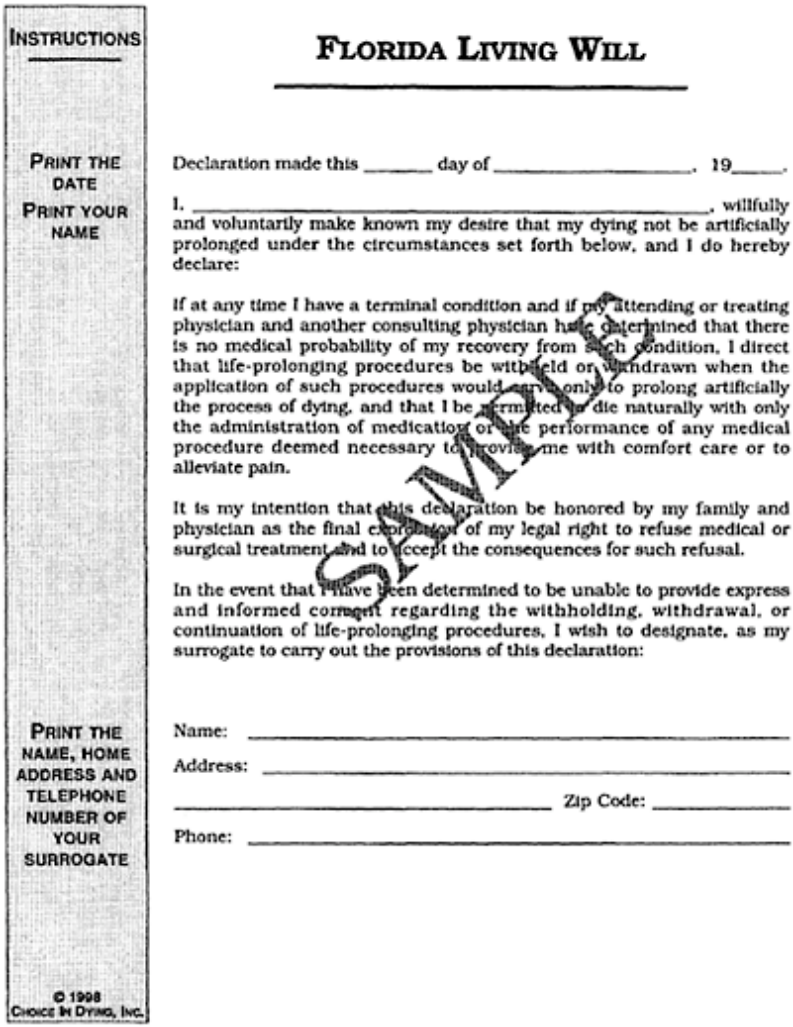
In cases such as those of Karen Ann Quinlan, Nancy Cruzan, and other coma patients, it has rarely been clear what the wishes of the patient regarding termination of treatment would be if he or she were conscious. Realizing that terminally ill patients may prefer to die rather than linger on in a painful or vegetative state and remain a financial, physical, and emotional burden on their loved ones, an organization known as Choice in Dying (formerly Concern for Dying and Society for the Right to Die) made available a form known as a Living Will (Fig. 7.3). The form was designed to be filled in, while the patient is still able to think clearly, to express the patient's desire that extraordinary medical procedures not be used to sustain life when the medical situation becomes final and hopeless.

Combined with physicians' concerns over medical malpractice suits, and the efforts of those who support passive euthanasia, the Living Will served as a stimulus for natural death legislation in many states. California's Natural Death Act, for example, permits a patient who has been diagnosed by two physicians as terminally and incurably ill or injured to sign an *advance directive* stating that certain life-sustaining procedures not be used to prolong his or her life when death is imminent. The law does not provide for or permit active steps to end life, but only to terminate treatment that is prolonging the dying process.

Patients who sign advance directives must be emotionally and mentally competent to make the decision, which is effective for a stipulated period of time and maybe revoked at any time. An advance directive must be completed while the patient is still able to think clearly. It must be executed within a specified period after the patient has

been diagnosed as having a terminal condition; otherwise it is only advisory and need not be complied with by the attending physician.[31]

Laws in all 50 states and the District of Columbia accept advance directives as representing the patients' wishes. Furthermore, in 1990 the U.S. Congress passed a Patient Self-Determination Act requiring hospitals to inform patients of their right to control their own treatment by means of advance directives and powers of attorney.



INSTRUCTIONS

PRINT THE DATE

PRINT YOUR NAME

PRINT THE NAME, HOME ADDRESS AND TELEPHONE NUMBER OF YOUR SURROGATE

© 1998 CHOICE IN DYING, INC.

FLORIDA LIVING WILL

Declaration made this _____ day of _____, 19____.

I, _____, willfully and voluntarily make known my desire that my dying not be artificially prolonged under the circumstances set forth below, and I do hereby declare:

If at any time I have a terminal condition and if my attending or treating physician and another consulting physician have determined that there is no medical probability of my recovery from such condition, I direct that life-prolonging procedures be withheld or withdrawn when the application of such procedures would serve only to prolong artificially the process of dying, and that I be permitted to die naturally with only the administration of medication or the performance of any medical procedure deemed necessary to provide me with comfort care or to alleviate pain.

It is my intention that this declaration be honored by my family and physician as the final expression of my legal right to refuse medical or surgical treatment and to accept the consequences for such refusal.

In the event that I have been determined to be unable to provide express and informed consent regarding the withholding, withdrawal, or continuation of life-prolonging procedures, I wish to designate, as my surrogate to carry out the provisions of this declaration:

Name: _____

Address: _____

_____ Zip Code: _____

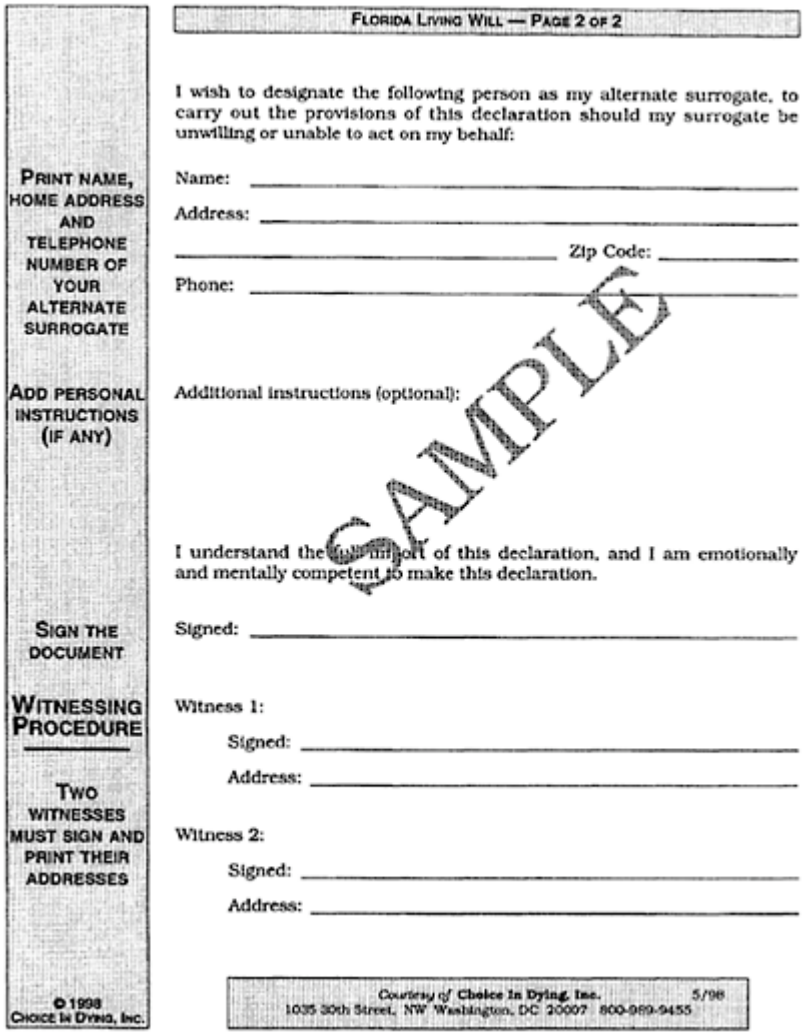
Phone: _____

SAMPLE

FIGURE 7-3a A Florida Living Will form

(source: Reprinted with permission of Choice in Dying, 1035 30th Street, NW, Washington, DC 20007; 800–989–9455).

[31]Forms for all 50 states and the District of Columbia maybe obtained from Choice in Dying, 1035 30th Street, NW, Washington, DC 20007 (Phone: 800-989-9455; Email cid@choices.org).



PRINT NAME, HOME ADDRESS AND TELEPHONE NUMBER OF YOUR ALTERNATE SURROGATE

ADD PERSONAL INSTRUCTIONS (IF ANY)

SIGN THE DOCUMENT

WITNESSING PROCEDURE

TWO WITNESSES MUST SIGN AND PRINT THEIR ADDRESSES

© 1998 CHOICE IN DYING, INC.

FLORIDA LIVING WILL — PAGE 2 OF 2

I wish to designate the following person as my alternate surrogate, to carry out the provisions of this declaration should my surrogate be unwilling or unable to act on my behalf:

Name: _____

Address: _____

_____ Zip Code: _____

Phone: _____

Additional instructions (optional):

SAMPLE

I understand the full import of this declaration, and I am emotionally and mentally competent to make this declaration.

Signed: _____

Witness 1:

Signed: _____

Address: _____

Witness 2:

Signed: _____

Address: _____

Courtesy of Choice in Dying, Inc. 5/98
1035 30th Street, NW Washington, DC 20007 800-989-9455

FIGURE 7-3b A Florida Living Will form

Natural death legislation has not been without problems and criticisms. For example, a terminal patient in a comatose state obviously cannot make or sign such a declaration. Relying on guidelines provided in 1968 by the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death, California law permits physicians (at least two) to declare a patient dead when there is an absence of brain waves for 24 hr; there must also be no spontaneous breathing and no response to external stimulation. Once the patient has been declared dead, the physicians can "pull the plug" on life-sustaining machinery. Because the law is not clear in all situations, most physicians lean toward the conservative side and consult with the patient's family and legal counsel before making a final decision.

Another problem that has arisen in attempting to implement the California Natural Death Act and similar laws in other states is that many physicians are ethically or religiously opposed to any form of euthanasia. Some physicians may also view the demand for death with dignity as romantic nonsense contrary to their own experiences with dying patients. In the eyes of these doctors, terminally ill patients are usually frightened, suffering people who do not really want to die. In a moment of despair a patient may express a desire to die and may even sign a legal form requesting that extraordinary life-sustaining procedures not be used. However, the patient often changes his or her mind with something hopeful or pleasurable occurs.

CAPITAL PUNISHMENT

Another controversial legal issue concerned with actively taking a person's life is capital punishment. The death penalty has been applied to hundreds of different crimes since ancient times. Hammurabi's Code decreed death for selling beer, and a similar fate awaited a Roman wife who stole the keys to her husband's wine cellar. The ancient Egyptians executed people for idolatry, the ancient Persians executed people who accidentally sat on the king's throne, and the ancient Greeks executed those who committed a sacrilege (Caldwell, 1998). During the Middle Ages, capital punishment was widely used for crimes against the church and state. Even as late as 1819, 223 different capital crimes were listed under British law (Radzinowicz, 1948). The 13 capital crimes in Massachusetts in 1636 indicate the influence of religion on legal punishment: adultery, assault in sudden anger, blasphemy, buggery, idolatry, manstealing, murder, perjury in a capital trial, rape, rebellion, sodomy, statutory rape, and witchcraft (Haskins, 1956). The American colonies had no uniform system of criminal justice, and whether or not an offense was deemed a capital crime depended to a great extent on the locality in which it occurred.

Number of Executions

Although the total number of crimes warranting the death penalty has declined since colonial times, people in the United States have been executed during the 20th century for armed robbery, arson, kidnapping, murder, rape, treason, and military desertion. Unlike the public executions of earlier centuries, which were supposed to serve as examples to would-be criminals, the great majority of executions in this country since 1900 have not been public spectacles. Most of these executions were for murder, with the crime of rape being second.

Figure 7.4 is a graph of the number of executions in the United States each year from 1930 to 1998. From 1930 through 1968, an average of more than 100 people per year were executed in this country. Because of U.S. Supreme Court rulings, executions were suspended from 1968 through 1976, but 546 people were executed between 1976 and June 1999. As shown in Figure 7.5, 304 (56%) of those executed in the United States from 1976 to May 1999 were White, 192 (35%) were Black, 38 (7%) were Latino, 8 (2%) were American Indian, and 4 (1%) were Asian. These statistics included 12 foreign nationals,

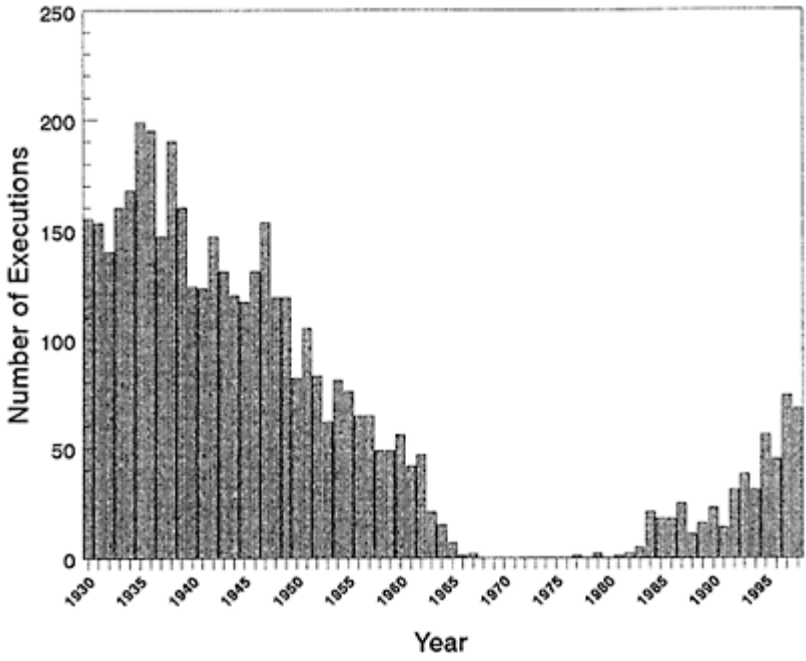


FIGURE 7-4 Executions by year in the United States from 1930 to 1998

(from data provided by the U.S. Department of Justice, Bureau of Justice Statistics).

6 of whom were Latinos. Though people of color make up over half of all homicide victims in the United States, nearly 90% of those executed were convicted of killing Whites. The fact that capital defendants who kill White victims are more likely to receive the death penalty than those who kill Black victims has been cited in support of the allegation that capital punishment is racist (National Coalition to Abolish the Death Penalty, 1999a; see Box 7.1)

Methods of Execution

Historically, people convicted of capital crimes have been beheaded, boiled in oil, burned, crucified, crushed, disemboweled, drowned, electrocuted, flayed alive, forcibly overfed, gassed, hanged, impaled, injected with chemicals, poisoned, shot, smothered, stoned, strangled, thrown to wild beasts, torn apart, and subjected to other forms of overkill. Two intricate examples of cruel and unusual punishment are those prescribed in ancient Persia and Rome. In the ancient Persian method of "the boats," the condemned person was placed in a boat and another boat was fitted over it. The prisoner, whose head, hands, and feet protruded from the boats, was then force-fed with milk and honey and smeared with the mixture. Following this treatment he was left exposed to the sun and eventually eaten by insects and

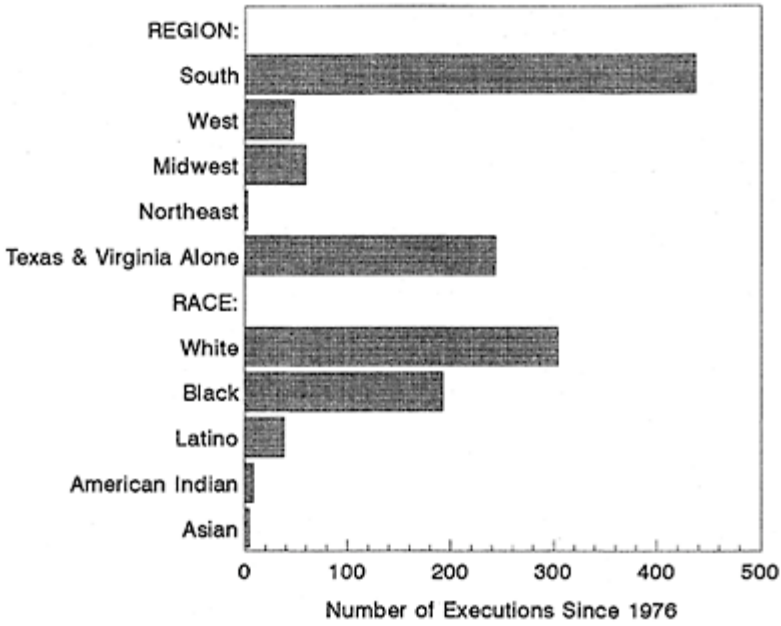


FIGURE 7-5 Executions by geographical region and race, 1976–May 1999)

(from data provided by the National Coalition to Abolish the Death Penalty).

vermin (Caldwell, 1998). In ancient Rome, persons found guilty of the crime of paracide ("kin killing") were bound and sealed in a sack with a dog and a chicken. The sack was then tossed into the water, and the person drowned if he or she was not scratched to death by the animals before drowning (Rosenblatt, 1982). A dog also figured in a 1906 execution in Switzerland. The animal, along with several people, was executed for its participation in a robbery and murder (Gambino, 1978).

Hanging was the most common method of execution in England during colonial times, with the axe being reserved for treason, burning at the stake for witchcraft, and disemboweling and quartering for counterfeiting. As illustrated by the following legal sentences, the first of which was imposed on an Englishman in the 13th century and the second on several Englishmen in the 19th century, methods of execution could be quite cruel and unusual:

> *Hugh (Hugh Dispenser the 'Younger)…you are found as a thief, and therefore shall be hanged; and are found as a traitor, and therefore shall be drawn and quartered; and for that you have been outlawed by the King, and…returned to the court without warrant, you shall be beheaded and for that you are abetted and procured discord between the King and Queen, and others of the realm, you shall be embowelled, and*

BOX 7.1 The Death Penalty and Racism

John William King will probably be the first White man in this century to be executed in Texas for the killing of a Black. The last time it happened was in 1854 when a White farmer was executed for killing another farmer's prize male slave.

Nationally, 8 Whites have been executed for killing Blacks since the resumption of the death penalty more than 2 decades ago.

Conversely, 124 Blacks have been put to death for killing Whites, according to the Death Penalty Information Center in Washington.

U.S. Justice Department statistics show that in interracial cases, Blacks kill Whites 2.5 times as often as Whites kill Blacks, a difference dwarfed by the 15:1 ratio above.

The General Accounting Office, the congressional watchdog agency, in 1990 reviewed more than 50 studies of race and punishment and found "a pattern of evidence indicating racial disparities in the charging, sentencing and imposition of the death penalty."

"That ought to really raise concerns and prompt an examination of procedural and other process-related matters."

—Dan Morales, the outgoing Texas attorney general, commenting on the disproportionate number of minorities on death row.

your bowels burnt. Withdraw traitor, tyrant and so go take your judgment, attainted wicked traitor. (Jankofsky, 1979, p. 49)

That each of you, be taken to the place from whence you came, and from thence be drawn on a hurdle to the place of execution, where you shall be hanged by the neck, not till you are dead; that you be severally taken down, while yet alive, your bowels be taken out and burnt before your faces—that your heads be then cut off, and your bodies cut into four quarters, to be at the King's disposal And God have mercy on your souls. (G.R.Scott, 1950, p. 179)

Five different methods of execution are now lawful in the United States, depending on the particular state: lethal injection (34 states), electrocution (10 states), gas chamber (5 states), hanging (2 states), and firing squad (2 states). In 4 of the 10 states in which electrocution is used, it is the sole method. However, more than one method is authorized in some states. Lethal injection is an alternative method in all (9) states in which the gas chamber, hanging, or firing squad is the preferred method. Lethal injection and electrocution have been the most common methods since 1976, accounting for over 70% of the executions. Federal executions are carried out according to the preferred method of the state in which they are performed (see Fig. 7.6).

Court Decisions

A landmark U.S. Supreme Court decision on capital punishment was handed down in 1972 in the case of *Furman v. Georgia*. By a vote of five to four, the court judged

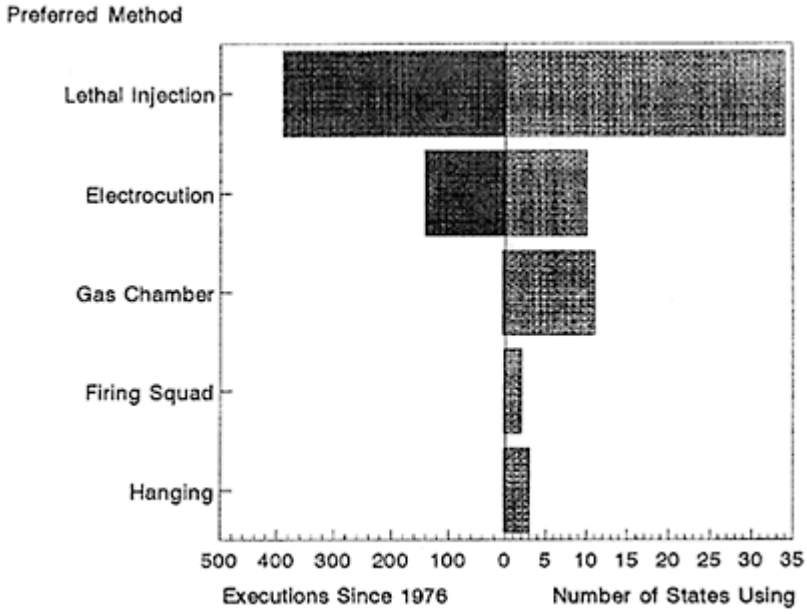


FIGURE 7-6 Number of executions and number of states by method of execution, 1976–May 1999

(from data provided by the Death Penalty Information Center).

Georgia's death penalty law, as it was administered in the mid-1960s, to be unconstitutional according to the Eighth Amendment prohibiting "cruel and unusual punishment." The effective result of this decision and subsequent Supreme Court decisions pertaining to capital punishment was to strike down existing capital punishment statutes. Laws that made capital punishment mandatory for certain crimes, and that eliminated the discretion of the judge and jury in setting penalties, were declared unconstitutional (*Woodson v. North Carolina,* 1976). Laws making rape a capital crime and laws specifying a limited number of mitigating circumstances in deciding punishment were also invalidated (*Coker v. Georgia,* 1977; *Lockett v. Ohio,* 1978; *Bell v. Ohio,* 1978; *Eddings v. Oklahoma,* 1982). Earlier decisions appeared to conclude that laws declared unconstitutional were those excluding prospective jurors who admit that the possibility of capital punishment would make their decision difficult (*Adams v. Texas,* 1980; *Witherspoon v. Illinois,* 1968). Several studies (e.g., Gross, 1984) have shown that so-called "death-qualified juries," composed of jurors who are not opposed to the death penalty, tend to be conviction-prone. However, in *Lockhart v. McCree* (1986), the Supreme Court held that "the Constitution does not prohibit the removal for cause, prior to the guilt phase of a bifurcated capital trial, of prospective jurors whose opposition to the death penalty is so strong that it would prevent or substantially impair the performance of their duties as jurors at the sentencing phase of the trial."

Three separate Supreme Court decisions rendered in 1976 *(Gregg v. Georgia, Jurek v. Texas, Profitt v. Florida)* upheld state laws providing for guided discretion in setting capital punishment sentences. Thus, the Court concluded that when applied thoughtfully, carefully, and under the right circumstances, capital punishment is not unconstitutional. As a result of these decisions, by 1999 a total of 38 states and 2 federal jurisdictions (U.S. Government and U.S. Military) had capital punishment statutes, whereas 12 states were without capital punishment.

In 1989 the U.S. Supreme Court ruled that the constitutional ban on cruel and unusual punishment does not forbid the execution of youths who commit crimes at 16 or 17 years of age, nor does it automatically prohibit death sentences for mentally retarded defendants (*Penry v. Lynaugh,* 1989; *Stanford v. Kentucky,* 1989). Of the 38 states that now have the death penalty, in 13 the minimum age for capital punishment is set at 18 years; 4 states have a minimum age of 17 years, 9 have 16 years, and 12 have no minimum age at all for capital punishment. According to data reported by the National Coalition to Abolish the Death Penalty (1999b), since 1973, 160 children, the majority of whom are people of color, have been sentenced to death in the United States. Since the death penalty was reinstated in 1976, 13 men have been executed for crimes committed as juveniles and 34 mentally retarded persons have been executed (Death Penalty Information Center, 1999).

Death Row

The number of prisoners awaiting execution on death row has increased sharply since 1973, while the states awaited Supreme Court decisions on capital punishment and drafted new legislation to conform to those decisions. On April 1, 1999, there were 3,565 death row inmates in the United States, over half of them in five states (California, Texas, Florida, Pennsylvania, and North Carolina). Of the total population of death row inmates, 1,659 (47%) were White; 1,499 (42%) were Black; 287 (8%) were Hispanic, and 104 (3%) were of other races. Approximately 1.5% of those were women (Death Penalty Information Center, 1999). A typical death-row inmate is a White or Black man in his late 20s or early 30s with less than a high school education.

Day-to-day existence during the several years that a typical prisoner resides on death row has been characterized as legalized torture. Several men executed since 1976 chose not to appeal the death sentence and many more chose suicide rather than being forced to remain in the oppressive atmosphere of death row. As one prisoner stated, "A maggot eats and defecates. That's all we do: eat and defecate. Nothing else. They don't allow us to do nothing else" (Johnson, 1982, p. 11).

There is at least one other thing that death row inmates do besides eating, sleeping, and performing other natural functions: They spend much of their time thinking. And what do they think about? From an analysis of letters and other documents written by inmates awaiting execution, Shneidman (1980c) concluded that they think intensively about themselves and what it will be like when they are dead. Knowing that one is about to die results in focusing on the self to such an extent that the person literally begins to mourn or grieve for himself. Perhaps Shneidman's (1980c) sample of written documents is not representative of death-row inmates in general, but many of the letters demonstrate a nobility of sentiment and concern about other people in the face of death. Thus, the

execution notes analyzed by Shneidman (1980c) reveal an increased compassion for loved ones and a feeling of inner peace as the end of life approaches. Many death-row inmates also develop strong religious convictions and beliefs in reincarnation or other forms of afterlife.

Pros and Cons of Capital Punishment

The United States is one of the few Western nations that have not abolished the death penalty, but for over 200 years many prominent Americans have opposed it. One of those citizens was Benjamin Rush, a doctor in the Revolutionary War, the father of American psychiatry, and the founder of the U.S. movement to abolish capital punishment (Post, 1944). Capital punishment is used regularly in Russia, but it has been abolished in Canada and most Latin American countries.

Despite a rather vocal opposition to it, public sentiment in favor of the death penalty remains high. In a 1997 poll of attitudes toward the death penalty, 75% of a U.S. national sample indicated that they approve of capital punishment (Louis Harris & Associates, 1997). With respect to the demographic breakdown of the responses, a greater percentage of males than females, of Whites than Blacks, of those in the West and South than in the East and Midwest, and of Republicans than Democrats indicated that they favor the death penalty.

Why is there such overwhelming support for what some would call legalized murder? According to Sellin (1980, p. 6), there are at least three community services that the death penalty might be expected to perform:

1. Satisfaction of the demand for retribution by making the criminal pay with his or her life.
2. Discouraging others from committing capital crimes, that is, general deterrence.
3. Removal of the danger that the criminal's survival would pose to society, that is, prevention and protection.

In general, opponents of capital punishment argue that decades of research have provided no conclusive evidence in support of capital punishment for retribution, general deterrence, or prevention and protection. There is no real evidence that murderers, who typically act impulsively, are deterred by the legal consequences of their acts. As indicated by the results of a survey of criminologists, for example, 84% of the sample rejected the notion that the death penalty acts as a deterrent to murder (Radelet & Akers, 1996). Although controlled experiments have not been conducted to determine whether imposing the death penalty acts as a general deterrent to capital crime, statistical data from various states and countries strongly suggest that it does not. Governments that have enacted the death penalty continue to have higher civilian murder rates than those that do not, and the average murder rate in the United States is higher in states with capital punishment than in those without it (National Coalition to Abolish the Death Penalty, 1999c). For example, the highest murder rates occur in Southern states, but the South accounts for 80% of the executions. In contrast, less than 1% of the executions occur in the Northeast, the region with the lowest murder rate (Death Penalty Information Center, 1999). Rather than the threat of punishment, it is the swiftness with which punishment is applied that seem to deter criminal behavior. Due process of law,

which typically takes years in the U.S. judicial system, guarantees, however, that punishment for a capital crime will not be swift.

Despite the concern with due process in capital cases, Margolick (1985; also see Radelet, Bedau, & Putnam, 1992) found that since 1900 at least 350 people in this country have been wrongly convicted of crimes punishable by death. Of these people, 139 were sentenced to death and 23 were executed. Furthermore, since 1970, new evidence (e.g., from DNA testing) has resulted in the release of 78 people from death row (Death Penalty Information Center, 1999).

Regarding protection against further murders, the recidivism rate for murder parolees is extremely low. However, with respect to retribution, it may be considered sufficient that capital punishment serves as an expression of community outrage and the moral right of society to retribution. This position stems from Hammurabi's Code or talion law (the principle of "an eye for an eye and a tooth for a tooth") and the Mosaic Law, but it is at odds with the position of many religious groups. Nevertheless, Christians who approve of capital punishment point out that the scriptural prohibition against killing should be interpreted as applying only to the actions of persons acting solely on their own. Even Christ, it is maintained, accepted his execution because it was ordered by legally constituted authority.

Whether or not a society feels that capital punishment is justifiable on the grounds of social retribution, it would seem necessary for the sentence to be imposed fairly, without regard to race, sex, socioeconomic status, or special influence. Unfortunately, law enforcement pertaining to capital punishment has never been consistent. For example, only about half of the willful homicides lead to murder charges, and only about half of those charged with murder are prosecuted for capital murder (Sellin, 1980). It is usually impossible to determine all the factors that led to a capital murder charge and to the imposition of a capital sentence, but the fact that justice has been applied unequally permits the question of whether capital punishment is administered fairly. After examining the roles of gender and other demographic factors in sentencing for capital cases, it can be concluded that not only has the death penalty failed as an agent of retribution but that the selective application of capital punishment has grossly distorted justice. For example, one of every eight murder suspects who are arrested is a woman, but 49 out of 50 death sentences are imposed on men. Women are arguably less likely to receive the death penalty because the victims of women are more likely than those of men to be husbands, lovers, and other persons with whom they were intimate, and crimes against intimates are less likely to receive capital sentences than those against strangers (Felten, 1996). Of course, there are other possible explanations as to why women maybe punished less severely than men, such as the social and judicial perception of females as the "weaker sex."

Another argument made by proponents of capital punishment is an economic one: It is cheaper to execute a person than to keep him or her in an institution for a long period of time. Opponents of the death penalty maintain, however, that enforcement of capital punishment is becoming more and more expensive and that simple incarceration for life or a long period of time provides a convicted person with the opportunity for self-support and some form of restitution to the relatives of the victim (Caldwell, 1998). Various state governments estimate that a single death penalty case, from the point of arrest to execution costs between $1 million and $3 million. The cost of life imprisonment, on the other hand, averages less than half that amount (Death Penalty Information Center, 1999).

Perhaps the most pernicious effect of capital punishment is that it makes people believe they have done something constructive about crime, whereas in reality they are probably only making matters worse. All too often capital punishment has merely brutalized a society, and the sanctioning of official killing as a response to a private killing has only added a second defilement to the first (Camus, 1955).

WILLS, TAXES, AND INSURANCE

Another matter pertaining to death and dying that is of concern to the legal profession is the disposition of estates. Not everyone who dies leaves behind an appreciable amount of property. Many people die poor, and a few even manage to "take it with them," For example, there are no wealthy people in a certain Arizona Indian culture, because a dead person's possessions are buried with the corpse (Shaffer & Rodes, 1977). Because the dead take their possessions with them into the next world rather than leaving them to the living, the survivors are materially poor and remain that way except for what they can earn or what they are given by others.

Burying a dead person's possessions with the corpse is not unique to these Arizona Indians. As noted in chapter 5, it has been practiced since Stone Age times and reached its height in the opulent grave goods of the Egyptian pharaohs' tombs. However, even the dead pharaohs did not take everything with them; some of the royal treasury was left for future pharaohs.

Influence of the Church

Throughout history, the usual way of disposing of one's property at death has been to leave it to family, friends, and institutions. As far back as ancient Rome, the manner in which a decedent's property was to be distributed was frequently recorded in a legal document known as a *will*. In medieval Europe, under the direction of the Church, the preparation of a will prior to death became an obligatory sacrament, even for the poor. Like the confession of sins, the disposal of one's worldly property served as a form of redemption, as long as it was given to pious causes. A person who did not make a will could be excommunicated, and those who died intestate (no will) were presumably not buried in sacred ground (Aries, 1977/1981).

Despite the shortness of life and the weak condition of entrepreneurship during the Middle Ages, many people managed to accumulate property and other holdings. They were proud of their possessions, but they also had strong beliefs in an afterlife. Therein arose the conflict—a conflict between the love of life and material things versus the paralyzing fear of eternal damnation and hell. The resolution of this conflict in many cases was to give all one's worldly goods, or at least a substantial portion of them, to the poor, to hospitals, and to churches and religious orders. In response to this generosity, which often left the benefactor's family almost penniless, the Church issued a kind of passport to heaven to the benefactor, agreeing to have masses, services, and prayer said in perpetuity for his or her soul. As for the living, having little or no legacy made it even more difficult to accumulate the fortunes required for successful capitalistic enterprises.

By the middle of the 18th century, charitable contributions and the endowment of masses were no longer the principal reasons for the last will and testament. What had been a philanthropic religious document during the Middle Ages now focused on family management (Aries, 1977/1981). Ambivalence between love of life and desire for salvation was still expressed in the wills of the Renaissance and Enlightenment, often in poetic or at least literary form. However, the hold of the Church on the human mind and spirit had weakened, and the influences of more practical economic and legal factors began to manifest themselves.

Modern Wills

Although two-thirds of all Americans die without having made a will, drawing up wills is a big business in the modern world. Most states have a common procedure for implanting a written attested will, but there is actually no standard legal form on which it must be drawn up and no universally required procedure for making a will. In fact, certain states accept an unwitnessed will prepared in the testator's[32] (legator's) own handwriting (a *holographic will*) (see Box 7.2) or even an oral will (a *nuncupative will*). A nuncupative will, however, is legal only under limited circumstances, as when a person is in fear of imminent death from an injury sustained on the same day or by a soldier or sailor engaged in military service.

BOX 7.2 A Holographic (Homemade) Will

The following is a will written by Herman Oberweiss, as offered for probate at the June, 1934, term, County Court of Anderson County, Texas.

I am writing of my will mineself that des lawyer want he should have too much money he asked to many answers about the family. First think i want i don't want my brother Oscar to get a dam thing what i got he is a mumser and he done me out of four dollars fourteen years since.

I want it that Hilda my sister she get the north sixtie akers of at where i am homing it now i bet she don't get that loafer husband of hers to brake twenty akers next plowing. She cant have it if she lets Oscar live on it i want i should have it back if she does.

Tell mama that six hundred dollars she been looking for twenty years is berried from the bakhouse behind about ten feet down. She better let little Frederick do the digging and count it when he comes up.

Pastor Ticknitis can have three hundred dollars if he kiss the book he wont preach no more dumhead talks about politics. He should a roof put on the meeting house with and the elders should the bills look at.

Mama should the rest get but I want it that Adolph should tell her what not she should do so no more slick irishers sell her vaken cleaner they noise like hell and a broom don't cost so much.

I want it that mine brother Adolph be my executer and I want it that the judge should please make Adolph plenty bond put up and watch him like

[32]Throughout this section, the masculine noun forms *testator, legator,* and *executor* are used to refer to both men and women. The comparable female nouns are *testatrix, legatrix,* and *executrix*.

hell. Adolph is a good bisness man but only a dumpph would trust him with a busted pfennig.

I want dam sure the schlaimial Oscar don't nothing get. Tell Adolph he can have a hundret dollars if he prove judge Oscar don't nothing get that dam sure fix Oscar.

(Signed) Herman Oberweiss

Note. Quoted from *The Judicial Humorist: A Collection of Judicial Opinions and Other Frivolities,* by W.I.Proser, 1980, Boston: Little, Brown, and Company.

Another special type of will is a *mutual will,* which contains reciprocal provisions as when, for instance, a husband and wife decide to leave everything to each other without restrictions. Also used in some circumstances is a *conditional will,* the provisions of which are put into effect only when certain events occur. For example, the will may state that certain monies or property are to be held in trust until specific conditions described in the will are satisfied.

Among the legal requirements for making a will in most states are that the testator or legator (the person making the bequest) is at least 18 years old and of sound mind, that a sufficient number of witnesses (usually two or three) are present, and that the document is executed in proper form. Included in the will are the testator's name, address, and age, followed by a statement of his or her capacity to make a will *(testamentary capacity)*[33] and voluntariness of the action. Next is a listing of the disposition of specific items in the estate and the names of the heirs (distributees, legatees; see Box 7.3). The will may also include the line of succession to be followed or alternate beneficiaries in the event that the primary beneficiary dies before the estate is probated. The name of the appointed executor of the will or estate should also be given, followed by the dated signature of the testator and the signatures and addresses of the witnesses. A will may be altered, added to by means of a codicil, or destroyed by the testator at any time. Thus a will is considered "ambulatory" in that it may be altered or revoked as long as the testator is of sound mind and intends to revoke it.

Laws concerning inheritances and wills vary from country to country and state to state within the United States. Most states, however, require that either a will be filed or the nonexistence of a will be disclosed to a probate court within 10 days after death. Certain procedural matters pertaining to the legality of a will are usually resolved fairly easily. If a person names an executor of the estate, that executor serves under the jurisdiction of a local probate court. However, if no executor is named by the testator or if a person dies *intestate* (no valid will having been found), the court appoints an administrator to handle the distribution of the decedent's property. Probate courts also become involved in disputations about whether a will is valid or which of several wills take precedence (usually the most recent). If no legal heirs can be found, the estate *escheats,* or passes to the state in which it is probated.

[33]Testamentary capacity is possessed by a testator who knows (a) the nature of his or her property ("bounty"), (b) that he or she is making a will, and (C) who his or her natural beneficiaries are. A testator's testamentary capacity is not the same as the competency to handle his or her life and property. A person's competency, if questioned by relatives or heirs, must be determined by a separate legal hearing from that required to establish testamentary capacity.

BOX 7.3 Some Illustrative Bequests

A captain of finance wrote:

To my wife, I leave her lover, and the knowledge that I wasn't the fool she thought I was.

To my son, I leave the pleasure of earning a living. For twenty-five years he thought the pleasure was mine. He was mistaken.

To my daughter, I leave $100,000. She will need it. The only good piece of business her husband ever did was to marry her.

To my valet, I leave the clothes he has been stealing from me regularly for ten years, also the fur coat he wore last winter while I was in Palm Beach.

To my chauffeur, I leave my cars. He almost ruined them, and I want him to have the satisfaction of finishing the job.

To my partner, I leave the suggestion that he take some other clever man in with him at once if he expects to do any business,

Note. From *To Will or Not to Will,* W.S.Hein & Associates.

One of the most common disputes regarding bequests and wills has to do with the question of legal heirs or beneficiaries. British law historically subscribed to the *rule of primogeniture,* in which the male line was preferred over the female line and the eldest over the youngest in the distribution of real property. Furthermore, illegitimate children had no rights of inheritance under English common law (Arenson, 1998). Such distinctions have largely disappeared in modern inheritance laws, and, depending on the particular state, anyone—relative or not—can be a legal heir to an estate. On the other hand, under the legal provisions of states having community property laws, each spouse has an equal interest in certain property and therefore cannot be disinherited. At the death of the testator, the surviving spouse is entitled to half the community property. In many other states, however, the spouse who earned the funds used to acquire the property owns the property outright and need not leave any of it to the surviving spouse. Regardless of the wishes of the testator, most states do not permit the surviving spouse to be left destitute, and will award at least a portion of the estate to that person.

Whether or not preferential treatment is given to the surviving spouse, a testator may legally elect to leave nothing to the surviving children. Traditionally, a person's natural heirs have been his or her blood kin, and adopted or foster children might receive nothing at the death of their foster parents. In recent years, however, there has been a liberalization of children's rights of inheritance. For example, California has liberalized its rules to allow foster children to inherit under certain circumstances.

When a widow or widower dies without having made a will, the bulk of the estate goes to the children or, if there are none, to other immediate relatives. The estate is typically distributed among the heirs in a pattern of *serial reciprocity,* in which the largest share of the estate goes to the adult child who has rendered the greatest service to the deceased over the years, the next largest share goes to the adult child who has rendered the second most service, and so on. The principle that bequests should be proportional to the amount of assistance provided to the deceased is usually acceptable to the heirs, but sometimes arguments occur over precisely how much assistance was rendered by whom (Sussman, 1985).

Death Taxes

Traditionally, a legal system of inheritance has had three purposes: (a) to maintain order in dividing the decedent's property, (b) to support the decedent's dependents, and (C) to inhibit the growth of private wealth and raise revenues for the government. It is the third purpose that has prompted the levying of *death taxes*. These kinds of taxes existed even in ancient Egypt, Greece, and Rome and continued to be levied during the Middle Ages (Mercer, 1998).

There are two kinds of death taxes: *estate taxes* and *inheritance taxes*. Estate taxes are levied on property left at death and are paid from the estate before the remaining assets are distributed to the heirs. At present, the estate tax in the United States begins at 37% of property over $650,000, but there is strong political interest in elim-inating the tax entirely or at least raising the starting point. Inheritance taxes are levied on the heirs, the tax being a percentage of the value of the property inherited by the heir. The United States has both state and federal death taxes. Pennsylvania was the first state (in 1826) to impose death taxes, and today all states except Nevada have estate and/or inheritance taxes ranging from 2% to 23% of the taxable property. Recently, however, several states have moved away from inheritance taxes, effectively abolishing them in some instances.

The U.S. government levied its first death tax in 1797, a 0.5% stamp tax on the transmission of estates. The current federal system of estate taxation began in 1916, the rates being raised in 1924, lowered in 1926, raised again in 1932 and 1941, and "reformed" in 1976. Death taxes are higher in Great Britain, where they have served to break up large landed estates (Sennholz, 1976).

Despite their apparent magnitude, only a small percentage of the total tax collected by the U.S. government comes from estate taxes. The availability of many tax shelters, such as trusts and foundations, results in the payment of relatively low estate taxes by affluent people. Since 1987, only estates greater than $600,000, after various deductions, have been taxed.

Gift Taxes

In addition to death taxes, gifts made by a person before death may be taxed *(gift taxes)*. Gifts of unlimited amounts may be given to charity without paying gift taxes, and other gifts of certain amounts during a specified time period are also not taxed. Thus, a person may distribute $10,000 per donee per year to as many people as he or she likes without paying any taxes on the gifts; the donee pays no income tax on the gift. Such gift splitting allows a husband and wife to transfer $20,000 per year to each donee. The largest tax savings on gifts, however, come from property, cash, or stock given to a private foundation. Nonvoting stock given to a charitable foundation is not taxed, but the

gift enables the benefactor to retain control of the company by means of his or her voting stock. It is understandable why numerous private education, medical, and charitable institutions owe their very existence to the dislike of taxes by wealthy individuals and the government subsidy provided by tax-free transfers of wealth.

The Tax Reform Act of 1976 and the Economic Recovery Tax Act of 1981 instituted a fairly uniform tax on lifetime and death transfers, so the tax advantages of transferring property before death are now minimal. However, because estate or gift taxes are assessed on the value of assets at the time of transfer, lifetime transfer may be advantageous when property is expected to increase in value (Scheible, 1988).

There are so many opportunities and intricacies in death tax law that finding ways to avoid these taxes has become a full-time occupation for some accountants and attorneys. Considering the complexities of federal and state laws pertaining to inheritances and gifts, it is advisable for anyone planning a bequest to consult an attorney. Estate planning, of which the will is only a part, is itself only one aspect of planning for death. In addition to preparing a will and understanding death taxes, it is wise for both benefactor and beneficiaries to become familiar with the language of laws pertaining to insurance policies, joint bank accounts, safe-deposit boxes, social security benefits, veteran benefits, and civil service benefits.

Avoiding Probate

Probate is a judicial process, handled by a special court *(probate court)* for administering the estate of a deceased person. Following a public announcement to the effect that the will of the decedent is being probated, all claims against the estate must be settled and the property distributed by the executor of the estate according to the decedent's wishes. The probate process can be time-consuming and expensive when there are disputes concerning the disposition of the estate.

One of the first questions asked of an estate planning attorney is how to avoid probate. Increasingly, wealth is being passed through annuitization (insurance, retirement plans, employee stock plans, annuities, etc.), which are outside the normal probate estate. In addition, legislatures are now allowing bank accounts held pursuant to survivorship rights to be treated like joint tenancy in real estate so they are not subject to probate. Probate may also be avoided by transferring most of one's property to others (beneficiaries) while one is still alive or by transferring it into a form of coownership (joint tenancy) with right of survivorship.

Trusts and Life Insurance

One of the most common methods of managing property during the later years with a view to continuing support of the survivors once the owner (trustor or settlor) has died is to establish a *trust*. The trustor retains control over the property during his or her ifetime, but on the death of the trustor the trust property is distributed to the designated beneficiaries without being probated.

One way to avoid large federal and state taxes is to set up a trust spanning one or more generations. For example, if a husband's property is placed in trust, his wife can avoid inheritance taxes by living on only the income from the estate after his death. When she

l dies, the estate either remains in trust or passes to the surviving children. In the former case, the children also avoid taxation; in the later case, the estate is now taxed. The appreciated property remaining in the estate is free of capital gains, and the estate tax is probably less than it would have been previously.

The purchase of life insurance as a way of protecting dependents from paupery in the event of the death of the insured did not become popular in the United States until the mid-19th century. Today, however, it is a multibillion dollar business. There are many types of life insurance, including term life insurance, universal life insurance, and variable life insurance. Premiums are lowest for a term policy, which is in effect for a fixed number of years (5, 10, etc.) with the premiums increasing as one ages. Group policies, in which the amount of the premiums depends on being a member of a particular employment or other group, are typically less expensive than individual policies. Unlike term insurance, universal and variable life policies include investment opportunities. *Universal life* is most flexible, not only for its investment possibilities but also because the premiums may be increased or decreased depending on the coverage on one's life. *Variable* life also includes opportunities for purchasing stocks, money market shares, and other investments, but the amounts of the premiums and life coverage do not change.

It is important to study the terms and conditions carefully before taking out an insurance policy on one's life. For example, the accidental death benefit will depend on whether the contract contains a double-indemnity clause; if so, then twice the face value of the policy is paid in the event of accidental death. If death occurs in an employment context, the beneficiaries are also entitled to workman's compensation death benefits. When death is caused by suicide, accidental death benefits are void. When death is due to homicide, the offender loses all rights to the decedent's property to which he or she might otherwise have been entitled. Even when the death is accidental, if it is proven to be the result of negligence, the negligent person may be held accountable for damages to which the deceased would have been entitled if he or she had lived.

In recent years, a great deal of attention has been paid in the media and elsewhere to *viatical* insurance settlements, whereby an investor purchases an interest in a life insurance policy on someone who is terminally ill. The seller receives a specified amount of cash for his or her medical bills and other current needs, and when the seller dies the investor gets the death benefit of the policy. The arrangement may be either one in which the seller receives a lump sum, say 70% of the face value of the policy, or a certain amount each month for as long as he or she lives. Depending on how long the seller lives, either arrangement can be profitable to either the seller or the investor.[34] However, complaints from investors that insured persons are living longer than the life expectancies represented to them are not uncommon.

[34]A similar arrangement is made in a *home equity conversion,* in which the value of a person's home, after subtracting any mortgage, is converted to cash to meet the person's living expenses. One type of home equity conversion is a *reverse annuity mortgage,* in which a person age 62 or over turns the equity in his or her home into cash without having to move. The owner receives regular monthly payments for 3–10 years or as long as he or she lives in the home. The loan is not repaid until the owner dies or sells the home, so he or she can remain there as long as desired, using the home as collateral for the loan. In a *sales leaseback* plan, the owner sells the home and leases it back from the purchaser for an indefinite period of time, now becoming a renter in what was previously his or her own home and therefore not responsible for taxes, repairs, maintenance, or property insurance.

SUMMARY

The major legal issues pertaining to death are determining when death occurred and what caused it, taking or shortening human life for medical or legal reasons, and disposing of the decedent's property. The various legal procedures associated with death and dying are designed to protect people from untimely death and improper burial and to make certain that estates are disposed of according to the decedent's wishes.

The concept of brain death is now accepted in may states, but the definition of death as the cessation of all vital functions still applies in others. All states require a death certificate that contains identifying data and information on the time and cause of death; the death must be registered and a burial permit issued after the death certificate is completed. Special legal problems occur when a death is not natural, that is, when it is due to accident, homicide, suicide, or undetermined cause. In such cases, the coroner or medical examiner may decide to conduct an autopsy to determine the cause of death.

It is estimated that over a million abortions are performed annually in the United States. When performed after the 12th week of pregnancy, abortion becomes increasingly hazardous to the health of the mother. Opposition by the Roman Catholic Church and other organizations has made induced abortion illegal in most Western countries, but there are virtually no restrictions on performing abortions in certain Eastern European countries, Russia, and China. In the United States, abortion has been the subject of intense debate between pro-life and pro-choice groups over the past 2 decades.

Euthanasia, or mercy killing, may be voluntary or involuntary and active or passive. The debate over euthanasia has centered on voluntary euthanasia (with the person's consent) of the active or passive sort. Despite strong religious opposition, public approval of euthanasia—especially passive euthanasia—has increased during recent years. The Roman Catholic Church now accepts passive euthanasia as morally defensible under certain circumstances, for example, turning off the respirator in the case of irreversible coma. Most states have passed natural death acts pertaining to medical responsibilities and procedures with regard to terminal patients, but the wording of these laws is not always legally or medically clear.

Since 1976, approximately 550 people have been executed in the United States, the great majority for murder. Seventy-one percent of them died by lethal injection and 26% by electrocution; the remainder were gassed, hanged, or shot. The several thousand persons on the death rows of this nation live in an environment characterized by some observers as legalized torture.

The United States is one of the few Western nations that have not abolished the death penalty, although much care is now exercised to make certain that prisoner's legal rights are not violated. Proponents of capital punishment maintain that it serves its purposes of retribution, general deterrence, and prevention. The results of research on the effects of capital punishment, however do not support this assertion.

The last will and testament has changed from a primarily religious document in the Middle Ages to a legal document for family and estate management. Wills are usually written and witnessed by two persons, but oral and unwitnessed wills are legal under certain conditions. Questions concerning the authenticity or conditions of a will must be resolved in a probate court.

There are two kinds of death taxes, estate and inheritance, either or both of which may be assessed by state and federal governments. Setting up a trust and/or giving property to a foundation are ways of avoiding large estate taxes. A person can avoid death taxes on a certain amount of money while still alive by giving the money to a number of individuals, although gift taxes are assessed when the amount becomes large. Preparing a will and being knowledgeable about death taxes are essential to estate planning, but planning for death should obviously go beyond estate planning.

QUESTIONS AND ACTIVITIES

1. Suppose that a close relative or friend of yours was dying from a painful, incurable illness and asked you to help him or her die. What would you say or do? Under what conditions, if any, would you be willing to help the person die? If you denied the request, what arguments would you make to encourage the person to give up the self-destructive thoughts and go on living?

2. Design a questionnaire or rating scale to measure student attitudes toward abortion and euthanasia. Administer your questionnaire to a dozen students and summarize the results.

3. Administer the following questionnaire to six male and six female students. Analyze the differences in the responses of the two sexes.

Attitudes Toward Capital Punishment

Directions: Indicate your degree of agreement or disagreement with each of the following statements by writing *SA* (Strongly Agree), *A* (agree), *U* (undecided), D (disagree), or *SD* (strongly disagree) in the marginal dash.

__ a. I am in favor of capital punishment for the crime of murder.
__ b. I am in favor of capital punishment for the crime of rape.
__ c. I am in favor of capital punishment for the crime of arson.
__ d. I am in favor of capital punishment for the crime of armed robbery.
__ e. I am in favor of capital punishment for terrorism.
__ f. Killing another person while driving under the influence of alcohol is deserving of capital punishment.
__ g. Committing a murder for $100,000 is deserving of capital punishment.
__ h. A killer who is guided by a radical ideology, such as the Zebra killers in the San Francisco Bay Area, deserves capital punishment.
__ i. A person who commits murder when he is 15 years old or younger deserves capital punishment.
__ j. A person who obeys the voice of God commanding him to kill his neighbor deserves capital punishment.

4. Take and defend a position on capital punishment. Cite specific research findings and logical arguments to support your position.

5. What is the legal status of (a) abortion, (b) euthanasia, and (C) capital punishment in the United States at the current time? Cite specific legislation to support your assertions in each case.

6. Not only epitaphs, but also wills have stimulated the poetic muse in some people. Consider the following poetic will:

I cherish life and have such fun
That I would hate to leave.
But death must come to everyone,
And all loved ones must grieve.

So now before my time is through,
I make this last bequest.
I hope that it will comfort you
When I have gone to rest.

The total of my property
To my dear wife should go.
Whatever else belongs to me,
I will as said below.

I leave my love to all the earth,
My body to the sod,
And finally, of greatest worth,
I give my soul to God.

Try writing your own will in poetry, either rhymed or free verse.
Before you begin the actual writing of the will, make an outline of what you wish to include in the will. After you have completed your will, date it, sign it, and have it signed by two witnesses.

7. What are some reasons for making a will, what procedures should be followed, and what should be included in it? How can a will be broken, under what conditions is awill considered invalid, and how is a will probated?

8. Arrange to visit an estate attorney's office and discuss his or her professional activities and experiences. What sort of training does an estate attorney need and what does he or she need to know? What rewards and other sources of satisfaction are to be found in this type of work?

9. Web exercise: Though not as controversial as abortion, euthanasia has its own polarities—pro and con, and, as with abortion, it has legal, medical, social, and religious aspects. The following three web sites present various positions on the euthanasia issue: Hemlock Society *(www.hemlock.org),* International Anti-Euthanasia Task Force *(www.iaetf.org),* and Oregon Death With Dignity Legal Defense and Education Center *(www.oregondwd.org)*. Log on to these three sites and review the material presented. Note that the first and third sites are more or less pro-euthanasia, and the second site anti-euthanasia. After examining this material, state and defend your own personal position regarding euthanasia.

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PART IV

HUMAN DEVELOPMENT AND DEATH

8
CHILDREN AND DEATH

TOPICAL OUTLINE OF THE CHAPTER:

Death in childhood
- *Changing mortality rates*
- *Sudden infant death syndrome (SIDS)*
- *Maternal mortality*
- *Correlates and causes of child mortality*

Children's conceptions and fears of death
- *Stages of development*
- *Effects of culture and experience*
- *Death concepts in infancy and childhood*
- *Children's games and sayings about death*
- *Death concepts in adolescence*
- *Children's fears of death*
- *Adolescents' fears of death*

Fatally ill children
- *Family reactions to the death of a child*
- *Helping fatally ill children and their parents*

Death of a parent
- *Children's grieving*
- *Persisting psychological reactions*
- *Coping with the death of a parent*

Death education
- *Educating children and adolescents*
- *Educating college students and adults*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *Are today's children more or less familiar with death than children in previous generations, and what factors account for any differences?*
- *How do children's conceptions and feeling about death change as they grow older?*
- *What are the causes and correlates of fears of death in children and adolescents?*
- *How do death rates and causes vary as a function of age in childhood and youth?*
- *What are the effects of terminal illness on the understanding and feelings of dying children and their families?*
- *What counseling techniques are employed by health professionals who work with dying children and their parents?*
- *What effects does the death of a parent have on a child!*
- *How does death education, both formal and informal, vary with the age and background of the student?*
- *What is the recommended structure of a curriculum in death education at the grade-school level?*

Childhood is supposed to be a happy time, a time when one's thoughts and feelings are focused on living, learning, and having fun. Consequently, *children and death* may appear to be an unkind, or at least an unfortunate, combination of words. Death is seen as a more appropriate companion of old age than of childhood. Children in many industrialized societies today seem to be less knowledgeable about death than sex—the opposite of what was true for children of yesteryear. Another way of expressing this distinction is that today's children know more about the beginning than the end of life. The assertion that today's children are less familiar with death than those of yesteryear is, however, not necessarily true of children living in certain countries and cultures. In recent years, children in a number of European and African countries that have been ravaged by war and famine have become all too familiar with death and dying. Even in highly industrialized countries such as the United States, children may be exposed to violence and death in the schools, in the streets, in the skies, and on the highways.

Death was no more welcome in previous generations than it is now, but it was no stranger. Yesterday's children lived with death, and it was rare for one to reach adolescence without having witnessed the death of a sibling, a grandparent, or another close relative or friend. Death was a common occurrence in children's lives, and a part of their practical and religious education.

Another reason why children of today are less knowledgeable about the dying process than children in previous generations is that dying has become less public. In former times, people died at home, surrounded by family members and friends; now they are more likely to expire in antiseptic, electronically equipped hospitals or nursing homes. Consequently, children are spared the unpleasantness and, unfortunately, the growth experience of observing the death of a grandparent or other relative. The relative has "passed away," "departed," "left us," "gone away" or "gone to Heaven" often without saying goodbye.[35] Even dead animals are something to be disposed of quickly before children become aware of it and begin asking disturbing questions.

The isolation and rapid disposal of the dead has been interpreted by thanatologists as indicative of a denial of death that was ushered in with the 20th century (Aries, 1960/1962). Death became what sex was in Victorian times—an unavoidable process that was unsuitable for public viewing or discussion. In a turnabout from the Victorian era, modern children are permitted to ask questions about where they came from but not where they are going.

Unlike previous times, special efforts are now often made to isolate children from the dying process and exclude them from participating in funerary rites. Children are typically seen as fragile, impressionable young creatures who cannot cope with death and might very well be traumatized by it. Even discussing death with children, a process that usually makes adults uncomfortable, is taboo in many families.

There are indications that, after almost a century of denying death and attempting to isolate young people from it, a different social attitude is emerging. During the past few decades, research on topics such as the development of ideas and feelings about death, the effects of terminal illness in children on both the child and the family, and the effects on children of the loss of a parent has provided information and guidelines for death education and counseling.

[35]The use of such phrases may only encourage the beliefs of children that a dead person will return. Grollman (1990, p. 39) tells the story of an elementary school teacher who told her class that she was sorry to report that "we lost Mrs. Thompson." The response of one sympathetic child was "Don't worry; we'll find her."

DEATH IN CHILDHOOD

At the beginning of the 20th century, death was almost as common in infancy as in old age. Childhood diseases such as measles, mumps, and chicken pox, that are now viewed as little more than passing inconveniences, sometimes killed children in epidemic numbers. In addition, many children who escaped death from some contagious disease in infancy or early childhood became orphans when one or both of their parents succumbed. Because children's lives were so uncertain, parents and other members of a family were frequently reluctant to let themselves become too attached to a young relative; by today's standards their reactions to the death of a child might seem unfeeling. The fact that families were larger, often with a dozen children or more, tended to soften the blow when a family member died.

Changing Mortality Rates

During colonial times an estimated one-third of all children born in New England died before they had reached their 10th birthday (Stannard, 1977). In 1900, an average of 162 out of 1,000 U.S. infants died—a rate that had dropped to 30 in 1,000 by 1950 and to 7 in 1,000 by 1997. In the late 1990s, only slightly over 1% of the total number of deaths in the United States occurred in infancy, and less than 2% of all deaths occurred before age 15 (Hoyert et al., 1999). For this reason, this generation of U.S. children has been labeled as the first "death-free" generation in history. This characterization is obviously not quite accurate even when applied to the more developed nations of North America and Europe, and it is certainly incorrect when extended to children in other parts of the world. In many African countries, in particular, the infant mortality rate is more than 10 times what it is in the United States, Canada, and Northern and Western Europe (see Fig. 8.1).

Mortality rates for young Americans have declined dramatically during this century, but even in highly industrialized nations thousands of children still die every year. During 1997, an estimated 28,045 infants, 5,501 children in the 1–4 year range, and 8,061 children in the 5–14 year range died in the United States (Hoyert et al., 1999). However, the infant mortality rate of 7.2 per 1,000 live births in 1997, compared with 7.3 in 1996, was the lowest rate ever recorded in this country.

The major causes of infant mortality in the United States are listed in Table 8.1. Nearly half the infant deaths in 1997 were attributable to three causes: congenital anomalies, disorders relating to short gestation and unspecified low birth weight, and sudden infant death syndrome. Thousands of children also died at or even before birth.

Congenital anomalies in internal body organs and tissues, the leading cause of death in infancy, are often treatable, but the cost of infant care in an intensive care unit is generally quite high. Because a large percentage of infants treated in these facilities survive, the high cost is usually considered justified. However, whether to continue the intensive care or to give up is not always an easy decision for parents. Not only are the medical bills a strain on a typical family budget, but the child (and the family) may be forced to endure a severe physical handicap for life.

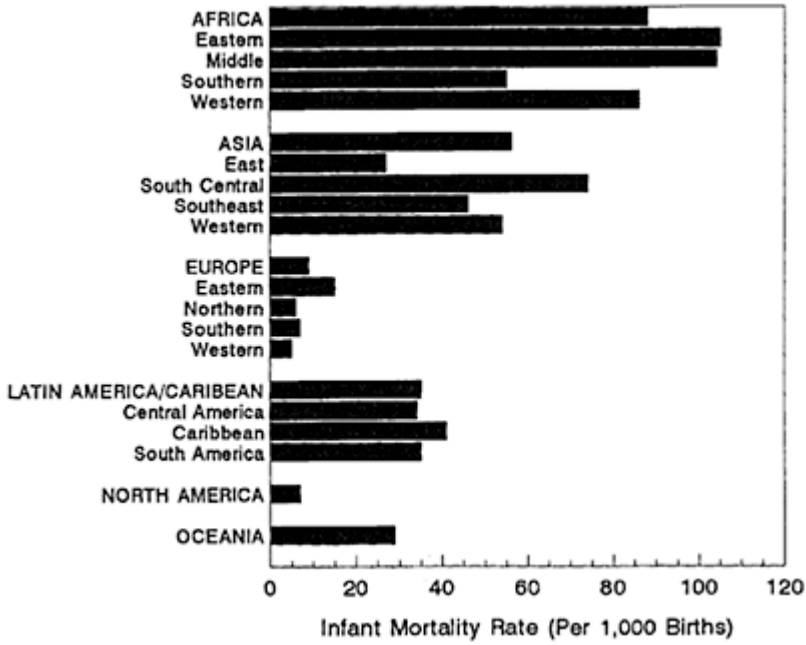

FIGURE 8-1 Infant mortality rates throughout the world

(based on data from Population Reference Bureau 1999).

TABLE 8.1 Major Causes of Infant Mortality in the United States in 1997[a]

Cause of Death	*Death Rate*[b]	
	Whites	*Blacks*
Congenital anomalies	156.3	187.5
Disorders relating to short gestation and unspecified low birth weight	67.6	290.5
Sudden infant death syndrome	64.0	153.0
Respiratory distress syndrome	26.7	74.2
Newborn affected by maternal complications of pregnancy	26.0	69.8
Newborn affected by complications of placenta, cord, and membranes	20.8	48.7
Accidents and adverse effects	16.8	36.8
Infections specific to late prenatal period	10.4	39.7
Pneumonia and influenza	8.6	23.5
All causes, under 1 year	603.4	1,416.2

[a]Hoyert, Kochanek, & Murphy, 1999. [b]Per 100,000 births.

Sudden Infant Death Syndrome (SIDS)

SIDS, also known as *crib death,* has received a great deal of public attention during the past few years. In this condition, which has existed for thousands of years, a sleeping infant simply stops breathing. Such sudden deaths in infants have often been thought to be caused by the sleeping mothers lying on the infant, an early example of which is found in Kings 3:19: "During the night this woman's son died because she lay on him." However, this is not a valid explanation for SIDS.

SIDS is rare during the first month after birth, increases gradually to a peak at about 10 weeks, and then declines until it becomes rare again after 6–8 months (Hines, 1980). It is more common during the winter and spring, among poor, Black, teenage mothers, and mothers who smoke and use alcohol and drugs. A variety of theories, including heart defect, viral infection, and elevated levels of thyroid hormone have been proposed to account for SIDS. Problems with respiration, heart functioning, and sleep have also been explored as possible causes of SIDS. A consensus of research studies indicates that SIDS is the result of a chronic abnormality originating before birth and involving control mechanisms that regulate basic body functions.

A susceptibility to SIDS is often detectable from observing the sleeping, crying, sucking, breathing, swallowing, and cuddliness of the infant. Infants who are prone to SIDS tend to be below-average in alertness, as measured by an Apgar test administered a few minutes after birth. Newborns whose Apgar scores indicate that they are at risk for SIDS can be connected to an apnea/bradycardia monitor, which sounds an alarm when breathing stops for 15–20 seconds or the heart rate drops below a specified level. To help validate the alarm signal, the monitor should also record the infant's breathing and heart pattern whenever the alarm is activated. In addition to knowing how to use the monitoring equipment, parents need to be able to perform CPR in case the infant's breathing or heart beat stops.[36]

Maternal Mortality

Occasionally associated with death of the fetus or newborn is death of the mother due to complications during pregnancy, childbirth, or the postchildbirth period (the *puerperium*). Like infant mortality, the maternal mortality rate has declined steadily during the current century. The overall maternal mortality rate in the United States in 1997 was 8.4 deaths per 100,000 live births. It was over 3.5 times as high for Black women (20.8) as for White women (5.3; Hoyert et al., 1999).

Correlates and Causes of Child Mortality

As shown in Fig. 8.2, the rate of death for children under 1 year of age in the United States is related to gender; the rate for boy babies (800 per 100,000 in 1997) was higher than that for girl babies (650). Infant mortality is also related to ethnicity, a demographic

[36]Further information on SIDS can be obtained from the American Sudden Infant Death Syndrome Institute and the SIDS Alliance (see Appendix B for addresses and telephone numbers).

variable associated with health and prenatal care. The 1997 death rate for Black children under 1 year of age (1,420) was over twice that for White children in the same age category (600; Hoyert et al., 1999).

The death rates for the 10 leading causes of death in children are plotted for three age groups in Fig. 8.3. Many of these fatal disorders are chronic conditions involving a long period of home care and hospitalization before the child dies. Such disorders, which are referred to as *terminal* or *catastrophic* illnesses, usually demand a great deal of physical and emotional investment—not only by the patient but by the entire family. Extraordinary medical measures, such as liver and bone marrow transplants, maybe undertaken to arrest or retard certain conditions, but the financial cost often runs into hundreds of thousands of dollars. Because insurance companies often refuse to pay for experimental treatments, whether a child with a catastrophic illness lives or dies frequently depends on the affluence of the family or the generosity of other people.

The three leading causes of death in adolescence are accidents, homicide, and suicide, although cancer and cardiovascular diseases also claim their share of victims in this age category. The loss of an adolescent son or daughter, bright with promise and full of great expectations, can be particularly heartrending for a parent. The loss of a friend or sibling in adolescence can also place a heavy burden on a person and act as a damper on his or her enthusiasm and hope.

CHILDREN'S CONCEPTIONS AND FEARS OF DEATH

Despite the attitudes of many adults that children who think about death are abnormal in some way, death is a part of human experience and a subject of interest to normal children.

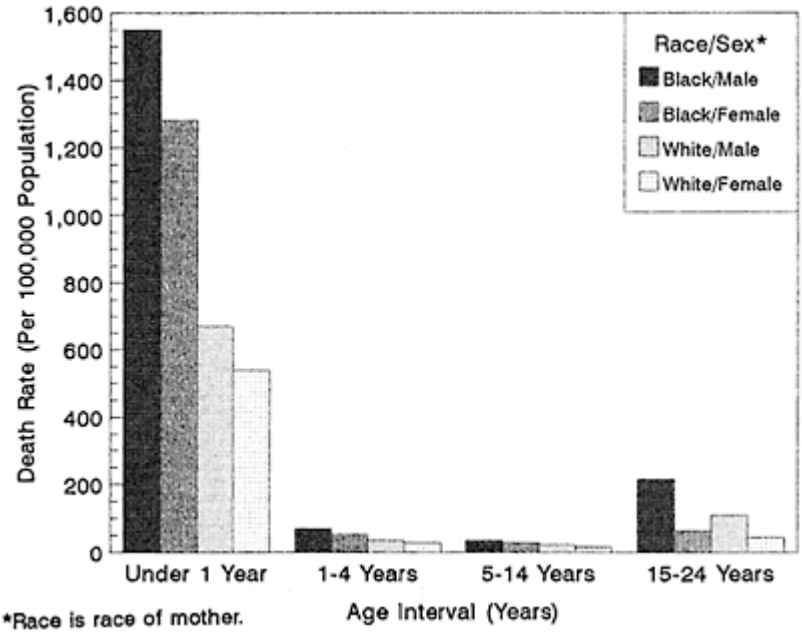

FIGURE 8-2 Death rates for U.S. children and youth, 1997

(based on data from Hoyert, Kochanek, & Murphy, 1999).

Parents cannot shield their children from death forever; it is encountered in nature, in the media, and in conversations with other children and adults. What parents can do is to deal with death and the child's questions about it in a natural manner suitable to the child's level of cognitive and emotional development. In general, children should be told the truth about a death as soon as possible, but only those details that he or she is capable of understanding and emotionally prepared to hear. Furthermore, children should be encouraged to talk about a death, to express their true feelings concerning it, and to tell other people about the loss. Parents and other close relatives and friends should be ready to answer a child's questions about the death, to encourage, but not force, the child to attend the funeral, and to take the child to the cemetery even when the deceased has already been buried (Canine, 1996; Shapiro, 1994). Because funeral rituals are an important part of the mourning process, older children in particular should be encouraged to participate in them (Grollman, 1990; Schaefer, 1988).

Stages of Development

Jean Piaget's stage theory has provided a starting point for much psychological research on the cognitive development of children, including their conceptions of death. A now classic study of the meaning of death to children was conducted by Maria Nagy (1948) with 378

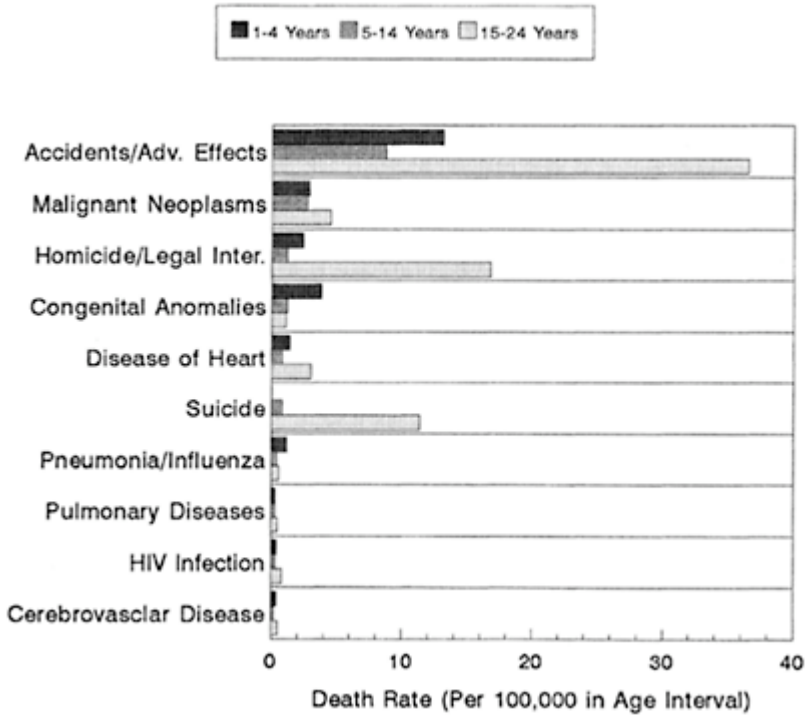

FIGURE 8-3 Rates for leading causes of death among U.S. children and youth, 1997

(based on data from Hoyert, Kochanek, & Murphy, 1999). Adv.=adverse.

Hungarian children aged 3–10 years. All of the children were questioned on their ideas about death, and those aged 6–10 also made drawings to represent those ideas. Following Piaget's theory of cognitive development (1936), Nagy found evidence for three stages in the growth of children's conceptions of death. Allowing for some overlap among the three stages and slight variations in the ages of onset of the stages, she concluded that the order of the stages and their age ranges are universal and invariant.

Most of the children in Nagy's (1948) first stage (ages 3–5) did not distinguish death from separation; they perceived death as a temporary rather than a permanent departure. People who died were believed to be asleep or on a journey from which they would awaken or return in time. To the preschoolers studied by Nagy, death was not a final or permanent condition; a dead person might come back to life at any moment. The person who was dead was seen as being less "alive" than a living person, but the deceased could still breathe, eat, and drink in the coffin or wherever he or she was.

The following excerpts are illustrative of the thinking of preschoolers:

> *Dead people don't get hungry—well, may just a little! (Kastenbaum, 1985, p. 629).*

> *[From a child's conversation with her 84-year-old great-grandmother]: 'You are old. That means you will die. I am young, so I won't die, you know…. But that's all right. Grandmother, just make sure you wear your white dress. Then, after you die, you can marry Nomo [great-grandfather] again and have babies.' (Kastenbaum, 1977, p. 280)*

In general, children under age 5 do not understand the finality or irreversibility of death, and may ask when the dead person will return. However, they can understand some aspects of its nonfunctionality: that dead people do not breathe, feel anything, eat, or go to the bathroom. They may also associate death with unrelated events, engage in "magical thinking" (e.g., "I made this happen, so it's my fault"), and believe that death is a punishment for bad behavior. They also understand that death makes people sad and that death is often connected with sickness and accidents. Older children in the first stage are capable of understanding that dead people may go from one type of existence to another, such as becoming angels.

Children in the second of Nagy's (1948) stages (ages 5–9) saw death as related to age (as did the child in the second quotation above); it is something that happens to old people. At this second stage, in which children are capable of concrete operational thinking, death is seen as irreversible but not necessarily inevitable or universal. Only bad people or those who have accidents die, and death can be outwitted if you are good, cautious, and fast. Therefore, one must be careful not to eat or drink too much, catch a disease, or get hurt. Children in this second developmental stage tend to accept the mortality of strangers before recognizing that the members of their family and even they themselves are also mortal. In Nagy's study, these children personified death as an angel, a bogy man (monster), or the death man. They also had difficulty understanding the difference between life and death. They were apt to view moving things as alive, whether or not those things moved by themselves, and nonmoving things as dead. Although they are beginning to understand that death is final, they may associate it with violent personifications such as skeletons, ghosts, or monsters that try to "get you." For the most part, however, 5- to 9-year-olds are concrete thinkers who search for natural explanations of events and are interested in the details of a death: how a person died, whether it is contagious, who is responsible for the death, and the like. For the most part, fairly short answers to the child's questions, such as the person's heart stopped or his body wore out. are sufficient. However, caution should be exercised in not giving well-meaning answers such as "He went to sleep and didn't wake up" or "God called him to heaven," lest the child worry that he or she won't wake up or will be called to heaven too soon.

By Stage 3 (ages 10 and above), the children studied by Nagy (1948) had developed a more realistic, adultlike view of death. This stage overlaps Piaget's (1966) stage of formal operations, and the beginnings of abstract thinking ability. To children in this age range, death was the real, inevitable, and irreversible destruction of body life—a fate that is yours even if you're careful. The conversation in Box 8.1 reveals the more mature level of questioning and thinking about death in a Stage-3 child. A 10-year-old girl and her father are discussing the death and cremation of their pet dog, which took place while the child and her brother were away at camp. Children of this age see death as a biological process that is final and universal.

BOX 8.1 Conversation Between a Father and His 10-Year-Old Daughter

Daughter: Daddy, Ken [her brother] and I were talking—why did you and Mommy spread Jumblie's ashes without us?
Father: Well, you and Ken were at camp, so Mommy and I thought we should go ahead and do it.
Daughter: What were the ashes in?
Father: They were in a jar.
Daughter: All of them?
Father: Yes, all of them.
Daughter: Well, how big was the jar?
Father: It was round like a bottle and about six or eight inches high.
Daughter: But where was *Jumblie*?
Father: The ashes were all that was left of Jumblie after he was cremated.
Daughter: But what about his bones?
Father: They were all burned down to ashes.
Daughter: But what about the rest of him? What about his ears?
Father: Everything was burned to ashes.
Daughter: Daddy, are you and Mommy going to have your ashes spread out on the dunes when you die?
Father: I think so—that's our plan for now. What do you think of that plan?
Daughter: I don't know. Who will spread them?
Father: Well, it depends on who dies first—whoever dies first, the other will spread them, and maybe you and Ken.
Daughter: But what if you die together?
Father: Then I guess you and Ken will spread them. But that isn't very likely. Anyhow, we don't plan to die for a while.
Daughter: Daddy, do you believe that when you die you are reborn again?
Father: No, dear, I don't. I believe that when you die, that's the end.
Daughter: I don't think Mommy believes that.
Father: Well, maybe not. But that's what I believe.
Daughter: Then how could it be the *end*? You must feel *something*.
Father: No, not after you're dead.
Daughter: But what happens to *you*?
Father: Well, when you die, there is only your body left—not really you—and you can't feel anything at all anymore.
Daughter: Does it hurt?
Father: Not after you're dead.
Daughter: But you can still *dream,* can't you?
Father: No, not after you're dead. You can't dream either. You just don't have any feeling at all. That must be pretty hard to understand, isn't it?
Daughter: Yeah it is.
Father: Well, even adults like us have a hard time understanding it.

Note. From *The Broken Connection: On Death and the Continuity of Life* (pp. 70–71), by Robert Jay Lifton, 1979, New York: International Creative Management. Copyright 1979 by Robert Jay Lifton.

Effects of Culture and Experience

As with the Piagetian stages of cognitive development, not all children of a given chronological age fit neatly into the stages prescribed by Nagy's (1948) schema. Culture, social class, and other experiences have significant influences on the development of conceptions of dying and death. For example, a study of the death concepts of 6-to 16-year-old American children (Koocher, 1974) failed to find the extensive personification of death reported by Nagy. Instead, the children in this investigation were inclined to use specificity of detail as a means of mastery and control over death. The results of another study indicate that children in the United States also understand the biological basis of death at an earlier age than Nagy's participants (Childers & Wimmer, 1971; Melear, 1973).

Nagy's (1948) conclusion that an appreciation of the finality, universality, and biological nonfunctionality of death is related to chronological age has been supported by subsequent investigations (e.g., Speece & Brent, 1984, 1987; E.White, Elson, & Prawat, 1978). As they grow older, school-age children come to understand the concepts of irreversibility, the cessation of biological functions, and the universality of death. Still, there are large individual differences in the chronological ages at which children comprehend these concepts; the way in which they conceptualize death is more closely related to their cognitive maturity than to their chronological age (Koocher, 1973; Speece & Brent, 1984).

Nationality differences are obviously not the only cultural factor that can affect ideas about death. Social-class differences within the same country are also influential. Lower class American children are more likely to associate death with violence, whereas middle class American children show a greater tendency to associate death with disease (McIntyre, Angle, & Struempler, 1972; Tallmer, Formanec, & Tallmer, 1974). In addition to cultural differences, specific experiences in the family, such as the death of a pet, affect a child's knowledge and feelings about death and dying.

From her work with terminally ill children, Bluebond-Langner (1978) found that all views of death can be expressed at any stage of development. The particular view expressed by a child of a given age depends more on the psychosocial stimulation and concerns he or she is experiencing at the time than on the child's chronological age or intelligence. In particular, children who have lost family members or have had direct experiences with death tend to have a more mature understanding than children without such experiences.

Death Concepts in Infancy and Childhood

One of Nagy's (1948) conclusions that has been extensively criticized is that infants and toddlers have no conception of death. The observations of several researchers (Anthony, 1972; Fraiberg, 1977; Maurer, 1966; Pattison, 1977) suggest that rudimentary

conceptions of death begin to form as early as the first year of life. An infant's awareness of dichotomous states such as here-gone (as in the game "peek-a-boo" or in separation from the mother), sleeping-waking, and other alternating internal states become the basis for object constancy and distinguishing between "me" and "not-me." The infant's experiments with states of being and nonbeing, as in peek-a-boo, are believed to provide a conceptual foundation for later thinking about death. Children below the age of 2 certainly show distress when one of their principal caretakers is suddenly gone. According to Wass and Stillion (1988), separation anxiety in infants is closely related to death anxiety in young children.

Anthony (1972) maintained that observations of the growth and deterioration of things, the unidirectional nature of time, and the many linguistic references to death also play a role in a young child's understanding of death. Death associations also develop when children react to the emotions of adults and the changed atmosphere of the home when someone has died. Thus, psychologists have concluded that children often perceive and understand more about death than they are capable of expressing to researchers such as Maria Nagy.

Children's Games and Sayings About Death

Traditionally, death has been a common theme in the play and fantasies of children. Peek-a-boo, which is derived from an old English word meaning "dead or alive," is only one of many games that have presumably helped young children throughout history to develop the concept of being versus nonbeing. Other popular children's games that may help instill this concept are "hide-and-go-seek," "I spy," and "ring-around-a-rosy." The chant "Ashes, ashes, all fall down" in an older version of ring-around-a-rosy reportedly came from the reactions of children during the Middle Ages to the Black Plague. The children's prayer,

Now I lay me down to sleep,
I pray the Lord my soul to keep.
If I should die before I wake,
I pray the Lord my soul to take.

is also a holdover from a time when many children died at night and parents were often fearful that a young son or daughter would not be alive in the morning. Unfortunately, this prayer may serve no better purpose than to frighten young children needlessly. With this in mind, one objector (Pardi, 1977, p. 119) recommended changing the last two lines of the prayer to the following:

Thy love guard me through the night,
And wake me with the morning light.

Children's stories in the 18th and 19th centuries were replete with warnings of hell and damnation and with frightening little verses of the following sort taken from the *Oxford Nursery Rhyme Book* (Opie & Opie, 1960, p. 20):

Baby, baby, if he hears you,
As he gallops past the house,
Limb from limb at once he'll tear you,
Just as pussy tears a mouse.
And he'll beat you, beat you, beat you,
And he'll beat you all to pap,
And he'll eat you, eat you, eat you,
Every morsel, snap, snap, snap.

Certain other sayings (and jokes) quoted by children may actually help them to cope with the idea of death. The common threat of the elementary child that "I'll kill ya"is a case in point, having the effect of putting the child rather than death in control. Unfortunately, the entertainment media, with their commercially reinforced dedication to themes of violence, often serve to anesthetize the child to death while stimulating cruelty and criminal behavior.

Death Concepts in Adolescence

The death concepts of children vary with both cognitive development and life experiences, which change from childhood to adolescence. Maria Nagy (1948) did not carry her research beyond 10-year-olds, but other investigators have questioned older children, adolescents, and adults concerning their ideas and feelings about death. As do younger children, adolescents are likely to view death as something that happens to old people. It is a distant, abstract event, although sometimes tinged with romance and indescribable peace and beauty. Adolescents may characterize death as darkness, light, a transition state, or nothingness (Wenestam & Wass, 1987). They come to accept it as something that happens eventually to everyone, but, with respect to themselves, death tends to be associated with fate or violent circumstances (Ambron & Brodzinsky, 1979). In addition, the natural self-centeredness of adolescents may support the belief that they are exempt from mortality.

Preadolescents and younger children have fairly simple beliefs about life, death, and the hereafter. Those with strong religious beliefs are more likely to think about heaven, hell, and the afterlife, but religious doubts are also more common at this age (Hogan, 1970). However, adolescents do not necessarily accept the finality of death. In fact, the 7- to 9-year-olds questioned in one study accepted the finality of death more readily than the adolescents (McIntyre et al., 1972). Like their older contemporaries, adolescents may come to believe in reincarnation, the transmigration of souls, or some kind of spiritual survival on earth on in another location (Wenestam & Wass, 1987).

Prepubertal and adolescent children may also ask detailed questions about a death and even say outrageous things or make jokes about death in order to get attention and

impress their peers and adults. Teenagers frequently take chances, and they may risk death in order to conquer it and thereby prove their invincibility or immortality. J.Johnson (1998) noted that despite what may seem like inconsiderate, uncaring behavior, bereaved teenagers often need help in handling their grief when someone dies. Adolescents can think abstractly about death and are more adultlike in their attitudes toward it, but they are still not grown-ups and may regress to earlier behaviors when under stress.

Children's Fears of Death

Cursory observations of the behavior of a typical young child show that separation from the mother or other nurturing person causes the child to respond in a fearful manner. As noted previously, many researchers believe that the fear produced by such separations lays the groundwork for later fears of death (Imara, 1998). A very young child probably does not remember being separated from its mother, but frequent or prolonged separations at a critical stage of development can lead to a high level of anxiety, depression, and emotional overactivity in the child (Fraiberg, 1977).

Depending on their stage of development, most normal children are afraid of some things (e.g., being sucked in by a vacuum cleaner or bathtub drain), but they are not generally fearful nor intensely afraid of a specific object or situation. Children do not normally develop a pathological fear of death *(thanaphobia);* they do not dwell on the topic, but they can handle it. On the other hand, many emotionally disturbed children are abnormally afraid of death, among other things. And many of the fears of these children are related to the more general fear of separation from family and friends and of being alone. Fears about death may also include fear of the dying process and destruction of the body, fear of what may happen when one dies, fear of God or spirits, fear of judgment and finality, and even the fear of being forgotten (National Organization for Victim Assistance, 1996).

Fears of dying and death are usually associated with other problems in the child's life. These problems are influenced by the child's experiences, particularly those occurring in the home situation. Physical separation from the parents through death or divorce, and emotional separation through lack of understanding and outright rejection of the child, are important home-related factors in emotional disturbances during childhood. One symptom of severe emotional disturbance in children is death anxiety. Unlike the leveling off of death anxiety that occurs in emotionally healthy children as they become older, death anxiety in emotionally disturbed children tends to increase steadily with age (Von Hug, 1965). The level of death anxiety is also related to the self-perceptions of children, in that children with better self-concepts tend to be less anxious about dying than those with poorer self-concepts (Wass & Scott, 1978).

Parents are important in other ways in the development of children's attitudes and feelings about death. By means of the identification process, fearful parents tend to produce fearful children—just as suicidal parents are more likely to produce suicidal children (Templer, Ruff, & Franks, 1971). On the other hand, the children of adults who approach the topic and actuality of death in a calm, accepting manner tend to be less afraid of it. The conversation in Box 8.2 is an illustration of a rational parental approach to a young child's concerns about death.

It is recommended that adults be natural but thoughtful in answering a child's questions about death, trying to see beneath the surface of the questions and responding in words the child understands. However, it is not advisable to lie to the child by professing beliefs that one doesn't actually possess (Gordon & Klass, 1979).

BOX 8.2 A Conversation Between a Preschooler and Her Mother

Child (4½ years old): Mummy, what means a dead mother?
Mother: A woman who has died and does not walk or talk anymore.
Child: But what will the children do?
Mother: Well, if a mother should die, the father would take care of them and maybe an aunt.
Child: Will you be a dead mother some day?
Mother: Why yes, though I don't expect to be for a long time.
Child: A very long time?
Mother: Yes.
Child: But I don't want you to die; I want you here like this.
Mother: Well, you will probably be quite grown-up before that happens.
Child: A long time?
Mother: Yes.
Child: But what means dead, mummy?
Mother: Well, your heart stops beating and you lie still without breathing.
Child: And what do you do with the talking part—you know, the inside talk?
Mother: I'm not sure, but some people think you live in another world and, of course, some don't.
Child: I guess we do [excitedly]. Yes! And then you die in a long, long time—a very long time, and then I die and we both hug each other and then you won't have any wrinkles….

Note. From *The growth of children's concepts of time, space, and magnitude,* byM. M.Rust, n.d. (Unpublished manuscript), Teachers College, Columbia University, New York.

Euphemisms such as "gone away" or "gone to sleep," rather than "dead" to explain what happened to a relative are also confusing to young children. Saying that grandmother is "in heaven with the angels," where she is "watching over you" is especially inappropriate if the parent does not believe in these things. Furthermore, the child might not like to have grandmother watching all the time, observing not just the good things but also the bad things that the child does.

Adolescents' Fears of Death

Like their younger counterparts, emotionally healthy adolescents are able to cope with death more effectively than adolescents who have emotional problems. Maurer (1964)

found that adolescents who were low academic achievers, for example, had stronger fears of death than those who were higher achievers; the former also showed greater separation anxiety and were more likely to believe in ghosts. Poor academic achievers also usually have lower intellectual ability than high achievers, so lower achievement and greater fearfulness on the part of poor achievers may both be due to lower ability. A significant negative relationship between mental ability and fear of death is also suggested by the findings in a study of preadolescents (ages 11–12). Children with college-educated fathers manifested less fear of death, although they theorized about death and verbalized thoughts concerning it more than children whose fathers had only a high-school education (Wass & Scott, 1978).

Children whose parents have prepared them for the changes and challenges of adolescence can cope more effectively with the problems of identity and status that characterize this period of development. Needing to maintain the illusion of invulnerability, adolescents usually reject thoughts of death. Denial of one's death, except as an abstract event in the distant future, is a mental mechanism used by both children and adolescents to defend themselves against the fear of death. Unfortunately, such denial may result in an attitude of invincibility and a tendency to take unnecessary chances by driving recklessly, experimenting with drugs, and engaging in other adventurous but dangerous behavior.

Rapid physical and psychological changes during adolescence also tend to increase anxiety levels. Adolescent girls who have not been informed about the physical changes of puberty, for example, may imagine that they are dying when they first begin to menstruate. And media talk about nuclear war and other cataclysmic events may lead adolescents to believe that they will never grow up, never get jobs, and never marry or have children (Caldicott, 1982). So, says the adolescent, why not "live it up" while I still can, regardless of the consequences, for tomorrow I may be dead? Unfortunately, such an attitude often leads to irresponsible, inconsiderate behavior and even violence.

FATALLY ILL CHILDREN

On the basis of Nagy's (1948) research with normal children, the assumption was made at one time that the majority of fatally ill (dying, terminally ill) children, and especially those below the age of 4–5 years, have no real understanding of impending death. It was obvious that fatally ill children were made anxious, depressed, and even angry by the pain, other symptoms, and treatments connected with their illness and by the social separation of hospitalization, but so were children whose illnesses were not terminal (Yudkin, 1967). However, the results of later studies revealed that fatally ill children are made even more anxious than other sick children by hospitalization and the treatments associated with it (Spinetta, Rigler & Karon, 1973; Waechter, 1971).

BOX 8.3 Death of a Child

Dear little child, who never grew
Beyond the age of five,
I wish I could have died for you

And you were still alive.
I loved you so and loved each day
When you and I were near,
I never thought that I would stay
And you would not be here.
But I survive and dream about
The times that used to be.
How hard it is to live without
Your sharing life with me!

In one investigation, fatally and nonfatally ill children between the ages of 6 and 10 years were administered an anxiety inventory and asked to make up stories about pictures shown to them (Waechter, 1971). The fatally ill children scored significantly higher on the anxiety inventory and told more stories associated with dying than did nonfatally ill children. Many of these stories expressed concerns about mutilation or loss of body functioning. Subsequent observations (Waechter, 1984) confirmed the finding that dying children have higher levels of anxiety—about death, mutilation, separation, and loneliness—than do healthy or chronically ill children whose deaths are not imminent. Similarly, Spinetta et al. (1973) found that children with leukemia were more anxious than other chronically ill children about being injured or the inability to function normally, even when both groups had received the same number and duration of medical treatments.

The nature of the anxiety or fear experienced by a fatally ill child varies with the chronological and mental age of the child. Spinetta (1974) found that what dying preschool (3–5 years) children feared most about death was separation from their parents, grandparents, and playmates. Children of this age are primarily afraid of being left all alone or abandoned, and are comforted by frequent attention and reassurance that Mommy and Daddy will never leave them. In contrast, the 5- to 9-year-olds in Spinetta's (1974) study were more afraid of death at the end of life and body mutilation.

Some of the most important investigations concerned with the feelings of fatally ill children were conducted by Myra Bluebond-Langner (1977, 1978). From her observations of fatally ill 4- to 5-year-olds, Bluebond-Langner concluded that they often have a keen understanding of the threat to their lives caused by illness. Close personal encounters with death and dying are significant in determining the feelings and understandings of such children, especially their observations of and experiences with other dying children. In addition, not only 4- to 5-year-old children but even those as young as 18 months can understand that they are dying and that the process cannot be reversed.

Such understanding does not come all at once, but progresses through a series of stages. In each stage, the child acquires a little more information about the illness and its prognosis and alters his or her self-concept in accordance with that information. In the

first stage, after the initial diagnosis is made, the child is concerned about the seriousness of the illness and with feeling so sick; the self-concept is one of *seriously ill*. In the second stage, after experiencing the first remission of symptoms, the child's self-concept is changed to *seriously ill but will get better*. In the third stage, after the first relapse or return of symptoms, the child begins to feel that he or she will always be ill, but continues to hope for improvement; the self-concept is modified to *always ill, but will get better*. In the fourth stage, the illness has continued and the child wonders if he or she will ever improve; the self-concept changes to *always ill, and will never get better*.

In the fifth and final stage, the child comes to realize, perhaps after observing the death of another child, that he or she is also going to die; then the self-concept changes to *dying*. Each time that the child is readmitted to the hospital, he or she seems to become more aware of the imminence of personal demise and quite likely has progressed from one stage to the next. As the child's understanding of the illness progresses from the first to the fifth stage, references to a personal future decline appreciably and the child behaves as though pleasant experiences must now happen quickly if they are to happen at all.

As the above scenario suggests, fatally ill children are under a great deal of stress, not only from painful medical procedures and a growing realization that they are dying but also because of separation from the mother or mother figure and exposure to the deaths of other children with similar diagnoses. The major source of stress varies with the age of the child, focusing more on separation from the mother in children under 5 years of age, on discomfort and the possibly disfiguring effects of the illness or medical procedures in 5- to 9-year-olds, and on exposure to the deaths of other children in those over 9 years of age (DeSpelder & Strickland, 1999). Children of all ages attempt to cope with the anxiety produced by the stress of disease and death by using various defense mechanisms, including denial, rationalization, regression, sublimation, and any other techniques that are effective in restructuring a stressful situation into manageable dimensions (Juenker, 1977).

Family Reactions to the Death of a Child

The death of a child can be emotionally devastating to a family. This is especially true when the death is unexpected, as in an accident, a suicide, or a sudden fatal illness. Even in the case of an infant who is aborted, stillborn, or dies shortly after birth, the mother's emotional attachment to the child has already started forming (Grobstein, 1978). The loss is usually even more difficult to bear when the child has developed to the point where he or she can interact socially with the parents. Then the parents may feel that they have failed to fulfill their parental obligations and thereby, directly or indirectly, caused the death of the child. The accompanying feelings of guilt may interfere with the parents' ability to grieve properly and work through the loss of the child (Miles & Demi, 1983–1984).

Coupled with the guilt and depression experienced by bereaved parents are feelings of impotence, frustration, and anger that this should happen and at being unable to do anything to help the fatally ill or dead child. The anger may be directed toward anyone who seems to bear a responsibility for the tragedy—the hospital staff, the parents themselves, and even God. These feelings are so intense in many cases that the parents

never fully recover; the emotional problems associated with the death may still be present a decade or more after the child dies. When one or both of the parents are unable to work through their grief, family life becomes disrupted. Alcoholism, sexual dysfunctions, sleeping and eating disturbances, and other symptoms of emotional disorder are commonplace, indicating a need for psychological counseling or psychotherapy. If untreated, these parental reactions may lead to separation and divorce.

Not only the parents but all members of the family may be affected by the fatal illness and death of a child. Grandparents grieve in a threefold sense—for the grandchild, for their son or daughter, and for themselves (Hamilton, 1978). Furthermore, the parents are frequently so preoccupied with their own thoughts and feelings and with attending to the dying or dead child that they neglect their other children. The siblings of dying and deceased children often feel anxious, deprived, confused, and socially isolated. The physical and behavioral changes that occur in a dying child as the illness progresses can also be frightening to a young brother or sister. And when the child dies, the surviving children are not only sad, as everyone else in the family is, but they may also feel guilty for having mistreated the dead sibling or having wished he or she were dead. They may also show regressive behavior and develop an unreasonable fear of doctors, hospitals, and their own death. If ignored by the parents, these feelings can persist and influence the surviving child's future emotional behavior and mental stability.

A number of writers (e.g., Green & Solnit, 1964; Pollock, 1978) have described the psychological vulnerability of surviving children and their greater-than-average tendency to have emotional problems that persist into adulthood. Fairly high percentages of adjustment problems (problems with school, fears of death, etc.) have been found in the sibling survivors of children who died of cancer. The surviving children frequently behave defensively with respect to the death, refusing even to talk about it or listen to the parents talk about the dead child (Cook, 1983).

On the other hand, the attitudes of children with fatally ill or dead siblings are often healthier than those of their parents. Childhood is a time of flexibility, a time when losses and frustrations are usually adjusted to fairly quickly. What seems like a traumatic experience to an adult is typically not as disturbing to a growing child, who is full of energy and keen on living and learning. However, children do need reassurance and a sense of being included, both during the fatal illness and after the death of a brother or sister. They should be made to feel that they are important and needed at all stages of the illness. They can be permitted to visit the hospital, provided with details on their brothers or sister's illness, and encouraged to express their feelings and thoughts—especially any feelings of guilt—about the dying child (Wass & Stillion, 1988). After the death, the surviving siblings should not be excluded from the funerary rituals or postmortem discussions. Those in middle childhood (6–10 years) can certainly understand the significance of death and loss and the meaning of a funeral, so adults should take time to explain to them, at their own level, the cause of the death and what it means. Consider the following conversation between a small girl and her mother after the child's recently deceased brother had been cremated (Keyser, 1978):

> *'I will keep your ashes, Mom (after you die), but who will keep mine?'*
> *'Your kids will, if you have kids. Or your best friend.'*
> *'Who will keep the ashes of the last person in the world?'*
> *'God will,' say.*

Even children as young as age 5 or 6 can cope with a funeral and, to some extent, understand its significance. Therefore, they should be encouraged, but not forced, to participate. In any event, the key to how a surviving sibling deals with the death is almost always in the hands of the parents and other significant adults. Clearly, then, it is important for these individuals to work through their own problems associated with the death as soon as possible.

Helping Fatally Ill Children and Their Parents

Physicians, nurses, and other health workers usually understand the importance of being fairly open and truthful in responding to dying children. They also recognize the cruelty of repeatedly encouraging the child to minimize the seriousness of the illness or of pretending that a severe loss is not being endured. On the other hand, complete candor and failure to offer some hope is inadvisable and unrealistic. Hope should always be expressed explicitly as long as there is any basis at all in reality for it. After all, many young children do recover from leukemia, malignant neoplasms, and other potentially fatal illnesses.

Health workers and counselors are advised to listen to fatally ill children and remain open to their questions. These questions are usually not highly technical queries about disease or afterlife but rather questions indicating a need for reassurance, companionship, and assistance. Some of these questions have to do with feelings of safety, pain, helplessness, and aloneness. Other, perhaps more negative and defensive, questions asked by dying children are (a) why is this happening to me rather than to you or someone else, (b) how could you let this happen to me, and (c) what did I do that was so bad or terrible to make this happen to me? It takes patience and experience to respond to these questions in a manner appropriate for a particular child, but love and understanding, combined with adequate training and a high tolerance for frustration, can help.

Hospitals are not the only community agencies that deal with fatal illnesses. Various organizations provide books, toys, and other materials for young, catastrophically ill patients. For example, every year the Sunshine Foundation sends a number of fatally or chronically ill children and their families on expense-paid trips to athletic events, amusement parks, and other places of interest. Similarly, the Make-a-Wish Foundation grants special requests from children with terminal or life-threatening illnesses. Information on various services that are available to sick children and their parents by organizations such as the Brass Ring Society, the Starlight Children's Foundation, the Make-a-Wish Foundation, and the Candlelighters Childhood Cancer Foundation, can be obtained by writing to the corresponding addresses listed in Appendix B.

One of the most important contributions of health workers in treatment programs for fatally ill children is making suggestions and giving advice to parents. Parents are a significant part of the total treatment program for a dying child, and calm acceptance on their part leads to a better prognosis for the child. Health workers should begin by recognizing the cognitive, emotional, and social needs of the parents. On the cognitive side, parents require clear explanations of the child's diagnosis (nature and type of disease), the type of therapy or treatment to be undertaken, and the probable outcomes (prognosis). On the emotional side, health workers, who often feel frustrated and distressed because

their primary goal is to save lives, must also be aware of the depth of shock and despair felt by parents of dying children. Feeling guilty because they have failed in the basic parental task of protecting their children and keeping them healthy, parents are under even greater strain than the attending physicians and nurses.

Parents often progress through a series of stages when dealing with their emotional reactions to terminal illness in their child. The initial reaction is one of shock and denial, frequently accompanied by anger, weeping, and overprotection of the child. After a time this progresses to a stage of acceptance of the child's illness and a search for ways of saving the child. At the final stage, parents defensively sublimate their feelings by directing their energies toward sick children other than their own (Natterson & Knudson, 1960). Throughout all of these stages of parental reactions, health workers must be prepared to discuss and help relieve any guilt felt by the parents and to emphasize any possible hope. Health workers should also be ready to assist parents with any problems in telling other people about the illness and in maintaining continuity in rearing a sick child. Effective parent counselors will want to assess the capacities of the family for coping with the child's illness and to encourage building on the family's strengths. A final parent conference after the death of the child is recommended to provide an opportunity for the expression of postmortem feelings and to achieve closure (Wass & Stillion, 1988). Organizations such as The Compassionate Friends, a national, nonprofit, self-help support organization that offers friendship and understanding to families who are grieving the death of a child of any age and from any cause, can also assist bereaved family members in dealing with the loss.

The process of mourning a child does not always wait until the child has died. Much mourning is anticipatory in nature, and can thereby shorten and soften postbereavement mourning to some extent. Anticipatory mourning begins by acknowledging that the child's death is inevitable and grieving in response to this knowledge. Then the bereaved person becomes reconciled to the child's death by finding meaning in it and in the child's life. The next stage consists of becoming somewhat emotionally detached from the child, and, finally, memorizing the child by forming a lasting mental image of him or her (Futterman & Hoffman, 1983).

DEATH OF A PARENT

The natural order of events is for parents to die before their children, which usually occurs after the children are grown. However, many American children experience the death of at least one parent by age 15, either from illness, accident, or violence. Young children are usually quite resilient when faced with upsetting situations, but the death of a parent can be an overwhelming tragedy for a child. Perhaps in part because they have a poorer understanding of death, younger children tend to have greater difficulty than older ones in adjusting to the death of a parent (Kastenbaum, 1991). The death of a sibling, another relative, a friend, or even a pet is disturbing enough, but it usually does not compare with the child's emotional reactions to the death of a close parental figure.

Children who have lost someone or something close to them may, like bereaved adults, show denial, bodily distress, anger, hostile reactions to the deceased and others, guilt or self-blame, depression, anxiety, and even panic. They may refuse to accept the reality of the situation, idealize the deceased person, assume his or her mannerisms and attitudes, and try to find a substitute or replacement person. Eventually, however, they must reorganize their lives and learn to live without the presence and assistance of the deceased person (Andrey, n. d.).

Children's Grieving

The normal grief responses of children who have lost parents are similar to those observed in anyone who has suffered a severe loss, but children do not grieve exactly like adults. Children are less likely to accept a death, and they tend to grieve intermittently for several years. In fact, genuine mourning for a deceased parent may not set in until adolescence (Krupnick & Solomon, 1987).

A young grieving child may refuse to believe that the parent is actually dead, protest vigorously, and try to find a way to get the parent back (Bowlby, 1974). In addition to denial or inhibition of grief, bereaved children may also employ other defense mechanisms such as identification with or idealization of the deceased. When defense mechanisms are unsuccessful, a child's behavior becomes disorganized, and genuine grief sets in. Eventually the child accepts the reality of the loss and begins to reorganize his or her life. However, even with strong social support, working through the loss of a parent is never easy. In addition, as with adults, the degree of vulnerability of a child to the death of a parent varies with the degree of dependency in the relationship (Raphael, 1983).

The following factors appear to be closely related to psychological problems in children after the death of a parent or sibling (Krupnick, 1984):

- Loss occurs at an age below 5 years or during early adolescence
- Loss of the mother for girls below age 11 and loss of the father for adolescent boys
- Psychological difficulties in the child preceding the death (the more severe the preexisting pathology, the greater the postbereavement risk)
- Conflictual relationship with the deceased preceding the death
- Psychologically vulnerable surviving parent who is excessively dependent on the chil
- Lack of adequate family or community support or parent who cannot make use of available support system
- Unstable, inconsistent environment, including multiple shifts in caretakers and disrup tion of familiar routines (transfer to an institutional setting would be an extreme example)
- Experience of parental remarriage if there is a negative relationship between the child and the parent replacement figure
- Lack of prior knowledge about death, unanticipated death
- Experience of parent or sibling suicide or homicide, (pp. 126–127)

Persisting Psychological Reactions

Although some evidence indicates that the terminal phase of a parent's illness is a period of greater psychological vulnerability for children than the period following the actual loss (K.Siegel, Karus, & Raveis, 1996), postbereavement reactions are often quite

pronounced. Physical reactions associated with bereavement in preschool children include disorders of eating, sleeping, and bowel and bladder control. School-age children may also experience somatic problems, in addition to having academic difficulties and showing irritability, aggressiveness, delinquency, and phobic reactions (Burnell & Burnell, 1989; Haig, 1990). Rather than being depressed, boys are more likely than girls to act out their grief in destructive ways.

The persistence of psychological problems associated with the loss of a parent has been documented in various groups of children. In a study of normal preadolescent Israeli children who had lost a father during wartime, 3 years later the children continued to have symptoms such as soiling, social isolation, and learning difficulties (Elizur & Kaffman, 1982; Kaffman & Elizur, 1979). Other studies have shown that years after losing a parent a child may suddenly become depressed when confronted with a situation that reminds him or her of the parent (Kastenbaum, 1991).

Children who lose one or both parents through death also tend to have more physical and psychological problems as adults than those whose families remain intact (Bendiksen & Fulton, 1975). Among these problems are antisocial behavior, schizophrenia, depression, and suicidal behavior. After summarizing research on the link between adult depression and childhood bereavement, Lloyd (1980) concluded that "parental bereavement during childhood increases the risk of depression in adulthood by a factor of about 2 or 3" (p. 534). Sometimes the depression becomes particularly acute on the anniversary of the parent's death, a so-called *anniversary reaction*.

Coping With the Death of a Parent

The process of coping with the death of a parent is less intense when the bereaved child has alternative sources of emotional support and understanding. In fact, grieving can be eased even before the death by giving the child a role in caring for the sick parent. No matter how minor the role may seem, it can provide the child with a sense of contributing to the well-being of the parent. One child may be comfortable in the role of practical nurse to the parent, whereas another child would rather talk to the parent or simply listen to music with him or her (Pier, 1982).

DEATH EDUCATION

Like sex, death is a part of life about which children and adults need to be familiar with death and understand it. Nevertheless, as with sex education, introduction of the topic of death in schools and colleges has sometimes been met with cries of alarm about the potentially damaging effects of readings, discussions, and other activities concerning this topic. Some people have voiced concerns that discussions of death and dying make children and youth anxious, depressed, and callous, in addition to increasing suicide and homicide rates and decreasing religious faith. The fact that such fears are usually unwarranted is seen in the results of studies of changes occurring in children and adults

who have been exposed to educational experiences and courses concerned with thanatology. Rather than creating emotional havoc, the usual result of a discussion or course on death and dying is a moderate improvement in the participants' attitudes and knowledge about this subject (Durlak & Reisenberg, 1991; Leviton, 1977).

Units, courses, and entire curricula on death and dying have been designed for schools, colleges, senior citizens' organizations, and many special-interest groups. The goals of these educational efforts are both theoretical and practical. Because students frequently lack accurate information on death and dying, one important goal is to increase their knowledge about death, in addition to familiarizing them with the professions and organizations (medical, governmental, funeral, etc.) that are directly concerned with it. Another goal is to help students learn to cope, in an emotional sense, with the death of loved ones and associates. Beyond these two very concrete goals is the more abstract goal of helping students understand the social and ethical issues pertaining to death, and particularly the value judgments involved in discussions of these issues (Gordon & Klass, 1979).

Educating Children and Adolescents

Much of the death-oriented teaching of young children is impromptu and informal, depending on what is taking place at the time and the questions asked by the child. Parents and teachers usually talk about death only when the child wants to or when the death of a pet or person indicates that a "teachable moment" has arrived (Leviton & Forman, 1974). The nature of the response to a child's query about death depends not only on the specific question asked or the particular situation but also on the maturity level of the child. For example, preschoolers require less elaborate explanations than older children. Death can be explained to preschool children in simple physical and biological terms without becoming too detailed or abstract. In fact, what preschoolers need, more than highly accurate explanations about death, is reassurance that they are loved and will not be abandoned. Older children, on the other hand, should be encouraged to go beyond simple notions and think a bit more abstractly about the meaning of life and death (Stein, 1974).

Regardless of the child's age, adults should be honest, sensitive, and sympathetic, encouraging children to express their own feelings and ideas. Children need to be told when family members or other individuals whom they know are dying, and they should be permitted to stay with the rest of the family at this time. School-aged children should be encouraged, but not forced, to attend the funerals of family members and friends, and, if they decide to attend, told exactly what to expect. However, viewing a corpse, observing the casket being lowered into the grave, and leaving a close friend or relative in the cemetery may be quite upsetting to preschoolers. Special care should therefore be exercised in determining whether children can handle the funeral experience. Finally, when children question them about life after death, adults should express their own beliefs but admit that they do not know all the answers.

The degree of formality of death education in elementary and secondary schools varies with the school and the teachers, but a number of approaches have been proposed (e.g., Deaton, 1995; Leaman, 1995). One of the most comprehensive approaches was devised by Gordon and Klass (1979). Spanning the entire grade range from preschool through

senior high, this curriculum is based on four goals. The first goal, which is concerned with the question of what happens when people die, is attained when students become informed about facts that are not generally known in the culture. The second goal, which is concerned with how to cope with the reality of death in a healthy way, is attained when students have learned to deal effectively with the idea of personal death and the deaths of people who are significant to them. The third goal is concerned with the practical matter of making students informed consumers of medical and funeral services. The fourth and final goal, which is the most abstract of all, is to help students formulate socioethical issues related to death and to define value judgments raised by these issues. Subgoals or objectives under each goal are defined for seven grade levels: 1, 2–3, 4–5, 6–7, 8–9, 10–11, and 12. The objectives become more complex and abstract at higher grade levels, and special methods and materials are used to attain them. For example, poems, stories, drawings/paintings, and films are often useful in attaining the affective objectives of the second goal. Trips to a mortuary, a cemetery, a hospice, or a hospital ward for terminally ill patients can also make significant contributions to children's lessons on death and dying. Young visitors rarely find these experiences frightening or distasteful, and, when prepared beforehand and accompanied by a sensitive and knowledgeable adult, children almost always find them interesting and informative.

Educating College Students and Adults

A number of organizations have helped structure death education curricula in colleges and universities. The addresses of several such organizations, including the Association for Death Education and Counseling, the Center for Death Education and Research, the Hospice Education Institute, and the International Institute for the Study of Death, are listed in Appendix B. Among other activities, these organizations encourage the development of programs, courses, and curricula that not only serve an informational function but also contribute to the development of empathy and concern for one's fellows. A successful course on death and dying should not only make students more knowledgeable but also increase their sensitivity to the feelings and needs of dying people. Suggestions for designing and implementing such courses are given in various sources (e.g., Aspinall, 1996; Attig, 1992; Corr, 1992; National Organization for Victim Assistance, 1996).

In addition to readings, lectures by the course instructor, and class discussions, several special activities have become a part of college adult education courses on death and dying. These activities include describing one's reasons for taking the course and what is expected from it; live talks, tape recordings, and films, particularly films featuring dying people; a visit to at least one death-related institution, for example, a cemetery, a funeral home, or a crematorium; drawing pictures or writing poems and stories describing one's personal feelings and ideas about death; writing one's own epitaph and obituary; and role-playing scenes of dying, death, and related matters.

All adults do not require a formal course in death and dying in order to become informed about the topic. Many of the books listed in the Suggested Readings lists at the ends of the chapters in this text and in Appendix C provide useful information for both adults and children. However, parents and teachers need to make certain that they themselves are sufficiently informed about death, dying, and bereavement before

attempting to provide explanations to other people. Course instructors also need to get in touch with their own feelings about death, because emotional reactions are often more easily communicated than information.

SUMMARY

Because death has become less public and a topic that is not discussed as much in the presence of children as it once was, children in the United States today are less familiar with death and dying, at least of the nonviolent kind, than were children in previous generations. There are indications, however, that the denial of death characteristic of Western culture during the first half of the 20th century is changing to a greater openness and an interest in education concerning the subject.

Death in infancy has declined dramatically during this century, but it is still more common than in early or late childhood. The three leading causes of death in infancy are congenital anomalies, disorders relating to short gestation and unspecified low birth weight, and SIDS. The three leading causes of death in children aged 1–4 years are accidents, congenital anomalies, and malignant neoplasms. The three major causes of death in children aged 5–14 years are accidents, malignant neoplasms, and homicide. The three leading causes of death in the late teens and early 20s (15–24 years) are accidents, homicide, and suicide.

A classic research investigation by Maria Nagy (1948) pointed to three stages in children's conceptions of death: a first stage between the ages of 3 and 5 years, in which children do not distinguish between death and separation; a second stage between 5 and 9 years, in which death is conceived of as irreversible but avoidable; and a third stage at 10 years and over, in which children understand death as real, inevitable, and irreversible. Nagy was criticized for failing to consider the influence of culture and experience on the child's conceptions of death and for her assumption that very young children have little or no understanding of mortality. Studies conducted in the United States, for example, have not found the frequent personifications of death reported by Nagy's second-stage children. Furthermore, lower class American children are more likely to associate death with violence, but middle class children are more likely to associate it with old age and illness. From her research on terminally ill children, Bluebond-Langner (1978) concluded that rather than being restricted to a specific chronological age range, all views of death are present at every stage of child development.

Extreme fears of death in young children are not normal and are usually indicative of psychological problems. A child who is intensely afraid of death or dying is, in most cases, actually afraid of being separated from family members or other people. Like all fears, fear of death can also be learned from parents and other associates. Whatever the origin of a child's fears and questions about death may be, children should be responded to in a natural but thoughtful manner, neither lying nor denying, but providing answers that the child can understand.

Fatally ill children are usually more afraid, depressed, and angry than other hospitalized children, and in most instances realize that they are dying. The fears concerning death expressed by dying children vary with chronological age. In early

childhood they are more afraid of separation, whereas in middle childhood they are more afraid of body mutilation and the end of their lives. Bluebond-Langner's (1977, 1978) formulation of five stages through which fatally ill children pass in their changing attitudes toward their condition and self-concepts points to a fairly high level of awareness of their condition and situation on the part of these children.

The death of a child can be devastating for the parents and other members of the family. Anxiety, depression, guilt, and anger are common parental and sibling reactions that can lead to more serious emotional problems and family disruption when unresolved. The siblings of deceased children usually adjust more readily than the adult members of the family, especially when the parents do not neglect them while caring for a dying or deceased child.

Health workers are advised to be open and truthful with dying children, not providing false encouragement but communicating a realistic degree of hope. The dying child's questions about his or her condition and future should be answered sensitively and at a level appropriate to the child's ability to understand. Realizing that the parents must also be helped, health workers need to recognize and deal with the cognitive, emotional, and social needs of the parents as they relate to the dying child. Parents pass through a number of stages before fully accepting the fact that their child is dying or has died. Anticipatory mourning begins even before the child's death, and is viewed as a positive sign that the parent is working on his or her emotional problems related to the impending death.

Parents do not always wait until their children are grown before dying. A small percentage of newborns never know their mothers and form no direct emotional attachment to her. The loss of a parent to whom the child has become emotionally attached, however, can produce an extreme psychological reaction. If not dealt with adequately, it can lead to an emotional disorder that lasts into adulthood.

The realization that both sex and death are parts of life for which children and adults must be prepared has led to increased attention to these two topics in schools and colleges in the past three decades. Lessons, courses, and entire curricula on death and dying have been designed for a variety of formal and informal groups, ranging from preschoolers to senior citizens. The goals of these efforts are both practical and theoretical, cognitive and affective. The overall goal is to help participants cope more effectively with their own mortality and the deaths of significant others. The participants in sessions or courses on death and dying are provided with information by means of conventional instructional approaches (lectures, discussions, films, readings, writing assignments), as well as experiences such as trips to hospitals, mortuaries, cemeteries, and other death-related sites.

QUESTIONS AND ACTIVITIES

1. Why are many of today's children less knowledgeable about the dying process than children were in previous generations, and what effect does this situation have on their attitudes toward death and dying? How does this vary with where a child lives (for example, in an inner-city ghetto, on an Indian reservation, or in an affluent suburb)?

2. What counseling techniques are used by health personnel who work with dying children and their parents? What can counselors do to help children who have been exposed to death in their communities resulting from disaster, violence, or war?

3. Was the subject of death talked about very much in your family? Who talked to you about death, and what did they say?

4. What are your earliest memories of death? What were the circumstances? Did it involve a dead animal, a dead relative, a friend, or a stranger? What were your feelings at the time, and what did people say to you about it?

5. How old were you when you first attended a funeral? Who was the deceased, and were you emotionally close to her or him? Were you told or forced to attend the funeral, or did you do so voluntarily?

6. What are some of the terms or expressions that people use to make death and dying seem less distressful? Examples are "passed away," "put to sleep," "gone to heaven," and so on. List some others. Is it helpful to use such euphemisms in trying to explain death to children? Why or why not?

7. A great deal of research on the causes of SIDS has been conducted during the past few years. Consult the *Reader's Guide to Periodical Literature,* the index of a big city newspaper, on-line search engines (e.g., PsycINFO, Medscape, etc.), and other sources on the subject of the causes and cures for SIDS. Write a brief paper on your findings.

8. Consider the following case presented by Wilcox and Sutton (1985):

The parents of a seven-year-old leukemia boy are meeting with a health care team consisting of the child's physician, nurse and social worker. The child has reentered the hospital in the terminal phase of his painful illness; he has previously experienced three spontaneous remissions and returned home, only to fall dangerously ill and return to the hospital each time. A fourth remission is not expected. The group must decide whether to begin the child on an expensive new experimental treatment. Although the treatment is not expected to be able to control the disease for the child, it might keep him alive for up to six months longer, and its use in this case would add to medical knowledge and possibly improve the survival rate of other sick children. However, the parents and the two younger brothers of the child have prepared themselves for his death at each return to the hospital. The emotional strain of the dramatic recoveries is reflected in the worsening relationship between the parents and in behavior problems in the children. The father is working a second job to help pay the medical bills. The mother alternates between wanting to keep her child alive at all costs and wanting to release him from pain. The doctor is committed to saving and prolonging life if at all possible, especially in the case of a child. The nurse has cared for the child during each hospitalization and considers herself to have the primary responsibility for caring for the child. The social worker has given the parents financial counseling and has tried to give them psychological support during the long illness, (pp. 314–315)

For a class project, select a representative group of six students to discuss this case and make a decision about whether to prolong the boy's life. Treat the project like a jury trial, electing a foreman and taking a series of secret ballots between discussion periods. A typed copy of the case should be given to each member of the group, and the foreman should read it aloud before proceeding with the discussion. The members should be told that their task is to reach a group decision on whether to

prolong the boy's life. Discussion should then begin, and after a few minutes a ballot should be taken. The foreman should announce the results of each balloting before proceeding with the next round of discussion. When all members have agreed on a decision, or at least agreed not to actively oppose it, each member should explain to the class his or her personal decision, what factors played a role in it, whether the case information was sufficient, and how he or she felt about the discussion and the group decision. Were all members of the group in agreement and satisfied with the decision? Did they feel that they had enough information to make a decision? Was the exercise interesting and educational or merely disturbing and frustrating?

9. After obtaining permission from their parents or teachers, administer the following questionnaire to five 5-year-old boys, five 5-year-old girls, five 10-year-old boys, and five 10-year-old girls. Questions 1–5 are concerned with the cessation of life, Questions 6 and 7 with the irreversibility of death, Questions 9–12 with the universality of death, and Questions 12 and 13 with biological causality of death. Questions 1–11 should be answered "yes" or "no," whereas Questions 12 and 13 are open-ended. Compare the answers of the 5-year-olds with those of the 10-year-olds and the boys with the girls. Interpret all differences.

Some Questions on Death

Yes	No	1.	Can a dead person move?
Yes	No	2.	Can a dead person get hungry?
Yes	No	3.	Can a dead person think?
Yes	No	4.	Can a dead person dream?
Yes	No	5.	Do dead people know they are dead?
Yes	No	6.	Can a dead person become a live person again?
Yes	No	7.	Is there anything that could make a dead animal come back to life?
Yes	No	8.	Does everyone die sometime?
Yes	No	9.	Will your parents die someday?
Yes	No	10.	Will your friends die someday?
Yes	No	11.	Will you die someday?
		12.	What makes a person die?
		13.	Why do animals die?

10. Arrange, either through your instructor or on your own, to visit the terminal or oncology ward of a children's hospital or hospital wing. Talk with the staff on the ward and a sample of the children. What impressions did you obtain of the attitudes of the staff and children? What special techniques, both physical and psychological, are used by the staff in treating these children?

11. Web exercise: Many different advocacy groups and organizations have been designed to help terminally ill children, either medically or psychologically, or both. The following is a list of six such organizations and their web sites: Big Brothers/ Big Sisters of America *(www.bigbro.com),* Brass Ring Society *(www.brassring.org),* Candlelighters Childhood Cancer Foundation *(www.candlelighters.org),* Make a Wish Foundation *(www.makeawish.org),* Starlight Children's Foundation *(www.starlight.org),* and Sunshine Foundation *(www.sunshinefoundation.org)*. Log on to each of the web sites and get a description of the aims and procedures of the corresponding organization. What are the similarities and differences in the purposes of the various organizations? Have you ever had any association with any of them before?

SUGGESTED READINGS

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9

DEATH ATTITUDES, FEARS, AND BELIEFS OF ADULTS

TOPICAL OUTLINE OF THE CHAPTER:

Attitudes toward death
- *Historical perspective on attitudes toward death*
- *Contemporary cultural differences in attitudes*

Fears of death
- *Assessment of fears and attitudes toward death*
- *Correlates of death fears*
- *Modifying fears of death and dying*

Religious beliefs and near-death experiences
- *Religion and death fears*
- *Belief in an afterlife*
- *Near-death experiences*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *How are dying and death in adulthood different from dying and death in childhood?*
- *How can fears and attitudes toward death and dying be determined?*
- *What are some of the most popular paper-and-pencil measures of death fears and anxieties?*
- *How do fears of death vary with chronological age, gender, and other demographic variables?*
- *How have attitudes toward death, dying, and the afterlife varied with history and culture?*
- *What are near-death experiences, what purposes do they serve, and how have they been explained?*

Nothing lasts forever. Success and failure, pleasure and pain, joy and sorrow, even beauty and love—all have their day and are gone. Memories survive longer, but in an altered, reconstructed form, resembling but not faithfully recording their origins. Personal identity is also changed over time. Nobody lives forever, and as we grow older, our appearance, feelings, and functioning are changed and eventually disappear as well. One day we die, and all that is left to remind others that we once lived in this house, walked in this street, and spoke in a voice that proclaimed our existence are a few faded pictures, a memento or two, a bit of property, and the good and bad thoughts that we left in the minds of those with whom we lived, worked, played, and loved.

Ordinarily, young people do not spend a great deal of time thinking and worrying about death. When one is young, energetic, and full of hopes and dreams, life is just beginning, and death, if it even intrudes upon one's consciousness, is perceived as lying in the distant future. Rather than being concerned about growing old and dying, young people are usually in a hurry to achieve competence, establish their independence, and acquire all the benefits that adulthood promises.

There is no specific age at which people begin thinking more about death and dying. It depends on culture, personality, and the particular circumstances of one's own life. Certainly there is no scarcity of death scenes in the media to stimulate one's feelings, fantasies, and knowledge about death. Although most children and young adults are rarely exposed to a dead human body, by the time they are 18 years old most Americans have witnessed thousands of deaths on television, most of which are homicides. Despite the saturation with death-related dramas, youth is not a time for preoccupation with death and dying.

Perhaps because they are not particularly concerned with their own aging processes, young adults do not think very much about growing old. A young man or woman who has a serious accident may experience some death anxiety, but rarely does it become overwhelming. Tradition has it that a turning point in the recognition of one's own mortality is age 30 for women and age 40 for men. Obviously, the critical age, whatever it may be, varies with the individual. But in the lives of most people there comes a time when they begin to measure their lives in terms of the number of years they have left rather than by those already past. At this time, the reality of temporal limits on personal existence becomes of greater concern to the individual than it has previously. If that time comes sooner than anticipated, say in young adulthood, the person may become quite anxious, angry, and depressed.

It may seem surprising that most human beings are actually at a peak of their physical fitness and prowess at around age 11. In a manner of speaking, it is downhill after then, though most people do not sense any great change in their health and physical skills during adolescence and early adulthood. However, somewhere around the fifth decade of life, signs that the catabolic (breaking down) processes of the body are outstripping the anabolic (building up) processes become all too clear. The physical deterioration associated with aging begins to show in one's appearance and abilities. The deaths of relatives and friends who are in the middle or late years of life remind people that their chances of dying increase every year after age 45 or so.

Not only the overall number and rate but also the causes of death change with age. Heart disease and cancer are prominent causes of death at all ages, but more choice-dependent, and therefore perhaps more avoidable, conditions such as accidents, HIV infection, suicide, and homicide are responsible for a greater percentage of deaths among younger than older adults. In contrast, cerebrovascular diseases, pneumonia and influenza, and diabetes claim a larger percentage of lives in older adulthood.

As illustrated in Fig. 9.1, not only does the likelihood of dying vary with sex and ethnicity, but it increases dramatically after middle age. This is the time when more and more of one's relatives and friends, and even strangers in one's own age group, are dying. Physical changes occurring in oneself at this time of life underscore the untruth in the unexpressed but half-believed romantic assumption that other people may die but I am invulnerable and hence immortal. Death must then be recognized as something that happens eventually to everyone, including oneself.

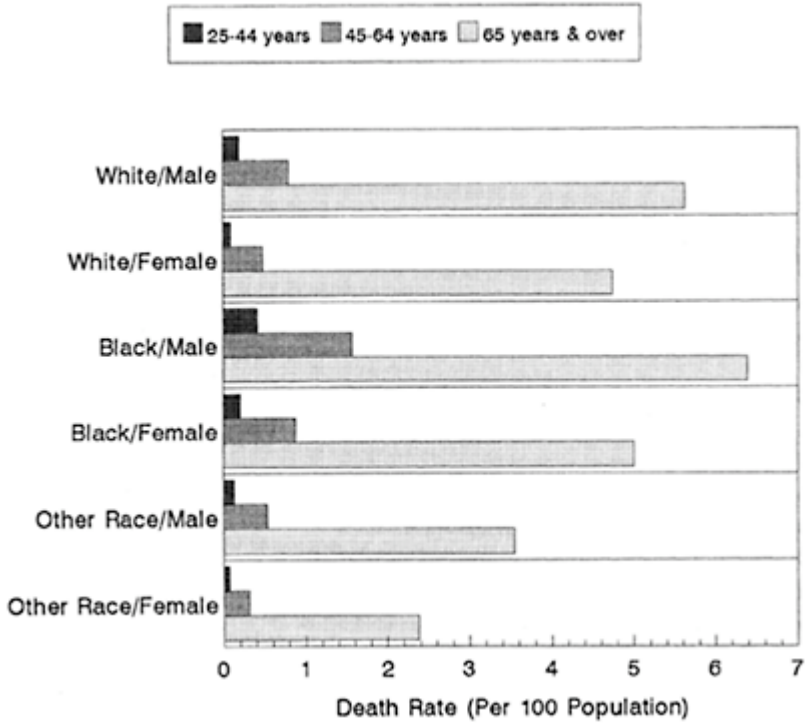

FIGURE 9-1 Death rates for U.S. adults by age, race, and sex, 1997

(constructed from data in Hoyert, Kochanek, & Murphy, 1999).

> *Man contains within himself a most profound contradiction. At the conscious, intellectual level he is absolutely convinced that he must die, this belief being reinforced and sustained by contacts with those around him who share it, as well as by the knowledge of the deaths of others. He can be more certain of his death than of his name. His unconscious is 'immortal,' however, denying the reality of his death and not allowing him to imagine himself dead. There is absolutely no way to eradicate the emotional feeling of immortality, so that the individual's emotions deny his death quite as steadfastly as his intellect affirms it. (Dumont & Foss, 1972, pp. 104–105)*

The review, revaluation, and realization of midlife may precipitate what has been labeled a *midlife crisis,* a crisis that can lead to new efforts on the one hand or resignation on the other. Middle adulthood is a time when one thinks less about how long he or she has lived and more about how much time is left in which to achieve one's goals or realize the dreams of youth. In any event, middle age is a time to shed one's irrational notions about life, to stop searching for perfection in people and things, to forgive and forget old hurts, and in large measure to accept things as they are.

ATTITUDES TOWARD DEATH

Differences in attitudes toward death and dying are obviously not unique to contemporary society but have varied throughout human history. Despite the difficulties of attempting to reconstruct the past to obtain insight into the origins of death rites and customs, the painstaking research of Philippe Aries (1977/1981) has yielded a number of interesting results. Using a variety of historiographic methods, Aries (1977/1981) set out to test the hypothesis that attitudes toward death are related to awareness of self or the sense of individuality. Beginning his studies with documents and artifacts from the European Middle Ages of a thousand years ago, Aries (1977/1981) traced the evolution of attitudes toward death and their relationships to self-awareness up to the 20th century. His findings are summarized in the following discussion and in Box 9.1.

Historical Perspective on Attitudes Toward Death

According to Aries (1977/1981), during the *tame death* era of the Middle Ages, death was accepted and expected as a terrible but necessary human misfortune. In this group-centered, less individualistic period that was dominated by the Catholic Church, the dead were thought merely to be sleeping until the Second Coming of Christ. Death itself was not feared so much as its method and timing. Of greatest concern was a sudden death, without warning or during sleep, because it provided no opportunity for confession and absolution. Except in the case of upper class persons, even funerary practices were a testimonial to the unimportance of the individual. Most people were buried in common pits, their bones being removed and placed in special receptacles *(ossuaries)* after the flesh had decayed. The ossuaries were tended by church workers and could be seen from the villages, where the descendants of the dead lived.

The late Middle Ages (through the 15th century) were, according to Aries, (1977/1981) a time of the *death of the self,* a period when individuality was minimized

BOX 9.1 Changes in Attitudes Toward Death Throughout History

Tame death (Middle Ages). Death was accepted and expected as a terrible but necessary human misfortune. The dead were thought to be merely sleeping until the Second Coming of Christ.

Death of the self (14th-15th centuries). Individuality was minimized. Without a last confession, at the moment of death the immortal soul of the person was seized by a devil instead of an angel. Thus, dying in sleep or otherwise without confessing one's sins was to be avoided at all costs.

Remote death (17th-18th centuries). Death was a sorrowful but remote event. Human mortality was accepted, but thoughts of it still made people anxious. Romantic or macabre eroticism was intermingled with sex in art and literature.

Death of the other (early to middle 19th century). The view of death as ugly and the belief in a literal hell began to dimin ish. Death was seen as a

beautiful event leading to a happy reunion in paradise. The personal self survived death and roamed the earth with other disembodied spirits.

Denial of death (late 19th century to present). Death became less visible. Dying people were hidden away in hospitals and children were spared the unpleasantness of viewing and knowing about death and dying. Public mourning was eliminated. Death was more likely to be seen as an accident or a medical failure, and the best way to die was in one's sleep.

Present time? Denial and externalization of death have diminished somewhat. Death is seen as a part of what it means to be human, and it is inhuman for people to die alone, connected to medical apparatus, and without having a chance to make their peace and say goodbye to others.

Adapted from Aries (1977/1981).

even more than previously. People were believed to be judged at the moment of death, and hence that moment became especially feared. Cries of "Confess me! Confess me!" rang out on many battlefields strewn with dying men. Deathbed confessions abounded, for without a last confession it was believed that at the moment of death the person's immortal soul would be seized by a demon instead of an angel.

The death-of-the-self attitude was succeeded by the *remote* death attitude of the 17th and 18th centuries. Death began to be perceived as a sorrowful but remote event. Mortality was accepted, but thoughts of personal death still made people anxious. It was a time of romantic or macabre eroticism in which death was intermingled with sex in art and literature.

The prevailing attitude toward death had changed again by the beginning of the 19th century. The attitude toward death as ugly, including the belief in hell, began to diminish. During this period, which Aries (1977/1981) maintained was dominated by a *death of the other* attitude, death was considered to be a beautiful event leading to a happy reunion in paradise. Religious beliefs prevailing at this time held that the personal self survives death and roams the earth with other disembodied spirits.

Aries (1977/1981) was most critical of the next era, which he characterized as *denial of death.* This era, which began in the late 19th century, was a time when death became less visible and the start of what Aries (1977/1981) calls *the lie*. Dying people were hidden away in hospitals, children were "spared" the unpleasantness of viewing and knowing about death and dying, the deceased was efficiently prepared and interred by a team of professionals, and public mourning was essentially eliminated. Death was likely to be seen as either an accident or a medical failure, and, in contrast to the belief of the Middle Ages, the best way to die was in one's sleep.

There are indications that the denial and externalization of death, which have been so characteristic of 20th century Western society, have changed somewhat during recent decades. Adults and children are learning that death is a part of what it means to be human, and that it is inhuman for people to die all alone, connected to tubes and life-sustaining machines, without being given an opportunity to make their peace and say their goodbyes.

Contemporary Cultural Differences in Attitudes

Although customs and attitudes associated with death, dying, and bereavement have varied extensively with time and place, there are many cross-cultural similarities in practices and beliefs. Most cultures do not consider death to be the end of existence. Rather, it is believed that something of individual consciousness survives death and goes to a heavenly or hellish afterlife. As among the Murngin tribe of Australia and the Gond people of India, the cause of death is often viewed as accidental or external or outside the individual. A similar belief that death, illness, and other misfortunes are nonrandom events precipitated by magic, demons, or other external forces is found among many native African groups (Grof & Halifax, 1977).

The Murngins respond with anger and fear to the death of a member of their tribe. In contrast, the Tlingit people of Alaska, who view death as a natural phenomenon, accept it calmly and even joyfully. Similarly, the Basques of northern Spain hold that death is the crowning point of life, to be anticipated and celebrated by complex mourning rites. The East African Masai are also apparently unafraid of death, but, unlike the Basques, they minimize the importance of death and practice quite simple burial customs.

Cultural differences in attitudes and beliefs concerning death are widespread within the United States. For example, Kalish and Reynolds (1981) found many differences among samples of Blacks, Whites, Japanese Americans, and Mexican Americans in their responses to questions about death and dying. Mexican Americans were less likely than the other three cultural groups to believe that people should be permitted to die if they want to, that people should be told if they are fatally ill, and that one should try very hard to control his or her emotions in public when someone dies. A greater percentage of Whites than other ethnic groups indicated that slow death is more tragic than sudden death and that death in childhood is the most tragic of all. Whites also reported having had less contact with the dead and dying and were more likely to avoid funerals. Greater percentages of both African Americans and Mexican Americans saw the death of a woman as more tragic than the death of a man, admitted having experienced or felt the presence of someone who had died, and wanted to live past age 90. Many of the differences in the responses of the four ethnic groups studied by Kalish and Reynolds (1981) declined with age, and there were notable similarities in the responses of the four groups. For example, large percentages of all groups viewed the private expression of grief as more appropriate than public display of grief.

FEARS OF DEATH

The results of cross-sectional surveys are fairly consistent in showing that fear of death is more common and more intense during middle age than in later life (DePaola, Neimeyer, & Ross 1994; Gesser, Wong, & Reker, 1987–1988; Kalish, 1977; Neimeyer, 1985; L.D.Nelson, 1979; Rasmusson & Brems, 1996). Gesser et al., (1987–1988) found that fear of death has a curvilinear relationship to age, being relatively high in young adulthood, peaking in middle adulthood, and reaching a minimum in old age. Fear of death in middle adulthood, which has been identified as part of a midlife crisis, is precipitated by the individual's awareness of declining health and appearance, coupled with unfulfilled dreams and unattained goals. An event that can enhance this fear is the

death of one's parents. When mother and father have died, the buffer between oneself and death seems to be gone, and one is next in line. Death anxiety can be particularly intense in middle-aged people who are living enjoyable, personally meaningful lives and become seriously ill. An inventory of one's assets and liabilities, combined with a reasonable assessment of the time remaining in life, frequently acts as a stimulus to anxiety, sometimes hastening the very event that the individual dreads most.

Levinson (1978) referred to the period between ages 60 and 65 as the *late adult transition,* a time when people realize that they can no longer occupy center stage. The heavy responsibilities of middle adulthood must be reduced as aging individuals learn to function in a changed relationship between themselves and society. In the end, what matters most is "one's view from the bridge"—the final sense of what life is all about and what it means. Such a perception typically takes place as a result of a *life review,* a process of looking back over one's life and sorting the good from the bad.

As an individual grows older and physical deterioration becomes more and more apparent, annoying, and debilitating, the psychological distance from death diminishes. With each passing year, people perceive themselves as getting closer and closer to the end of their lives. In this shifting time perspective, the personal past—the time of one's major successes and failures—is seen as being relatively long and the personal future as relatively short. People begin to talk more and more about bygone days and "how it used to be"—a tendency that may cause their younger associates to remark that their elders are "living in the past."

Compared with those in midlife, older adults are more likely to see themselves as having had their day and to view death in old age as only fair. Experiencing the decline in their own bodies and being reminded of death as their age-peers and even younger people die, older adults realize that their time is shorter than in early years. Being thus forced to confront the reality of death, they are better able to cope with fears of it (Kalish, 1985a). They do not plan as far ahead and tend to be more inner directed or private in their activities than their younger contemporaries. The deaths of friends and relatives, a lack of satisfying social roles, health and financial problems, and increased dependence on others all contribute to feelings of having outlived one's usefulness and a resignation to one's fate. Whatever the reasons may be, older people are usually not as afraid of dying as younger and middle-aged people. The fears that they have are more those of loneliness and lack of social support rather than the pain and sadness of leaving loved ones. Kalish (1985a) maintained that the "blurring of ego boundaries," or diffusion of the sense of self, in older adults may serve as a mechanism for transcending pain, and thereby contribute to the lower incidence of death fears in this age group.

Although the majority of older people do not express great fear of death, many do. Butler, Lewis, and Sutherland (1998) concluded, for example, that a majority of the older adults whom they surveyed had resolved their fears of death realistically but that a sizable percentage are still overtly afraid of it and many others used defensive denial to cope with those fears. Furthermore, fear of death and fear of ageing are related, and both are associated with the fear of losing one's identity and sense of control (DePaola et al., 1994).

Fears of death and dying may be particularly strong in older adults who are in poor physical or mental health or who have a disabled spouse, dependent children, or important goals that they still expect to attain. However, even terminally ill older people tend to be less afraid than their younger counterparts. Terminal illness usually increases

fears of dying in the young, but it appears to have no such effect on the majority of elderly individuals (Kastenbaum, 1969). When asked how they would want to spend the time until they died if they had a fatal illness and 6 months to live, significantly more older than younger or middle-aged adults in one study (Kalish & Reynolds, 1981) stated that they would spend it reading, contemplating, praying, or focusing on their inner lives. In contrast, larger percentages of the other two age groups said that they would spend their time on concerns involving other people.

Despite the fact that only a minority of older adults report being afraid or terrified by death, they are certainly very aware of it. As one grows older, awareness of death increases, an awareness that is prompted by the deaths of friends, relatives, and associates on an almost daily basis. Compared with younger and middle-aged people, more elderly people report thinking and dreaming about death and discussing it with other people (Kalish & Reynolds, 1981). Still, these thoughts and feelings are rarely expressed as strong fears.

Assessment of Fears and Attitudes Toward Death

Whatever the origins of fears and attitudes toward death may be, as with other human characteristics efforts have been made to measure them. A variety of methods have been applied to the measurement of attitudes toward death, including behavioral observations, interviews, projective techniques, physiological responses, and questionnaires.

A descriptive list of questionnaires, inventories, scales, and other paper-and-pencil devices that have been used in research on death, dying, and bereavement is given in Appendix D. Some of these instruments provide only a single score, whereas others can be scored on several variables. Perhaps the most popular of these instruments, in that it has been administered in dozens of research investigations throughout the world, is Templer's Death Anxiety Scale (Templer, 1970; see Form 9.1). This single-score inventory consists of 15 statements to be answered true or false. A revision of the Death Anxiety Scale, the Templer/McMordie Death Anxiety Scale, consists of 15 items to be answered on a 7-point, agree-disagree rating scale.

Other popular measures of death fears and anxieties are the Threat Index (Krieger, Epting, & Leitner, 1974; Krieger, Epting, & Hays, 1979), the Collett-Lester Fear of Death Scale (Collett & Lester, 1969), the Multidimensional Fear of Death Scale (Hoelter, 1979), and the Death Attitude Profile—Revised (Wong, Reker, & Gesser, 1994). Several such instruments were described and evaluated by Neimeyer (1995, 1998). The Threat Index was designed to assess the respondent's interpretation of the concepts of death and self on opposite poles of a sample of bipolar adjective constructs (e.g., *sick* vs. *healthy, static* vs. *changing,* etc.). The Collett-Lester Fear of Death Scale was designed to assess four conceptually distinct dimensions of death fears: death of self, dying of self, death of others, and dying of others; respondents indicate their agreement or disagreement with each of 36 statements on a 6-point scale.

The 48 Likert-type statements on the multidimensional Fear of Death Scale are grouped into eight subscales of six items each. The factors assessed by the eight

FORM 9.1 Death Anxiety Scale

Directions: Mark "t" next to the number of the statement if it is true about you; mark "f" if it is false.

1. I am very much afraid to die.
2. The thought of death seldom enters my mind.
3. It doesn't make me nervous when people talk about death.
4. I dread to think about having to have an operation.
5. I am not at all afraid to die.
6. I am not particularly afraid of getting cancer.
7. The thought of death never bothers me.
8. I am often distressed by the way time flies so very rapidly.
9. I fear dying a painful death.
10. The subject of life after death troubles me greatly.
11. I am really scared of having a heart attack.
12. I often think about how short life really is.
13. I shudder when I hear people talking about a World War III.
14. The sight of a dead body is horrifying to me.
15. I feel that the future holds nothing for me to fear.

Note. From "The construction and validation of a death anxiety scale," by D.I. Templer, 1972, *Journal of General Psychology, 82,* p. 165–167. Copyright 1972. Reprinted with permission of the Helen Dwight Reid Educational Foundation. See No. 1 of QUESTIONS AND ACTIVITIES for the scoring key.

subscales are Fear of Dying, Fear of the Dead, Fear of Being Destroyed, Fear for Significant Others, Fear of the Unknown, Fear of Conscious Death, Fear for Body After Death, and Fear of Premature Death. Finally, the 215-point scale items on the Death Attitude Profile were designed to measure five factors in attitudes toward death: Fear of the State of Death, Fear of the Process of Dying, Approach-Oriented Death Acceptance (where death is viewed as an entrance to a happy afterlife), Escape-Oriented Death Acceptance (where death is viewed as an escape from pain and suffering), and Neutral Acceptance (where death is viewed as a reality).

Another revision of an older instrument is the Death Attitude Profile—Revised. Comprised of 31 items to be answered on 7-point scales, responses to this paper-and-pencil inventory are scored on five factors: Fear of Death/Dying (having negative thoughts and feelings about death as a state and dying as process), Approach Acceptance (viewing death as a passage to a satisfying afterlife), Escape Acceptance (seeing death as an alternative to a painful existence), Neutral Acceptance (understanding death as a reality that is to be neither feared nor welcomed), and Death Avoidance (a defensive attempt to keep thoughts of death out of one's consciousness).

Like many other paper-and-pencil psychometric instruments, most of the inventories and scales described in Appendix D have fairly modest reliabilities and validities and have not been adequately standardized. Understandably, the briefer instruments, such as the Death Anxiety Scale, are the most widely administered in research on death and dying, though not always the most fruitful in terms of the interpretability of results.

Correlates of Death Fears

In addition to varying with chronological age, fears, anxiety, and attitudes toward death and dying vary with gender, ethnicity, health, education, personality, occupation, religious beliefs, and many other demographic and personal variables. Several of these factors are now discussed briefly.

Gender. Many older studies found that women score higher than men on measures of fear and anxiety toward death (Lonetto, Mercer, Fleming, Bunting, & Clare, 1980; Pollack, 1979). For example, in a study by Wass and Sisler (1978), noninstitutionalized elderly women expressed more fears of death than elderly men. Although the research findings are not entirely consistent, the consensus of studies in several different countries is that women display more death anxiety than men (e.g., Datel & Neimeyer, 1990; Okafor, 1994–1995; Templer, 1991; Thorson, Powell, & Samuel, 1998; Viswanathan, 1996). This appears to be especially true in Eastern countries (Abdel-Khalek, 1991; Templer, 1991). However, whether these are bona fide sex differences in fear or anxiety concerning death or reflections of women's greater willingness to admit strong emotions or problems is debatable. The perceptions that women have of death appear to be different from those of men. Back (1971) found that, in comparison with elderly men, elderly women tend to be more accepting and benevolent in their attitudes toward death. The women in Back's study tended to liken death to a compassionate mother or an understanding doctor rather than an opponent. Men, on the other hand, tended to view death as an evil antagonist, a grinning butcher, or a hangman with bloody hands who must be combated.

Culture and Ethnicity. Death anxiety scales have been administered to Japanese, Egyptian, Kuwaiti, Lebanese, Nigerian, and many other non-Western groups. From the results of these studies, the generalization appears warranted that the level of death anxiety is quite similar in African, Near-Eastern, and Euro-American cultures (Thorson et al., 1998). With respect to ethnicity, the findings of an older study by Myers, Wass, and Murphey (1980) are characteristic. Of the race/sex groups studied, Black males expressed the greatest fear of death, followed by Black females, White females, and White males, in that order. Interactions between gender and ethnicity have also been found in certain studies. For example, Schumaker, Warren, and Groth-Marnat (1991) found that Australian women scored higher than Australian men on death anxiety, but there were no sex differences in death anxiety in their Japanese sample

It is interesting to speculate on the relative influences of accurate reality testing and denial in determining culture, ethnic, and gender differences in fear of death. Although it is tempting to conclude that the intensity of death fears in a particular group is an accurate reflection of the incidence of death in that group (as in Blacks vs. Whites, and particularly Black men), the generality of this conclusion is not supported by White female versus White male comparisons. In all likelihood, denial and the machismo ethic play a role in the less intense fear reported by White males than by White females.

Education. A number of older studies (e.g., Keith, 1979; Riley, 1968) reported significant negative correlations between level of education and fear of death. Compared with more highly educated people, those with less education expressed more negative views concerning death. Less educated people also tend to view death as coming too soon and as being associated with suffering. This may, of course, be an accurate perception of the particular reality in this group. However, less educated people were

also less likely to talk about death or to make plans for it, as in preparing a will or discussing funeral arrangements.

Occupation. With regard to occupation, an older study by Feifel, Hanson, and Jones (1967), found that physicians and medical students had greater death anxiety than most professional persons, but this finding could not be confirmed by Neimeyer, Bagley, and Moore (1986). More recently, Gershuny and Burrows (1990) found that the death anxiety scores of oncologists were lower than those of physicians in general; Viswanathan (1996) found that a sample of psychiatrists scored higher on death anxiety than a sample of surgeons, and De Walden-Galuszko, Majkowicz, Trzebiatowska, and Kapala, (1998) found that nurses were more death anxious than doctors. Neimeyer (1995) made a distinction between "death exposure" occupations and "death risk" occupations, and concluded that death anxiety is likely to be high in the latter but not necessarily in the former. For example, research suggests that workers in high-risk occupations such as police officer and firefighter have higher death anxiety, whereas those in high death-exposure occupations such as nursing and funeral director do not (Neimeyer, 1995). However, Thorson and Powell (1996) found that the death anxiety scores of their sample of undertakers—members of high-exposure but presumably not high-risk occupations—were higher than those of men in other occupations. Furthermore, anxiety caused by either exposure to or risk of death can be controlled by capability and self-confidence in coping with the threat of death.

Physical Health. Understandably, poor health can increase worries and fears concerning death. For example, seriously ill persons tend to express more anxiety about death than well persons (Hayslip, Luhr, & Beyerlein, 1991–1992; Sinha & Nigan, 1993; Viney, 1984). Still, health status has not been found to be a good predictor of death anxiety (Lester, 1994).

Personality. A number of personality variables have been found to have modest but significant relationships to fear and anxiety concerning death. For example, people with high death anxiety tend to be more distressed and significantly less satisfied with life than those with low death anxiety (White & Handal, 1990–1991); they also tend to be more depressed than those who are less anxious or more positive in their attitudes toward death (Cataldo, 1994; Vargo & Black, 1984). Other results point to a relationship between neuroticism and death anxiety (Howells & Field, 1982; Loo, 1984; Pollack, 1979). The results of other studies (Kane & Hogan, 1985; Tobacyk & Eckstein, 1980) point to a relationship between death anxiety and denial or repression: Low death anxiety has been found to be associated with a defensive personality that avoids rather than confronts threatening situations. Be that as it may, a certain amount of denial is not necessarily pathological or even maladaptive if it helps the person to cope with potential threats to his or her existence and to keep hopes alive. Among the more positive personality variables that have been shown to have fairly consistent inverse relationships to death anxiety are self-esteem, self-actualization (S.F.Davis, Bremer, Anderson, & Tramill, 1983; Rappaport, Fossler, Bross, & Gilden, 1993), psychosocial maturity (Rasmussen & Brems, 1996), and hardiness (Cataldo, 1994)

Modifying Fears of Death and Dying

Efforts to reduce death anxiety by means of death education courses have had some success (e.g., Davis-Berman, 1998–1999; Hutchison & Scherman, 1992), but for the

most part the results have not been very encouraging (e.g., Hayslip, Galt, & Pinder, 1993–1994; Hayslip & Walling, 1985; Maglio & Robinson, 1994; Mullins & Merriam, 1983; Rasmussen, Templer, Kenkel, & Cannon, 1998). A didactic teaching method in which students are given detailed information about death, dying, and bereavement, but in which little or no effort is made to reduce their fears and concerns, may be particularly ineffective and actually increase rather than decrease students' anxieties with respect to the topic. It might seem as if indirect methods of changing feelings and attitudes toward death, such as concentrated relaxation and stress management, would fare better than classroom instruction, but again, this has not always been true in practice (e.g., Rasmussen et al., 1998). Nevertheless, some success has accompanied efforts to change extreme fears of death by means of behavior modification and psychotherapy.

As with any phobia, an extreme fear of death *(thanaphobia)* may have a generalized quality in which the person is afraid of the idea of death or dying rather than a specific condition or situation associated with it. In such cases, reminding the person that he or she is going to die, as in the memento mori ("remember, you must die") of bygone years, can trigger a panic reaction or anxiety attack. On further analysis, the fear usually turns out to be not so much a fear of death itself as a fear of what death represents or connotes —personal extinction, separation from loved ones and things, the great unknown, the supernatural, uncertainty of going to heaven or hell, or disfigurement and destruction of the body. Rather than being afraid of anything associated with death, the person may simply fear the process of dying because of the pain associated with it. Fear of death may also be related to specific situations or objects, such as funerals, churches or anything religious, spirits or anything supernatural, stories or dramas in which someone dies, illness, injuries, hospitals, operations, or disfigured, disabled, or handicapped persons.

An extreme fear of death does not usually exist alone as a symptom, but is part of a general pattern of disordered behavior and cognition. In such cases, focusing on treatment of the fear exclusively is inadequate. The patient's problems and life should be explored more fully and a variety of techniques used to help him or her. In many cases, however, it is sufficient, or at least efficient, to deal with the specific fear by itself. Taking a personal history can reveal the predisposing and precipitating conditions for the fear and the consequences of thoughts and behaviors associated with it. A program for treating the fear may then be designed, including such techniques as systematic desensitization, self-monitoring, and modeling.

Systematic Desensitization. When combined with progressive relaxation and counterconditioning, this therapeutic technique has proven effective in the treatment of many phobias. First, the patient is taught how to relax the muscles of the body progressively whenever he or she wishes to. Then a series of stimuli, which are graded according to their fear-producing qualities, are presented. Initially, the stimuli are symbolic (e.g., "Imagine a situation…"), but eventually they may be made real (e.g., actual confrontation with the feared object, event, or situation). The patient is exposed to the hierarchically arranged stimuli or situations in order from least feared to most feared. When the patient has learned to tolerate the first feared stimulus, the next one in the hierarchy is presented, and so on until all stimuli in the hierarchy have been desensitized. Although the patient and the therapist usually cooperate in designing a desensitization hierarchy based on the particular patient's experiences, one possible hierarchy for the systematic desensitization of an extreme fear of death is as follows

1. Reading a book in which someone dies.
2. Looking at a painting of a deathbed or other dying scene.
3. Viewing a film in which people die.
4. Walking through a cemetery and looking at the tombstones.
5. Writing a will and making other plans for my death.
6. Attending the funeral of someone whom I know well.
7. Imagining my funeral and wondering what will happen to me when I'm dead.
8. Getting sick and not being able to get well.
9. Discovering that I have a potentially fatal illness.
10. Being admitted to the critical ward of a hospital.
11. Being told that I have only a short time to live.
12. Hearing that I am expected to die in the next day or so.

Self-monitoring. In the therapeutic technique of *self-monitoring,* patients are instructed to carry materials such as a note pad, a diary, a wrist counter, and a timer with them at all times to keep a record of their fear experiences and the time, place, and circumstances in which they occurred. The recorded information is then reported and discussed with the psychotherapist. Interestingly enough, the very process of self-monitoring—observing and tabulating occurrences of specific fears and thoughts—can result in a decrease in their occurrence. Modeling the behavior of another person has also been shown to be an effective approach to overcoming phobias. In *behavior modeling,* the patient watches another person interacting with the feared object or performing the feared act without showing any fear. The model may be a real live person or merely someone observed on film. The patient may also be encouraged to rehearse the feared behavior in a role-playing situation before actually engaging in it.

RELIGIOUS BELIEFS AND NEAR-DEATH EXPERIENCES

The event of death can obviously be viewed in a number of ways—as the final insult to humanity, as the last developmental task, or as a rite of passage to another plane of existence. In whatever way it is perceived, the fact remains that death comes to everyone and should be thought about and dealt with in some way. Whether these thoughts produce motivational paralysis on the one hand or a beneficial or destructive change in behavior on the other depends on one's past experiences and present social supports. The effects of increased awareness of death also depend on one's philosophy of life, a philosophy shaped by the multiplicity of social interactions that take place from childhood to old age. A part of that continually developing philosophy is concerned with a sense of purpose in life, a purpose that serves as a mainstay in coping with the problems and emotions precipitated by the inevitability of life's ending.

Since time immemorial, the great majority of humankind has found meaning and purpose in life through religious beliefs. A strong belief in conventional religious principles is, however, not essential to a calm acceptance of death. Though strong religious beliefs are a comfort to many dying people, other philosophical tenets may serve equally as well. It can be argued, for example, that an identification with humanity rather than religious orthodoxy is the best defense against death anxiety (Erikson, 1976).

Religion and Death Fears

The results of earlier research studies support the conclusion that people who believe in some form of a God and afterlife are usually better able to face death without overwhelming fears than are those who are less religious (Kübler-Ross, 1974; L. P.Nelson & Nelson, 1973). Feifel and Nagy (1981) found that fear of death was inversely related to religiosity, whether religiosity was defined as self-reported religiousness, intrinsic religiousness, belief in God, importance of religion in everyday life, or belief in life after death. More recent studies of various groups have generally confirmed these earlier findings (Alvarado, Templer, Bresler, & Thomas-Dobson, 1995; Durand, Dickinson, Sumner, & Lancaster, 1990; Lundh & Radon, 1998; Thorson, Powell, Abdel-Khalek, & Beshai, 1997).

There is, however, a difference between professed belief and actual behavior. For example, over 90% of the respondents in a national poll of Americans indicated that they believed in God, but fewer than half stated that they attended religious services once a month or more (American Attitudes, 1998). Furthermore, regular church attendance is not necessarily an indicator of low death anxiety. Although Rigdon and Epting (1985) found that college students who were less afraid and less threatened by death were more likely to attend church, church attendance may be prompted by death anxiety. Attending church, reading the Bible and religious literature, and other religious behaviors increase during times of personal turmoil and trouble. For example, Franks, Templer, Cappelletty, and Kauffman, (1990–1991) found that in gay men with AIDS greater church attendance was associated with higher death anxiety.

People with strong beliefs in God and an afterlife presumably find more meaning in life and relief from fear of death than those who are uncertain and practice religion only for status, social, or safety reasons (Cassem, 1988). Affirmed atheists, who have strong disbeliefs, also tend to profess few fears of death. A number of studies have found that the greatest apprehension concerning death occurs among people in the middle range between strong believers and strong nonbelievers in religion, those sporadically religious people who are inconsistent or uncertain in their beliefs (Aday, 1984–1985; Downey, 1984; McMordie, 1981). It would appear that ambivalence or uncertainty of belief rather than a lack of religious belief is more likely to lead to unresolved fear of death. In addition, strong religious beliefs do not necessarily eliminate death fears and anxieties but may merely serve to suppress or control them (Kuzendorf, 1985).

Belief in an Afterlife

Characteristics of religion that provide comfort to dying people vary widely with time and culture, but all religions try to provide a purpose and meaning for human existence. Though national surveys have found that approximately 70% of Americans believe in some form of afterlife, (see web site *http://www.icpsr.umich.edu /GSS99/codebook /postlife.htm*) such a belief is not essential to facing death calmly (Kalish & Reynolds, 1981). In fact, older adults are usually more concerned about death per se and their own demise than they are with life after death (Hurlock, 1980). It is understandable, however, that feelings of personal transcendence and belief in an afterlife often provide comfort and reassurance to dying people. Such beliefs may be interpreted as wishful thinking or defensive denial, and those mechanisms are certainly present in many cases. The threat

of total extinction and nothingness is a fearsome prospect, and it is natural for the human ego to defend itself against that threat.

Conceptions of an afterlife, heaven, and hell form a part of most religions. Christians are often unclear as to the nature of the life to come, but a large percentage believe that something of human personality survives the death of the body (J.A.Davis & Smith, 1994; Gallup, 1997). Hindus, Buddhists, and members of certain other religious groups believe in reincarnation or metempsychosis, in which something of the spirit of the deceased person passes into another living body. Traditional Buddhists, however, do not accept the notion that what passes from one life to the next is an unchanging self or permanent soul. In both Hinduism and Buddhism, the particular form in which the deceased is reincarnated is determined by his or her *karma,* or actions in previous incarnations. The individual's last thought before dying is particularly important in determining the character of the next incarnation.

The United States prides itself on being a religious nation, and belief in a hereafter is held quite strongly by many Americans. Seventy-three percent of the respondents in a nationwide poll conducted in 1996 by the National Opinion Research Center stated that they believed there is a life after death (American Attitudes, 1998). However, the exact percentages of believers varied somewhat with gender, race, age, and education. A slightly larger percentage of women than men, of Whites than Blacks, of those under than over age 70, and of those with a high school education or above than those with less than a high school education said that they

TABLE 9.1 Percentages of a Representative Sample of Americans With Various Conceptions on the Nature of an Afterlife

Connception of Afterlife	*Percentage*
1. A life of peace and tranquility.	92
2. A life of intense action.	38
3. A life like the one here on earth only better.	58
4. A life without many things which make our present life enjoyable.	46
5. A pale, shadowy form of life, hardly life at all.	18
6. A spiritual life, involving our mind but not our body.	75
7. A paradise of pleasure and delights.	64
8. A place of loving intellectual communion.	86
9. Union with God.	95
10. Reunion with loved ones.	91

Note. From General Social Surveys, 1972–1994, (pp. 118–120), by J.A.Davis and T.W.Smith, 1994, Chicago: National Opinion Research Center.

believed that there is a life after death. The gender and race differences in the 1996 poll were similar to those in a comparable 1976 poll, but in 1976 a greater percentage of respondents who were over than under age 70, and a smaller percentage of those with a

graduate degree than those with less education said that they believed there is a life after death. And what will that afterlife be like? As seen in Table 9.1, different people have somewhat different ideas about it, but a large majority feel that the afterlife will be a peaceful, tranquil place in which one is reunited with loved ones and becomes unified with God (see Box 9.2).

Near-Death Experiences

Despite mythological and mystical accounts of people who returned to life after having died, little if any scientific evidence of an afterlife has been published. Interview data from patients who were "dead" for a few minutes have been obtained by physicians and others since Plato's time, but interpretations of this anecdotal information have varied. The first systematic investigation of these *near-death experiences (NDEs)* was conducted at the turn of the century by Albert Heim, a Swiss geologist and mountain climber (cited by DeSpelder & Strickland, 1999, p. 526). Heim interviewed 30 skiers and mountain climbers who had accidents resulting in paranormal experiences. Three quarters of a century later, Kletti and Noyes (1981) interpreted these experiences as defensive depersonalization: by getting outside oneself, as it were, the person defends himself or herself against the reality of death.

Since Heim's time, a wealth of anecdotal data has been obtained from people who nearly died and were actually pronounced medically dead in some cases. On the basis of a number of these reports, Noyes (1972) identified three experiential phases occurring at the moment of death: *resistance, life review,* and *transcendence*. During the first phase, resistance, the dying person is initially aware of extreme danger, which leads to fear and struggling; sensations are enhanced and accelerated, and time seems to expand. During the second phase, life review, there is a pleasant out-of-body sensation of observing one's own physical being from somewhere outside; past experiences also pass rapidly before the individual. During the third phase, transcendence, there is a sense of awareness of the cosmos, of being one with other people and nature—a feeling of contentment and even ecstasy in which one is outside space and time.

Reports of *out-of-body experiences* are not uncommon. In a national sample of adults polled by Gallup and Proctor (1982), 15% of the respondents reported having been on the verge of death or having had a close call that involved an unusual experience at the time. Particularly influential in stimulating both popular and scientific interest in life after death have been the research and writings of Raymond Moody (1976). Moody's research methodology consisted of interviewing people who had been resuscitated after having been pronounced clinically dead. The 150 or so people whom he interviewed had difficulty describing their experiences, but several common features emerged. Most people referred to a feeling of peace and quiet, a sense of floating out of and above one's own body, traveling through a dark tunnel and toward a distant white light. On approaching the light the person had a powerful sense of love and an impression of being interrogated about his or her life and the degree of satisfaction with it. At this time a colorful, panoramic review of the person's life was experienced, a review that was totally accepted by a "being of light." Many people who reported having these experiences admitted that they

BOX 9.2 Where Are We Going?

I never thought much about death and an afterlife when I was growing up. There was some talk about dying, and an occasional funeral, but these events were of more interest in themselves than for what happened to the deceased afterward. Like many other children, I was told that if I was good I would go to heaven, but if I was bad I would go to hell. Because I had a greater fear of hell than an attraction to heaven, I was more concerned about not doing bad things than I was about doing good ones. Immortality was of little interest to me: Dracula was immortal, and he turned out to be a monster! Furthermore, I realized my limitations and couldn't stand the thought of living with myself for more than two or three hundred years at the most. Being a farm boy who was aware that animal corpses rot over time, I also had difficulty seeing how a person who had been dead for centuries could be reconstructed into a recognizable whole on some distant day.

Like most kids, I was more involved with the present than either the past or the future, so where we came from when we were born and where we are going when we die were of little interest to me and my friends. Most of us were content with being little hypocrites. We professed beliefs consistent with those of our church, but underneath it all we had doubts or considered that what might or might not be was probably not worth worrying about when there were so many other interesting things in the present. And when one of my friends told me that his pastor believed there was really nothing a person could do to influence what happened to him or her after death—that it was entirely a matter of God's grace rather than our own actions while we are still alive—I felt relieved and interpreted it as a license to do whatever seemed okay to me and my conscience.

This didn't completely settle the matter in the long run, so for a college course project I decided to interview a sample of people and ask them where they thought they would go when they died. The following responses are representative:

"Dust to dust, ashes to ashes."
"To play harps and football with the angels."
"To become one with the cosmos."
"To sleep for eternity." "Anywhere except New York City."
"To a distant planet, after an alien space ship picks me up."
"To Peaceful Valley cemetery, where my parents are buried."
"To the High Sierras or the Pacific Ocean, where my ashes will be scattered to the winds."
"To heaven to begin a new life."
"To my grave, where I shall await resurrection on Judgment Day."
"To hell if I don't change."
"To Atlanta. That's where I was born, and I have arranged for my remains to be sent there."

To the committed Christian, of course, Christ's answer to the "Quo Vadis?" question "Where are you going, Lord?" was that he was going to prepare a place for us. Whether that place has many mansions or is just a massive housing development, and whether souls fly around on wings or in helicopters was of little concern to an 8-year old girl to whom I posed the question of where she thought she would go when she died. Her delightfully refreshing answer, and probably one with which most people deep down would agree, was "I don't know, but I hope it's a nice place." Out of the mouths of babes…

were reluctant to return to their physical bodies, but the need to complete unfinished tasks made them do so (see Box 9.3).

A number of other researchers have used Moody's (1976) methodology. From a study of 102 people who had experienced NDEs, Ring (1980) analyzed interviews of 49 people who, according to Moody's definition, were "core experiences" of NDEs. Ring concluded that the experiences of these individuals occurred in five stages: (1) peace and a sense of well-being, (2) leaving the body behind, (3) entering the darkness, (4) seeing the light, and (5) entering the light. The third and fourth stages were accompanied by a life review, encounters with a "presence" and loved ones, and a final decision to return to life.

There is no question that NDEs are real: Millions of people of all ages, cultures, religions, and educational levels have reporting having them.[37] Rather, the problem is how to explain or interpret these phenomena. R.K.Siegel (1980) admitted that Moody's (1976)

BOX 9.3 Three Near-Death Experiences

When the bleeding wouldn't stop, Bill knew he was dying. "I was going, but I felt totally at peace. There was a golden kind of light, brighter than the sun, but it didn't hurt my eyes. I never wanted anything as much as to go into that light, but something or somebody—it felt like my dad, who died when I was a kid—communicated to me, 'It isn't your time. You must go back to finish what you have to do in your life.' The next thing I knew, I was slammed back into my body. It felt like a wet sock, and the pain was just awful."

For Marilyn, in the emergency room with a heart attack, the pain suddenly stopped. "All at once I just popped out of my body and floated up to the ceiling. I could see dust on top of the light fixtures, and I thought, 'Boy somebody's going to catch it for this!' I could see doctors working on someone on the table, when all of a sudden I realized it was me—I mean, my body. I thought it was kind of silly they were working so hard. My family was waiting down the hall, and I wished my kids could stop crying; I wanted to let them know I was fine, but they couldn't hear me. Then it seemed I had to get back, that it was my job to take care of them, see them grow up okay."

When the car stopped flipping, Kurt thought he had been thrown into outer space. "I was alone, all by myself out in the universe. I could hear noises,

[37]The International Association for Near-Death Studies serves as a center for the investigation of NDEs and the collection and dissemination of information and theories concerning these phenomena. The results of many studies of NDEs are reported in the *Journal of Near-Death Studies,* a periodical published by this association.

sort of like moans, and I could see these figures in the distance. They seemed to be people wearing some kind of robe, and they were faceless. They were in torment. I don't know why I think that, except I just seemed that way. They were helpless and gesturing to me to join them. Then I was realizing it would be like this forever. Something—I don't know what—was sending me a message, something about making a choice. I don't really remember it exactly. Being there was so horrible I can't even describe it. That was fourteen years ago, and I still can't figure out what I ever did to deserve it."

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findings can be interpreted as demonstrating that people survive death, but he prefers a more parsimonious explanation. Noting the similarity of these afterlife visions to hallucinations produced by drugs such as ketamine, which is related to PCP ("angel dust"), Siegel interpreted them as dissociative hallucinations caused by abnormal brain activity. A similar explanation was offered by Jansen (1997a, 1997b; see also Strassman, 1997). He maintained that NDEs can be produced by ketamine via blockade of *N*-methyl-*D*-aspartate (NMDA), receptors in the brain for the neurotransmitter glutamate. Conditions such as hypoxia, ischemia, hypoglycemia, and temporal lobe epilepsy—which can precipitate NDEs—release a flood of the amino acid glutamate in the brain, overactivating NMDA receptors and resulting in neurotoxicity. Ketamine, as well as substances in the brain that bind to the same receptor sites as it does, prevent this neurotoxicity and thereby produce altered states of consciousness of the sort seen in NDEs. Related physiological explanations of NDEs are that they are hallucinations accompanying oxygen deprivation (Blacher, 1979) or a surge of endorphins triggered at the time of death (D.Carr, 1981; Guevara & Sotelo, 1997; L.Thomas, 1975).

Rather than focusing on their physiological or biochemical basis, psychological explanations of NDEs interpret them as delirium states, romantic wish fulfillment, or psychological attempts to survive death. After pointing to the similarity of NDEs to psychedelic drug experiences, Kastenbaum (1991) concluded that people who have NDEs are still alive and that these experiences have nothing to do with death, a sentiment that was echoed by Kung (1984).

Whatever one's personal belief concerning NDEs may be, many researchers have concluded that they cannot be adequately explained at this time. Like religious portrayals of the hereafter, interpretations of near-death experiences as revealing something about the nature of an afterlife are a matter of faith rather than science. The idea that NDEs indicate the existence of another world beyond this one may provide comfort to both dying and bereaved people (Becker, 1998). NDEs may also reduce fears of death and intensify belief in an afterlife (Horacek, 1997; Sabom & Kreutziger, 1982). There are

also numerous reports of NDEs resulting in significant changes in the person's life (e.g., Greyson, 1992–1993, 1997; Groth-Marnat & Summers, 1998).

One can interpret the results of NDE research as demonstrating that the moment of death need not be feared; the pain goes away and the feeling can be calm and peaceful. Unfortunately, it is not always so. Although reported visits to the "other side" are usually pleasant, these experiences can also be quite terrifying (see Box 9–3). Rawlings (1978) reported that half of the 30 resuscitated patients whom he interviewed had unpleasant visions of hell when they were near death. Furthermore, a danger of publicizing a romantic, pleasant view of death is that such reports may actually encourage suicide attempts by people who are already oriented in that direction (Kamerman, 1988).

SUMMARY

Older adults think and talk more about death than young and middle-aged adults, but fears of death are usually more intense during middle age than at other times of life. Even in old age, there are significant individual differences in fears and attitudes toward death. Older women are more likely to view death in a benevolent way, whereas older men tend to perceive it as an enemy. Furthermore, more posi-tive attitudes toward death and dying are found in emotionally adjusted and financially stable people than among the maladjusted and the poor.

Fears, anxieties, and attitudes toward death can be assessed by a variety of methods, including observations, interviews, questionnaires, and projective techniques. The most popular of these are questionnaires, in particular paper-and-pencil scales and inventories. Brief descriptions of the most widely used scales of death fears and anxieties are given in Appendix D. These single- and multiple-score scales have been administered to various age groups throughout the world and correlated with dozens of other measures.

In addition to varying with chronological age, fears and attitudes toward death are related to gender, ethnicity, health status, education, religion, personality, and other demographic and personal variables. Different cultures view death and dying and associated practices or rituals from different perspectives. Philippe Aries's (1977/1981) historical research on changes in Western attitudes toward death since the Middle Ages points to relationships between attitudes toward death and awareness of the self. Aries (1977/1981) characterized the dominant changes in attitude from the early Middle Ages to the present time as a transition from the tame death to the death of the self to remote death to death of the other and, finally, to the denial of death in the 20th century.

Deeply religious people tend to express less fear of death than people who are more uncertain in their beliefs. By providing a meaning for human existence and hope for an afterlife, religion can give comfort to the dying. However, affirmed atheists also tend to show little fear of death, and nonreHgious, philosophical beliefs can also have a sustaining and supportive influence on one's personal security and life satisfaction.

The results of studies of people who have had near-death experiences have been interpreted in various ways: as bona fide visits to the "other side," as psychodynamic phenomena, or as due to the effects of endorphins, ketamine, or other neurophysiological or biochemical changes in the brain. Such experiences are usually reported as pleasant and may therefore act as a source of hope and comfort to terminally ill patients and their loved ones.

QUESTIONS AND ACTIVITIES

1. Make 20 or so copies of the Form 9.1 (Death Anxiety Scale), and administer them to a random sample of men and women of different ages. The scoring key for the scale is: 1-T, 2-F, 3-F, 4-T, 5-F, 6-F, 7-F, 8-T, 9-T, 10-T, 11-T, 12-T, 13-T, 14-T, 15-F. Score 1 point for each correct answer. The respondent's total score, which will be between 1 and 15, is the number of statements that he or she answered correctly according to the key. Score the scale for each person, and compare the scores of men and women. A score of 10 or above, which is higher than that obtained by 16% of a sample of college students, may be considered "high." What was the highest score obtained by your respondents? The lowest score? On the average, did men score lower or higher than women? Did older people score higher or lower than younger people?
2. Try the following exercise with yourself or a friend who did not get a very high score on the Death Anxiety Scale in Form 9.1. *Do not try this exercise if the person is very fearful of death.* Construct a hierarchy of death-related events or scenes varying form most to least fearful (263). Then have the person sit in an easy chair or lie down and try to relax completely. Tell him or her to take several deep breaths, exhale slowly and relax the muscles one by one. Next, ask the person to mentally picture the least fearful death-related event or scene on your hierarchy. Tell him or her to think about it as long as possible while continuing to relax and without becoming too fearful. This process should be repeated with the next least fearful event in the hierarchy. One event should be tried each day until the person can think about all the events in the hierarchy without becoming anxious or upset. Write a brief report of the results of applying this procedure.
3. Ask several friends or acquaintances if they will help you with a little course assignment that will take only about 10 min. Tell each person that you are going to read a list of words out loud, and that after each word is read the person should respond with the first word that comes to mind. Using a watch, a pencil, and a piece of paper, record the response time, in seconds, and the association given to each word. Summarize the results in terms of the number of responses of a particular kind given to each stimulus word, average response times, and the insights provided by the respondents into their fears and attitudes toward death. The words are *burial, disease, hell, cemetery, dying, kill, coffin, embalming, murder, cremation, funeral, soul, death, heaven,* and *suicide.* Use a different arrangement of the words with each person.
4. Why should moderately religious people be more afraid of death and dying than very religious people or even nonreligious people? Under what circumstances might religion make a person less afraid of death, and when might it make a person more afraid of death? How can you tell if a person is a "true believer," as opposed to someone who is simply using religion as an insurance policy? How can you tell if religious faith really eliminates or cures fears of death or merely suppresses or controls them?
5. Ask a few people who have had near-death or out-of-body experiences in accidents what thoughts and feelings they remember having at the time. Did their whole lives

flash before them? Did they travel to the "other side" through a long tunnel and encounter a "being of light?" What other aspects of the experience can they recall?

6. Do you believe in a life after death? If so, where do you think you will go after you die, in what form will you be, and what will the experience be like?
7. Have you ever played with a Ouija board or participated in a seance? If so, describe your experiences. If not, ask several classmates about their experiences with Ouija boards, seances, the occult, and spirits. How valid are such reports? What can these experiences tell us about life beyond the grave?
8. Web exercise: The purpose of this exercise in to acquaint you more fully with commercially available, paper-and-pencil measures of attitudes, anxieties, fears, and related concepts concerning death, dying, and bereavement. Begin by logging on to the site *ericae.net/testcol.htm,* the ERIC/AE Test Locator. Point and click on the first category listed, the ETS/ERIC Test File. Enter *death* into the "Find" box and click on "Go." Read the brief descriptions of all 45 instruments described in the five groups. From these instruments, select 5 that you feel would be of greatest interest to a researcher or counselor in thanatology and print the corresponding descriptions. Next, point and click on the Page Top category at the bottom of the screen and then click on the Test Review Locator category. Enter the name of each of your five instruments to determine if a review for it is available; if so, print the review. Finally, repeat the entire procedure outlined above with the words dying and bereavement.

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PART V

DYING AND SURVIVING

10
THE PROCESS OF DYING

TOPICAL OUTLINE OF THE CHAPTER:

Timing and Sequence in Dying
- *Dying trajectories*
- *Terminal drop*
- *Personal control of dying*
- *Stages in dying*
- *Criticisms of Kübler-Ross's model and alternative conceptions*

Hospital and nursing home treatment
- *Training and attitudes of medical personnel*
- *Sustaining life and resuscitating*
- *Defining and diagnosing death*
- *Pain control*
- *Helplessness, hopelessness, and choice*

Hospice care
- *History of hospice*
- *Features and procedures*
- *The hospice team*
- *Patient admission criteria*
- *Models and problems*

Communicating with and counseling the dying
- *Conspiracy of silence*
- *Open communication*
- *Professional counseling procedures*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *What are the arguments for and against dying at home rather than in a health-care institution?*
- *What role do feelings of helplessness and hopelessness play in dying?*
- *What are stage theories of dying, and why have they been criticized?*
- *What attitudes have hospital staff members traditionally shown toward dying patients?*
- *In what ways are individual differences related to efforts to sustain life and/or resuscitate?*
- *How do medical definitions differ from legal definitions of death?*
- *What are the goals of hospice treatment and the procedures used to attain these goals?*
- *What is a conspiracy of silence and how should it be handled?*
- *What techniques are recommended for counseling dying persons?*

Whether death is perceived as a tragedy or a normal event depends not only on how it occurs but also on the dying person's age and relationships with the survivors. The death of a young person, or any sudden, unexpected death, may be perceived as more tragic than dying in old age or at the end of a long illness. In fact, when a person has suffered extensively, death is often seen as a relief or blessing rather than a tragedy.

In another sense, death is always something of a tragedy to the survivors, especially when the deceased was deeply loved, highly esteemed, or valued in other ways. The tragedy of death is compounded when a person dies all alone in the impersonal, unloving atmosphere that characterizes many general hospitals, nursing homes, and even private residences.

TIMING AND SEQUENCE IN DYING

Like other events in one's life, dying occurs in a particular place and at a particular time. The place and time may not be to one's liking, but there is often not a great deal that can be done to change them. This does not mean, however, that a dying person has no influence whatsoever over where or when he or she dies. Furthermore, not everyone dies in the same way or goes through the same experiences or stages in dying. Dying, like other personal behaviors, is a highly individualized process, varying not only with the nature of the specific disorder and the health of the person, but with demographic and situational variables as well.

Dying Trajectories

The rate of decline in functioning from health to death can be fast or slow, with many starts and stops. The *dying trajectory* of a person, as it was labeled by Glaser and Strauss (1968), depends on the nature of the disorder, the patient's age and life-style, the medical treatment received, and various psychological factors. In the "staircase" trajectory of multiple sclerosis, for example, there are rapid declines followed by periods of remission. A long dying trajectory, though it gives one a better chance to put his or her affairs in order and is perhaps less stressful for the survivors than a short dying trajectory, is not always desirable. Given a choice, many people would probably rather die quickly and avoid much pain and psychological stress for themselves and, presumably, their loved ones.

Glaser and Strauss (1968) described a *lingering dying trajectory* as one in which patients die over a long period of time, seeming to "drift out of the world, sometimes almost like imperceptibly melting snowflakes" (p. 64). The treatment of such persons, who were typically nursing home patients suffering from chronic degenerative illnesses, emphasized "comfort, care and custodial routine, complemented by a sentimental order emphasizing patience and inevitability" (Glaser & Strauss, 1968, p. 64). On the other hand, patients who died quickly were characterized as following a *quick dying trajectory,* which may or may not have been expected by the staff. Those who followed an *expected quick dying trajectory* were often seen in emergency rooms and intensive-care units of hospitals. In an *unexpected quick dying trajectory,* the medical staff either expected the patient's death, but not as quickly as it occurred or did not expect a patient to die, but death occurred suddenly (Strauss & Glaser, 1970). Whether the patient was expected to die or not, and particularly if not, an unexpected quick dying trajectory resulted in a crisis atmosphere in the hospital or long-term care institution. The crisis atmosphere created by quick dying was especially disruptive on obstetrical wards or other wards where death was uncommon (Mauksch, 1975).

The dying trajectory of a patient need not be simply a lingering or quick one. As pointed out by Martocchio (1980), a typical dying trajectory consists of peaks and valleys, as well as plateaus in which there are periods of no apparent deterioration. A fairly rapid downward movement toward death or a gradual rather than a rapid movement toward the end of the trajectory may occur. Furthermore, the designation of a patient as "well," "acutely ill," "chronically ill," or at "high risk of dying" is also not necessarily a one-time matter but can also change as the patient's condition improves or worsens.

In general, nursing homes are better equipped than hospitals to handle patients with lingering dying trajectories. Hospital personnel, whose training and attitudes are oriented toward recovery and cures rather than dying, have less difficulty dealing with patients who have quick dying trajectories than with those with lingering trajectories.

Whether the dying trajectory is long or short, and especially if it is short, people of all ages are expected to deal with impending death in a reasonable manner. What is socially accepted as "reasonable," however, varies with the age of the person. It is generally expected that young people will resist death actively and even antagonistically and attempt to take care of uncompleted tasks before dying. Older adults, on the other hand, are expected to be more passive and to express less anger and frustration when death is imminent.

Terminal Drop

People are seldom given the luxury of deciding how quickly or slowly they die, but there are psychological as well as physiological signs of impending or imminent death (see Table 10.1). Some researchers, for example, have reported evidence of a so-called *terminal drop* in behavioral functioning shortly before death (Granick & Patterson, 1972; Reimanis & Green, 1971; Riegel & Riegel, 1972). The terminal drop is reportedly manifested by decrements

TABLE 10.1 Physiological Signs of Impending and Imminent Death

Signs of Impending Death
Diminished body movement
Relaxation of facial muscles
Difficulty speaking
Difficulty swallowing
Drooling
Choking
Nausea
Flatus
Abdominal distention
Constipation

Urinary and rectal incontinence
Diminished sensations
Cyanosis and mottling of extremities
Cold skin (progressing from feet to hands, ears, and nose)
Decreased blood pressure
Slowed and weak pulse
Shallow, irregular (rapid or abnormally slow) respirations
Blurred vision
Impaired taste and smell (hyposensitive or hypersensitive)
Signs of Imminent Death
Dilated and fixed pupils
Inability to move
Loss of reflexes
Weaker, more rapid pulse
Cheyne-Stokes respirations
Noisy breathing ("death rattle")
Lowered blood pressure

Note. From "The Dying Process," by N.Samaral, in H.Wass & R.A.Neimeyer (Eds.), *Dying: Facing the Facts* (pp. 99–100), 1996, Washington, DC: Taylor & Francis.

in IQ, memory, cognitive organization, sensorimotor abilities, and even personality characteristics during the last months or years prior to death (N.White & Cunningham, 1988). In many dying patients there is increased disengagement from other people and things, signaled by lessened social interaction, loss of interest in former pursuits, and spending a greater percentage of time sleeping (Samarel, 1995).

To the extent that it is a genuine phenomenon and not merely an artifact of inadequate research methodology, a terminal drop in cognitive and behavioral functioning is probably due to cerebrovascular and other physiological changes occurring during the last months of life. Lieberman (1965) noted that in addition to cognitive changes, people who were approaching death became more preoccupied with themselves, not because of any inherent conceit or egocentricity but rather in a desperate effort to keep from falling apart psychologically. Realizing that they are no longer able to organize and integrate complex sensory inputs efficiently and that they cannot cope with environmental demands adequately, dying individuals may experience feelings of chaos and impending doom and be less willing and able to exert themselves to perform as well as they once did.

Personal Control of Dying

Although all dying people do not show a terminal drop in abilities and actions, many people apparently realize when they are about to die (Kalish & Reynolds, 1981). This

realization affects different people in different ways. Some who no longer wish to live may give up without a struggle and die rather quickly. Having lost the will to survive, they embrace death as a solution to their personal problems. Another group of severely ill people, those who find themselves unable to cope with the pain and frustration of prolonged illness but are also afraid of death, continually vacillate between a desire to live and a wish to die. The conflict between living and dying is aggravated when the person has one or more dependents but is afraid of becoming a burden on them.

Whether they desire to die sooner or later, it is generally acknowledged that people can, through their own attitudes and behavior, either hasten or delay their own death. Having accepted the fact that death is imminent, they may even decide on a particular time for it to occur. For example, Kastenbaum and Aisenberg (1976) found that cancer patients who had a strong motivation to survive, as indicated by resentment against their illness and positive attitudes toward treatment, survived longer than patients with a weaker will to live. Similarly, a priest who worked with Indians in the interior of Alaska observed that to some extent they could control the time, place, and manner in which they died. The priest was called upon to pray for those who believed, usually because of some "sign" in nature (e.g, "I heard the owl call my name"), that they were dying. They asked the priest to bring to them persons to whom they had something to say, concerning such matters as an old score to be righted or a debt to be forgiven. Then, having made their peace with others, most of them died soon after receiving the sacrament (Trelease, 1986). More systematically collected data also indicate that there is a relationship between time of death and those events (birthdays, holidays, etc.) that are important to an individual (Phillips & Feldman, 1973; Phillips & Smith, 1990).

Stages in Dying

Also related to the "time" dimension of the dying process are the stage theories of Elisabeth Kübler-Ross and other researchers. Kübler-Ross's (1969) stage theory (see Fig. 10.1) was formulated from an analysis of her interviews with over 200 dying patients. She argued that it is important for health workers and families of dying patient's to be observant and aware of these progressive stages, because the psychological needs of patients and the appropriate responses to them vary somewhat from stage to stage. Throughout all five stages, however, efforts must be made to encourage the patient not to lose hope or to become pessimistically resigned to dying. Kübler-Ross (1969) advocated supporting the patient's feelings of hope with constant reassurance that everything medically and humanly possible is being done to help.

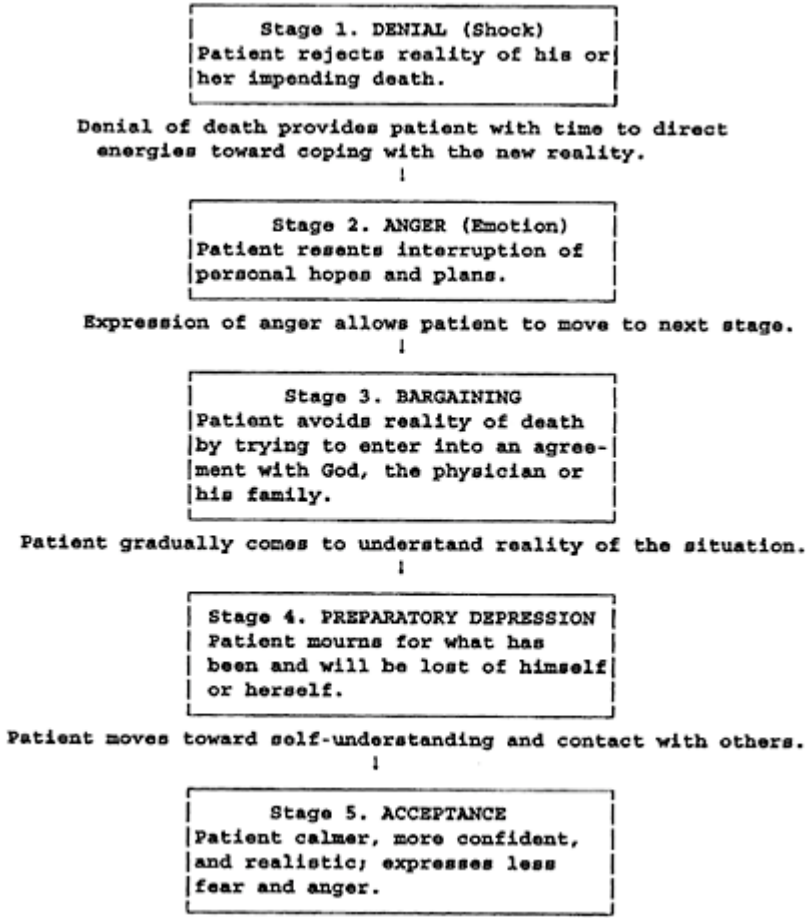

FIGURE 10-1 Kübler-Ross's stages in the dying process. From *Death: The Final Stage of Growth.*

By E.Kübler-Ross, 1975, Englewood Cliffs, NJ: Prentice-Hall. Copyright 1975 by [name of copyright holder]. Adapted with permission.

Denial. The first stage in Kübler-Ross's (1969) model is *denial,* a common reaction to being told that one is dying. Denial is an important self-protective mechanism, in that it enables a person to keep from being overwhelmed or rendered helpless by the frightening and depressing events of life and to direct his or her attention to more rewarding experiences. It is certainly advisable for any seriously ill person to question a terminal prognosis and seek additional medical opinions. But denial becomes unrealistic when the patient invests precious time, money, and emotions in medical quacks and faith healers.

Denial of death is manifested in many ways. For example, patients who have been told clearly and explicitly that they have a heart disorder, cancer, or some other serious illness

may deny having been told anything. Such "oversights" demonstrate how denial operates in selective attention, perception, and memory. Defensive, unconscious denial also helps a person to minimize the importance of bad news without dogmatically refusing to believe it. Denial of death is, of course, not limited to dying patients. It is also quite common among medical personnel and among the family and friends of dying patients.

Anger. Continual deterioration of a terminally ill patient's health and sense of well-being makes it more and more difficult to suppress the fact that time is growing short. As the dying process continues, denial gradually fades into partial acceptance of death. However, partial acceptance is accompanied by feelings of anger at the unfairness of having to die without being given a chance to do all that one wants to do, especially when so many less worthy people will continue to live. The feelings of anger experienced by a dying person are frequently nondiscriminating, being directed at family, friends, hospital staff, and even God. The direct target of the patient's anger, however, is the unfairness of death rather than other people. It is important for those who have regular contacts with dying people to be prepared for these attacks of anger and to recognize that much of the hostility represents defensive displacement of emotion from the real target to a convenient scapegoat. To facilitate the expression of anger ("emotional venting") in a safe atmosphere, Kübler-Ross (1969) recommended the use of "screaming rooms" for both the patients and the medical staff.

Bargaining. In the normal course of events, a dying patient's anger fades and is replaced by a desperate attempt to buy time—by striking a bargain with fate, God, attending physicians or nurses, or anyone or anything that offers hope for recovery or at least a postponement of death. Bargaining is a healthier, more controlled reaction than denial or anger, and patients in this stage make many promises. They may promise to take their medicine without fussing, to attend church regularly, to be kinder to others, and so on. Praying for forgiveness, embracing new religious beliefs, and engaging in rituals or magical acts to ward off death are also quite common.

Depression. The fourth stage in Kübler-Ross's (1969) model is depression, a stage in which the partial acceptance of the second stage gives way to a more complete realization of impending death.

Denial, anger, and bargaining have all failed to ward off the demon death, so the patient becomes dejected in the face of everything that he or she has suffered and all that will be lost in dying. Kübler-Ross (1969) considered depression, like the preceding three stages, to be a normal and necessary step toward the final peace that comes with complete acceptance of death. She advised the patient's loved ones and the medical personnel to let the patient feel depressed for a while, to share the patient's sadness, and then to offer reassurance and cheer when appropriate.

Acceptance. The last stage in the dying process, that of acceptance, is characterized by "quiet expectation" and is the healthiest way to face death. The weakened, tired patient now fully accepts death's inevitability and its blessings in terms of release from pain and anxiety. The patient may reminisce about life, eventually coming to terms with it and acknowledging that the experience has been meaningful and valuable. This is a time of disengagement from everyone except a few family members and friends and the hospital staff. In these social interactions, old hurts become erased and last goodbyes are said. This calm acceptance of death has been immortalized in many poems, stories, and other works of art, including William Cullen Bryant's "Thanatopsis," Alfred Lord Tennyson's "Crossing the Bar," and Robert Louis Stevenson's "Requiem."

Criticisms of Kübler-Ross's Model and Alternative Conceptions

Kübler-Ross's observations and investigations of the dying process are valuable contributions to thanatology, but her stage theory has not escaped criticism. In all fairness, she has cautioned that the five stages should not be interpreted as a fixed, unvarying, unidirectional sequence, but rather as a heuristic model for understanding how dying people feel and think. In general, dying people move from an initial stage of shock to one of acceptance, but some die still angry at everyone and everything, and others die depressed. Nevertheless, it has been alleged that the orderly listing or sequencing of these stages has encouraged application of Kübler-Ross's model as an exact description of how dying people should behave and the precise order of their reactions. Medical personnel can readily memorize the names and characteristics of the five stages, and the pat descriptions make them appear more definite than they were perhaps intended to be. Nurses and doctors have been known to chide terminally ill patients for not completing particular stages in the proper sequence and at the proper time. As a consequence, dying patients may be made to feel guilty for failing to accomplish the various tasks associated with specific stages "in order" and "on time." On the other hand, patients may also inform physicians and nurses of the stages they are in and therefore what to expect of them.

Despite criticisms of her stage theory (e.g. Corr, 1993; Doka, 1995; Kastenbaum, 1991; Pattison, 1977, 1978; Shneidman, 1977; Weisman, 1974), Kübler-Ross is right in certain respects. Though there is considerable movement back and forth between denial and acceptance, denial is more common during the early part and acceptance is more common during the later part of the dying trajectory (Kalish, 1985a). A similar sequence of behaviors can occur in response to any major loss, whether it be the death of a close relative or friend, a divorce, or even the loss of a prized possession. Stage theory is also appealing from a training point of view. Medical personnel are busy people and therefore receptive to learnable and easily applicable suggestions for dealing with terminally ill patients, their relatives, and close friends (see Downe-Wamboldt & Tamlyn, 1997). As a result of the training, health personnel may also become more accepting of the full range of emotions expressed by dying people and of always encouraging and reinforcing hope on their part.

Alternative ways of viewing the dying process have been proposed by a number of researchers, including Weisman and Kastenbaum (1968), Shneidman (1980b, 1987), and Pattison (1977). The response patterns of dying patients observed by Weisman and Kastenbaum (1968) fell into two groups. One group of patients consisted of two subgroups: (a) those who seemed unaware of the fact that they were dying, and (b) those who simply accepted it. Both subgroups became less and less active as the time of death approached. In contrast, a second group of dying patients remained active in hospital life until the very day on which they died.

Shneidman (1980b), who designated the task of a dying person as *death work,* maintained that the person first deals with impending death at a psychological level and prepares to meet the end. Next, the person readies himself or herself for death in a way that assists loved ones to prepare for their role as survivors. Shneidman recognized, however, that there is a great deal of individuality in how people face death. As with any life crisis, the manner in which a person approaches death is a reflection of his or her personality. So a person's reactions to impending death reveal something about the

personality and the kind of life that the person has lived. One person may view death as a punishment for wrongdoing, another is afraid of the separation entailed by death, and still another perceives it as an opportunity to be reunited with departed loved ones.

Various emotions and concerns may be expressed by dying persons: fear of the unknown, loneliness and sorrow, pain and suffering, loss of body, loss of self-control, loss of identity. In this regard, Pattison (1977, 1978) proposed a three-phase descriptive model that includes the aforementioned feelings and other psychological responses during the *living-dying interval*—the interval between the initial death crisis and the actual time of death. The three phases of the living-dying interval are the *acute phase,* the *chronic living-dying phase,* and the *terminal phase*. During the acute phase, which corresponds to Kübler-Ross's (1969) denial, anger, and bargaining stages, anxiety and fear are at a peak. The high level of anxiety experienced by the person during this phase is reduced by defense mechanisms and other cognitive and affective resources of the person. During the second phase, the chronic living-dying phase, anxiety is reduced and questions about the unknown are asked: What will happen to my body, my "self," and my family and friends while I am dying and afterward? Considering my present situation, what realistic plans can I make for the future? During this second phase, the person begins to accept death gracefully. But it is during the third, or terminal, phase that the person, though still wanting to live, finally accepts the fact that death is not going to go away. Now functioning at a low energy level and desiring mainly comfort and caring, the person begins a final social and emotional withdrawal from life.

HOSPITAL AND NURSING HOME TREATMENT

Unlike the situation in former times, when the large majority of people died at home or out-of-doors, most dying today is done in hospitals, nursing homes, and other health-care institutions. Although most people would probably rather die at home than in the hospital, from a strictly medical viewpoint institutional care is generally superior to home care. Institutional facilities have better equipment, and the personnel who run them are better trained and more technically proficient than most home caretakers. Unfortunately, the emphasis on physical care in institutions often leads to a neglect of the psychological needs of dying patients.

Training and Attitudes of Medical Personnel

Despite the availability of lifesaving equipment and medical expertise, from a psychosocial perspective a typical hospital or nursing home is not the best of all possible places in which to die. Physicians and nurses, who are continually busy with administrative and technical duties, have little time to try to understand and deal with the emotional and social needs of dying patients. The hospital staff can be seen moving swiftly and efficiently in and out of intensive-care rooms or terminal wards, checking their watches, administering medicines, and connecting, disconnecting, and tuning machines. If they do stop to chat with patients, it is usually only for brief moments before they are off to more pressing duties.

Doctors and nurses are trained to save lives, so it is not surprising if they become frustrated when, in spite of their best efforts, patients die. Sometimes efforts by medical

personnel to avoid failure assume the form of defensive anger at dying patients, in which they are treated differently from other patients. "Good" patients are those who make the staff look good; they do what they are expected to and do not cause a lot of trouble. "Bad" patients, on the other hand, are those who cause trouble by not getting well or dying at the wrong time.

Staying away from a dying patient as much as possible is one method of coping used by some hospital staff members. Hospital staff contact with a patient typically declines abruptly when the illness is diagnosed as terminal (Gordon & Klass, 1979). As one hospital staff member confessed, "When you've exhausted everything you can do for a patient medically, it becomes difficult to walk into the room every day and talk to the patient" (Barrow & Smith, 1983, p. 364).

To cope with their feelings of frustration, helplessness, and embarrassment, some doctors and nurses tend to stereotype terminally ill patients as already dead or at least as different from the living. *Depersonalization,* which is reflected in the tendency to refer to patients by specific diseases and room numbers rather than personal names, is most marked when patients are most helpless. The hospital staff may become abrupt and terse with dying patients, and confess that they don't want them to die on their shift (Kübler-Ross, 1975). In one hospital studied by Sudnow (1967), it was common for aides or orderlies to prop up or ignore patients who died on their shift, leaving it for orderlies on the next shift to "discover" the bodies and hence be responsible for wrapping them. Mauksch (1975) quoted one head nurse who tearfully referred to a patient as particularly "cooperative" because she had died at three o'clock so neither shift would be responsible for the consequences.

The characterizations given in the preceding paragraph are, hopefully, not true of a large number of hospital personnel. There is indeed a tendency for medical professionals to become detached specialists and spectators, who protect themselves by objectifying and combating death rather than dealing with personal feelings. In discussing the findings of a study of dying patients in a teaching hospital, Mumma and Benoliel (1984–1985) stated:

> *Despite the fact that the majority of patients had been designated 'no code' (no resuscitation attempts to be made) and had conditions labeled by their physicians as either grim or terminal, the treatment orientation was overwhelmingly toward the cure end of the comfort-cure continuum, (p. 285)*

However, many doctors and nurses genuinely care for their dying patients and miss them when they are gone. These medical professionals have learned to be comfortable with dying patients and to accept death as a natural event rather than a frightening consequence of a medical mistake. By adopting this attitude, they are in a better position to help patients come to terms with the inevitable.

Recognizing the need for psychological as well as technical training of hospital personnel, medical educators are now more likely to include the topic of the psychology of death and dying in their teaching. For example, the number of full-term courses on death and dying offered by medical schools in the United States has increased substantially in recent years. In addition to taking complete courses, medical and nursing students are being trained by means of occasional lectures and short courses to deal with

dying and death. Such training is designed to assist doctors and nurses in establishing greater rapport with terminally ill patients and their families and thus help them to view death less fearfully and make the passage from life to death more dignified for all concerned. One training procedure that has been used to increase the sensitivity of medical and nursing students to the role of psychological factors in dying is a *psychological autopsy*. This is an in-depth postmortem analysis of the psychosocial factors that may have contributed to the patient's death and had an effect on the dying process. A psychological autopsy is undertaken to clarify the manner of death, why it occurred at a particular time, and to provide information of potential value to survivors and other concerned persons (Young, 1992).

Sustaining Life and Resuscitating

For understandable reasons, the quality of medical care and efforts to arrest the decline in a patient's condition often diminish when the patient is diagnosed as incurable or terminal. For example, doctors and nurses often let terminally ill patients in nursing homes simply die, without making any special efforts to prolong their lives (Brown & Thompson, 1979).

A medical decision *(coding)* specifying the extent of efforts at resuscitation when the heart and lungs stop functioning is often made beforehand and entered on a patient's chart. *Code blue* is a directive for all-out efforts, including heroic or extraordinary measures as well as CPR. CPR consists of a group of procedures—artificial respiration, inserting a tube through the mouth or nose into the trachea to assist breathing (endotracheal intubation), as well as compression of the chest, electrical stimulation, and medication to support or restore heart functioning. CPR procedures are, however, effective in only 20–50% of the cases, and have an even lower success rate with seriously ill people who experience cardiac arrest (Ebell, 1994). Of course, CPR will not be attempted if the attending physician has issued a *do-not-resuscitate (DNR)* order for a patient who has experienced cardiac or respiratory arrest. However, issuance of a DNR does not imply that other treatments—intravenous fluids, artificial nutrition and hydration, or antibiotics will be discontinued. Some hospitals still employ a *no code* directive indicating that neither CPR nor medical heroics should be applied with the patient, and a *slow code* directive instructing nurses to initiate only CPR.[38]

Although the extent to which a coding system concerning patient resuscitation is followed varies with the medical facility and personnel involved, most physicians probably do as much or more than can reasonably be expected to sustain the lives of patients. Sometimes doctors seem insensitive to dying patients and their rights to live as long as they can, but probably more common is the doctor who is unwilling to recognize

[38]Other terms or acronyms that have been used by health personnel to refer to the treatment or condition of patients are CMO (comfort measures only) and code 90 (patient utterly without hope), PRN (giving medication "as occasion arises," as needed, when the patient hurts and asks for relief). Law enforcement also has its own jargon, including DAS (dead at scene), DRT (dead right there), and, of course, the familiar DOA (dead on arrival).

when further efforts on behalf of a dying patient not only will fail but may also cause even more suffering to the patient and his or her loved ones. Erring on the side of taking extraordinary (heroic) lifesaving measures to extend life is, of course, made more likely in the face of expensive malpractice suits and other legal measures against medical practitioners.

Much has been written about the rights of dying patients to decide when expensive and uncomfortable medical procedures should be used or terminated and the patient permitted to die a natural death (see chap. 7). However, physicians and nurses are well aware of the ambivalent feelings that terminally ill patients harbor toward dying. A dying person should certainly be permitted to have a voice in deciding whether to die at home and whether to prolong life by artificial means. But other voices, including those of family members and the attending medical staff, also have a right to be heard before a final decision is made.

In addition to ambivalence toward dying by a given patient, there are individual differences among patients in their expressed desire to have doctors make heroic efforts to keep them alive. When elderly people in a veteran's home were asked their preferences as to what medical efforts should be used to sustain their lives if they were terminally ill, under great physical stress, and bearing heavy medical expenses, the responses were mixed. Almost 50% of the respondents said they would want the attending physician to keep them alive, but another 25% stated that they would wish death to be speeded up under such circumstances. The remaining 25% did not want either heroic measures or efforts to hasten death to be used (Preston & Williams, 1971).

Defining and Diagnosing Death

Many writers of horror stories have capitalized on the fact that the traditional indicators of death—absences of heartbeat, pulse, respiration, or reflexes—are not always conclusive. The fact that these accounts are not entirely fictional is seen in cases of catalepsy and other conditions in which people (and animals) only appear to be dead *(thanatomimesis)*. None of the traditional vital signs are present, and yet the individual makes a dramatic recovery after a period of time. The following description of the case of an Italian soldier who presumably had died from an attack of asthma is illustrative:

> *A doctor, glancing at the body, fancied he detected signs of life in it. A lighted taper was applied to the nose of the carabineer—a mirror was applied to his mouth; but all without success. The body was pinched and beaten, the taper was applied again, and so often and so obstinately that the nose was burned, and the patient, quivering in all his frame, drew short spasmodic breaths—sure proof, even to a non-professional witness, that the soldier was not altogether dead. The doctor applied other remedies, and in a short time the corpse was declared to be a living man. (Kastenbaum & Aisenberg, 1976, pp. 138–139)*

This case, which occurred in the 1880s, was not particularly unusual in the 19th century. Such reports led to a distrust of the traditional vital signs of death and to the practice of leaving corpses above ground for several days before burial. Although rare, similar cases of apparent death occur even today:

> *A 40-year-old woman, pronounced dead by emergency medical technicians, lay on the floor of her apartment for nearly three hours on Monday night until an investigator from the city medical examiner's office heard a gurgling sound and realized that she was alive. (James, 1993)*

The lack of a completely objective, uniform legal definition of death, as well as ambiguities concerning the responsibilities of attending physicians toward dying patients and their families, has resulted in many malpractice suits and a number of manslaughter and murder charges. Thus far, only one physician, Jack Kevorkian, in the United States has been convicted of killing a patient in order to end that person's suffering. However, in the absence of a legal and medical consensus on what constitutes death, the threat of legal action against other physicians by the families of persons who die in hospitals is a continuing possibility.

According to the laws of most states a person is alive as long as a heartbeat and respiratory movements, no matter how they are maintained, can be detected. A number of states have adopted the concept of brain death (flat EEG for at least 10 min) as the legal definition of death and a condition for the removal of donated organs for transplant purposes. Most states, however, still use the traditional definition of death as the cessation of all vital functions. In states that have not passed legislation defining death, the definition is based on hospital policy. Because the issue of how to determine exactly when a patient has died and when all heroic measures should be terminated has not been solved, in order to protect themselves, most physicians are advised to consult with the family of the dying person and obtain legal counsel before deciding to terminate the use of life-sustaining equipment. Even so, the individual physician continues to bear a heavy responsibility for the final decision.

Pain Control

Another responsibility of physicians is concerned with the extent to which drugs such as heroin, morphine, and marijuana should be used to make terminally ill patients physically and emotionally comfortable. The quality and intensity of the pain experience is, of course, not only a function of the sensory stimulus per se but is also affected by the patient's emotional state and interpretation of the pain. In particular, the degree of stress that the patient is experiencing because of other events, and his or her general optimistic/pessimistic outlook, can affect the experience of pain.

The need for pain control in dying patients is made clear by the observation that approximately 50% of all patients with terminal illnesses have unrelieved pain and another 25% have severe or very severe pain. It might be argued that greater use of morphine by these patients would result in more drug addiction. However, this hardly seems of foremost concern with terminally ill patients who are allergic to or have developed tolerances for high doses of morphine and other addictive drugs and who may very well die in agony without heroin (Quattlebaum, 1980).

The use of morphine and other analgesics makes it possible for the majority of terminally ill patients to die without pain. A combination of drugs, the disease process itself, and psychological withdrawal usually results in the patient being drowsy rather than terrified at the moment of death. In any event, only a small minority of patients are

conscious just before they die, and for the great maj ority it appears to be a peaceful, painless experience.

Helplessness, Hopelessness, and Choice

Stories abound of believers in voodoo who were literally "scared to death" when a curse was placed on them. The breaking of taboos has also apparently contributed to the deaths of violators who were convinced that spirits were going to kill them for their transgressions. As seen in the following excerpt, reports of being scared to death are, however, not limited to non-Western cultures:

> *A story is told of a fraternity that decided to initiate a new pledge in what they considered a particularly imaginative way. They bound his arms and legs, blindfolded him, and tied him to a railroad track. Unbeknown to the poor pledge, they tied him to a track that was never used, but which was adjacent to one that was used. Along came a train. Although the young man was in no physical danger, he had every reason to believe he was, and he died. (Kalat, 1984, pp. 23–25)*

In contrast to such instances of being frightened to death are reports of incarcerated or institutionalized persons whose plight was so discouraging that they apparently just gave up and died. Actually, voodoo death and perhaps many other cases of sudden death in a frightening situation maybe caused by a physiological mechanism similar to that seen in prisoners or patients who resign themselves to their fate and "give up." A possible explanation is that of excessive activity of the parasympathetic nervous system, which can occur either as a rebound effect from excessive sympathetic nervous system activity or as a response to a hopeless situation.

The deaths of certain patients in hospitals and nursing homes have been attributed to loss of hope when it seemed that the patient's situation was not going to improve or when an unexpected change occurred in the environment. For example, being forced to move from a more familiar environment to a less familiar one, such as a different hospital ward or institution, has been associated with increased rates of illness and death in elderly patients (see Box 10.1). Engel (1971) compiled reports of 70 cases of sudden death that were not medically expected and concluded that the common elements in all cases were feelings of hopelessness and helplessness. The patients apparently resigned themselves to being unable to cope with whatever physical and psychological stress they were experiencing and simply gave up and died; to die was apparently the only choice they thought they had.

The results of an early study of nursing home applicants demonstrate the importance of individual choice (Ferrare, 1962). Fifty-five women patient applicants for admission to a nursing home were interviewed and classified according to whether they saw themselves as either having no choice but to enter the nursing home (no-choice group) or having other alternatives (choice group). Although no medical differences between the two groups of women were observed on admission to the nursing home, 8 of the 17 women in the no-choice group died within 4 weeks and another 8 died within 10 weeks. However, only 1 of the 38 women in the choice group died during the initial period.

BOX 10.1 Dying of Despair

A female patient who had remained in a mute state for nearly 10 years was shifted to a different floor of her building along with her floor mates, while her unit was being redecorated. The third floor of this psychiatric unit where the patient in question had been living was known among the patients as the chronic, hopeless floor. In contrast, the first floor was most commonly occupied by patients who held privileges, including the freedom to come and go on the hospital grounds and to the surrounding streets. in short, the first floor was an exit ward from which patients could anticipate discharge fairly rapidly. All patients who were temporarily moved from the third floor were given medical examinations prior to the move, and the patient in question was judged to be in excellent medical health though still mute and withdrawn. Shortly after moving to the first floor, this chronic psychiatric patient surprised the ward staff by becoming so-daily responsive such that within a two-week period she ceased being mute and was actually becoming gregarious, As fate would have it, the redecoration of the third-floor unit was soon completed and all previous residents were returned to it. Within a week after she had been returned to the "hopeless" unit, this patient, who like the legendary Snow White had been aroused from a living torpor, collapsed and died. The subsequent autopsy revealed no pathology of note, and it was whimsically suggested at the time that the patient had died of despair.

Note. From "The Function of Illusions of Control and Freedom," by H.M. Lefcourt, 1973, *American Psychologist, 28,* p. 422. Copyright 1973 by the American Psychological Association.

The results of a later investigation by Langer and Rodin (1976) supported and extended Ferrare's (1962) findings. Nursing home patients between the ages of 65 and 90 were divided into three groups. One group was told by the home administrator that they still had a great deal of control over their own lives, and therefore should decide how to spend their time. For example, they were encouraged to decide whether or not they wanted to see a movie that was being shown, and they were made responsible for taking care of a plant. A second (comparison) group of patients was assured that the nursing home staff was concerned with their well-being, but they were not encouraged to assume greater control over their own lives. They were told that the staff would inform them when they were to see the movie, and although they were also given a plant, they were told that the nurses would take care of it. A third (control) group of patients was given no special treatment. Subsequent ratings of the happiness, alertness, and activity of the residents were obtained from the nurses and the residents themselves. The results revealed significant increases in the happiness, alertness, and activity of the group that was urged to assume greater control over their lives, whereas the ratings of the comparison group on these variables declined. Follow-up data obtained 18 months later (Rodin & Langer, 1977) revealed even more impressive results. Not only did the patients in the first (experimental) group continue to be more vigorous, sociable, and self-initiating than those in the comparison and control groups, but the death rate in the first group was only half that of the other two groups.

Studies such as these are cited in support of the recommendation that patients and other institutionalized persons be permitted as much control as possible over their own lives. The residents might be permitted to plan their own meals, select their own clothes, decide how to decorate their living quarters, choose whether or not to attend certain meetings and participate in recreational activities, and the like. Unfortunately, these choices, usually with good intentions, are often not permitted by institutional personnel and family members.

HOSPICE CARE

The interest that terminally ill people take in life depends greatly on the care and human concern that other people show toward them. Dying people can be stimulated to live more fully until the end if they feel that genuinely concerned individuals are doing everything humanly possible to help them. Permitting and encouraging terminally ill persons to exercise some control over their own activities and to participate in treatment decisions leads them to take a greater interest in their surroundings and make the most of the remaining time. Although most doctors and nurses would probably agree with this statement, the relatively impersonal, technology-based modern hospital with its busy atmosphere oriented primarily toward curing illness and prolonging life does not always permit application of this humanitarian principle (Holden, 1980). Many people who die in hospitals and other health-care institutions may spend their final days feeling abandoned, alienated, and embittered.

History of Hospice

In the late 1960s, a medical staff member in a busy London hospital developed the idea of an environment for dying people that would be psychologically superior to terminal hospital wards or nursing homes. This idea, which came to be known as the *hospice concept,* stemmed from a friendship between nurse Cicely Saunders and a Polish refugee. The first hospice, St. Christopher's Hospice in London, was started in 1967 to provide an atmosphere that would foster positive attitudes toward death in terminally ill cancer patients by helping them die with comfort and dignity (Saunders, 1984). Following its initiation in England, the hospice movement spread to the United States in the mid-1970s and subsequently throughout the world. The first U.S. hospices, including the pioneering efforts at St. Luke's Hospice in New York and the New Haven Hospice in Connecticut begun in 1974, were modeled after St. Christopher's Hospice. By the end of 1998 there were approximately 3000 hospice programs in the United States, serving nearly a half-million patients (Boling & Lynn, 1998). These programs were designed to provide an alternative for terminally ill persons and their families, not only an alternative between impersonal hospital care and personalized home care but also an alternative to euthanasia (see Fig. 10.2).

Although active euthanasia has frequently been proposed as a means of avoiding death in a dehumanized hospital environment, Saunders has been an outspoken opponent of attempts to legalize euthanasia. To her and other hospice advocates, the pain experienced

by dying people—not only physical but also psychological and spiritual pain—does not require a speeding up of death but can be controlled in a specially designed environment. Thus, the goal of hospice treatment is similar to that expressed in Saunders's original concept of the term—an easy or painless death, but not one that is hastened by an external agent. The guiding philosophy is that patients should be enabled to carry on an alert, pain-free life and manage other symptoms so their final days can be spent with dignity and quality at home or in a home-like setting (National Hospice Organization, n.d.).

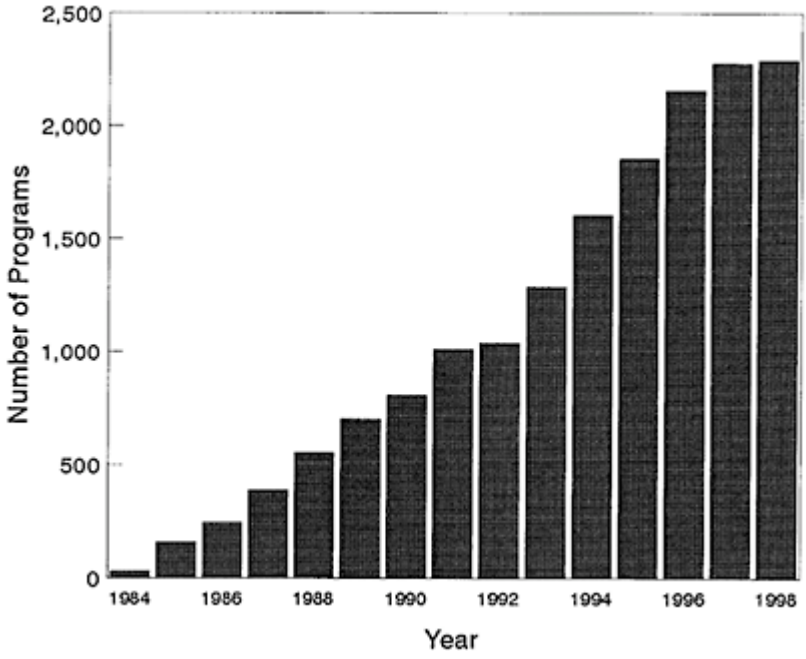

FIGURE 10-2 Number of Medicare-certified hospice programs in the United States, 1984–1998

[based on data Health Care Financing Administration (HCFA), Health Standards and Quality Bureau. Reported by Hospice Association of America (1999)].

Features and Procedures

As enunciated by Saunders (1984), the major features of hospice care are as follows:

1. Control of the patient's pain and discomfort
2. Personal caring contact and discussions of death and dying between patients and medical staff
3. Death with dignity and a sense of self-worth rather than feelings of isolation or aloneness

As implied by this list, hospice care is centered on meeting not only the physical needs but also the social, emotional, and spiritual needs of terminally ill patients. The focus of this kind of treatment is on coping with pain and depression, which are common accompaniments of fatal illness, without making extraordinary efforts to prolong life. Artificial life-support systems or medical/surgical heroics are not applied when there is no reasonable hope for remission of the patient's illness.

Hospice differs from other types of health care in that the treatment is palliative rather than curative, treats the person rather than the disease, emphasizes quality rather than length of life, views the entire family and not just the patient as the "unit of care," and offers round-the-clock help and support to the patient and the family (National Hospice Organization, n.d.).

Hospice treatment pays a great deal of attention to pain control. However, efforts are made not to sedate patients so much that communication is hindered. Oversedation would interfere with the important goal of bringing patients and family members together. By providing a warm, homey atmosphere in which pain is controlled, patients can remain alert, active, and productive until they die. Meanwhile, death can be discussed openly, without unnecessary fear and without the feeling that it is the end of everything. In this way dying becomes more meaningful and acceptable to the patient.

The Hospice Team

Home care of the dying is an important part of most hospice treatment programs. With good home care, patients can remain in their own homes as long as they desire—even dying there if they wish. A typical treatment program allows the patient to be cared for at home until transfer to a medical facility is deemed advisable. In both the home and medical settings, an interdisciplinary, nurse-coordinated team of health professionals and volunteers is available to provide medical care round-the-clock for the patient and counseling for both the patient and the family. The professional members of the team are physicians, nurses, a social worker, and a chaplain. In addition, a psychologist and other health professionals are on call as needed. All members of the team treat the terminally ill as valuable persons whose significance is in no way diminished because they are dying.

Hospice treatment emphasizes the significance of every moment of life and the importance of using one's remaining time wisely. In the most desirable situation, the terminally ill patient is surrounded by family and friends and, in the home, by volunteers who perform both patient-support and family-support duties of various kinds. These home volunteers, whose training, after an initial orientation program, is principally on-the-job, are important members of a hospice team. They perform such activities as reading to patients, staying with them while family members are out, making patients comfortable, providing transportation, and assisting families to understand and cope with other problems created by the dying process. The importance of these volunteer services underscores the need for carefully designed training and orientation programs that will sensitize the volunteers to the rewarding but demanding nature of hospice work.

Family members are important, integral participants in any hospice treatment plan, not only in the home but also after the patient has been moved to a medical facility. Provisions can be made for overnight accommodations for family members in the

medical facility in order to provide every opportunity for patients and their families to work through problems and provide mutual support. The hospice team also assists the family in understanding the dying person's feelings, needs, and behavior, and in dealing with difficulties related to the patient's death.

Patient Admission Criteria

Only patients who are dying from cancer or other terminal illnesses (e.g., cardiovascular, respiratory, or neurological disorders) and are no longer responding to aggressive, cure-oriented treatments, but require management of their pain and other physical symptoms as well as emotional and spiritual support, are accepted for hospice treatment. Most patients are over 65, but younger adults and children are also accepted.

Traditional criteria for admission to a hospice program include a prognosis of death in weeks or months, not years,[39] and an agreement on the part of the referring physician to continue his or her association with the patient and cooperate in the treatment. The patient must live within a reasonable distance of the hospice, and a primary caregiver (spouse, relative, trusted friend) must agree to take continuing responsibility for the care of the patient. These criteria vary somewhat with the particular setting, but they have been adopted by most hospices. Once a patient has been accepted for hospice care, a treatment program centered on the features previously described, but also designed to meet the patient's individual needs, is put into action.

Models and Problems

The term *hospice* (from Latin *hospitium,* meaning *guest house*) originated in the Middle Ages to refer to a place where pilgrims were fed and sheltered on their way to the Holy Land. In its modern definition, *hospice* refers to a philosophy of humane and compassionate care for the terminally ill that can be implemented in various settings —patients' homes, nursing homes, hospitals, or freestanding inpatient facilities. One model of a hospice is that of a house where people go for visits and counseling. A second model is hospice care in a segregated or separate ward or palliative care unit of a hospital, a unit where patients are cared for by a roving hospice team. A third model, which is more in line with the primary thrust of the hospice movement toward home care, is home-care service only. The original British model is that of a free-standing unit with beds for inpatient care as well as service for home care. This model, which has been publicized most extensively in the media, is not as popular in North America as in the United Kingdom.

The existence of various hospice models has led to a certain amount of confusion about what the *hospice* concept really entails. In some instances, the term has been used so loosely that it is difficult to differentiate between what is called a hospice and a back ward or terminal-care unit of a general hospital. Such confusion has led to problems of identity and quality control for the hospice movement.

Since 1983, hospice care in Medicare-certified programs has been insured under Medicare and under Medicaid in many states. The services provided by Medicare-certified hospices are as follows: nursing services on an intermittent basis; physician services; drugs, including outpatient drugs for pain relief and symptom management;

[39]However, some hospices also work with AIDS patients, who may experience longer periods of remission of symptoms.

physical, occupational, and speech-language therapy; home health aid and homemaker services; medical supplies and appliances; short-term inpatient care, including respite care; medical social services; spiritual, dietary, and other counseling; continuous care during periods of crisis; trained volunteers; and bereavement services. In addition to being a covered benefit under Medicare and Medicaid, hospice care is covered by many private health insurance policies and offered as a benefit by many HMOs. Because a major principle of hospice is to provide services based on need rather than on the ability to pay, insurance payments have had to be supplemented by grants and voluntary donations. However, hospice care during the last 6 months of life is no more expensive, and often less so, than conventional care.[40]

COMMUNICATING WITH AND COUNSELING THE DYING

Most people can accept death in the abstract, but the actual fact of dying usually makes them anxious and uncomfortable. This is especially true when the dying person is a relative or close friend. Having had no training and usually little experience with dying people, the average person does not know how to relate to a terminally ill patient at more than a superficial level. After reassuring the patient and trying to cheer him or her up, the conversation usually turns to more pleasant, but perhaps psychologically less meaningful, topics.

Even medical personnel tend to shun discussing death with patients whenever they can, and to avoid those for whom death is imminent. Believing that a terminally ill patient will be unable to cope with the knowledge that he or she is dying and that such knowledge may even accelerate the disease process, physicians have traditionally favored not sharing this knowledge with patients (Butler, 1975; Powers, 1982). However, not all medical staff members use the same approach in responding to a patient's desire to discuss death and dying. Kastenbaum and Aisenberg (1976) found that although the typical response of medical staff members was evasion, five strategies might be applied in such situations: (a) reassurance (e.g., "You're doing so well") (b) denial (e.g., "Oh, you'll live to be a hundred") (c) changing the subject (e.g., "Let's talk about something more cheerful") (d) fatalism (e.g., "Well, we all have to die sometime") and (e) discussion (e.g., "What happened to make you feel that way?").

Conspiracy of Silence

Despite the fact that a large majority of patients state that they would like to be told if they are going to die in the near future, physicians and nurses are frequently reluctant or uncomfortable in breaking the news to them. Hogshead (1978) recommended that when telling a patient that his or her condition is terminal, physicians should (a) keep the

[40]See web site *http//www.hospicefoundation.org* for details.

information simple; (b) try to understand what the diagnosis means to the patient; (c) not reveal all the information at once, but avoid saying anything this is not true; (d) wait for patients' questions and answer them honestly; (e) not argue with patients who attempt to deny the information; and (f) ask the patient to repeat what you have said, but don't destroy all hope.

Even when patients realize that they are dying and want to discuss it with someone, the orientation and attitudes of many physicians usually do not prepare them for dealing with the emotional needs of dying patients. Carrying out one's medical duties in a technically proficient but fairly impersonal manner is seen as safer than becoming emotionally involved with patients and trying to answer their questions about death. Another factor that may lead some physicians to intellectualize and withdraw emotionally from dying patients just when empathy and understanding are most needed is the avoidance of confronting their own above-average fears of death (Feifel et al., 1967). However, more experienced physicians and other health-care personnel who encounter death frequently are generally more comfortable in discussing it with patients than those who have had little experience with death (Dickinson & Pearson, 1979; Rea, Greenspan, & Spilka, 1975). Recognizing, however, that prognoses concerning how much time dying patients have left are frequently wrong and are a function of both physical and psychological variables, many physicians believe that an optimistic prediction can have a positive influence on the patient's survival (LaGanga, 1999).

Sometimes it seems as if family, friends, and medical personnel were collaborating in a *conspiracy of silence*—a conspiracy that the patient may also tacitly understand and accept. Unfortunately, this silence, which is ostensibly for the good of the patient, often leaves him or her to face death psychologically alone—a frightened, dehumanized body attached to sterilized tubes and machinery. Dying patients—both young and old—often harbor strong fears of being alone or abandoned, and silence or avoidance on the part of caretakers may contribute to those feelings.

Open Communication

It is unfortunate when relatives and medical professionals find it difficult to discuss death with dying persons, because many patients are eager to share their thoughts with others. Medical judgment clearly is an important factor in determining whether to tell a patient when death is imminent. Not all patients can or want to deal with this kind of information, and they do not recognize when they are dying. Somewhat higher on the awareness scale than this state of *closed awareness* is the *suspected awareness* of patients who suspect that they are dying and may even try to trick the hospital staff or family members into admitting it. An even greater degree of awareness is seen in *mutual pretense,* where both the patient and significant others know that the former is dying but act as if it were not so. Finally, there is *open awareness,* in which all actors in the drama of death openly acknowledge that the patient is dying (Glaser & Straus, 1965). In

contrast to yesteryear, when closed awareness of death, particularly in the case of cancer, was more common, open awareness is more prevalent today (Dickinson & Tournier, 1994; Seale, Addington-Hall & McCarthy, 1997).

Refusal to listen to or accept the truth concerning the imminence of death is less likely in the case of older adults, who understand the inevitability of death and are more likely to have made preparations for it. Most dying people—young and old—are grateful for being told the truth, and they welcome an opportunity to discuss it with an understanding and sympathetic person (Glaser & Strauss, 1965; Puner, 1974).

Today's physicians and nurses are more willing than they once were to tell dying patients the truth. It has been almost 4 decades since Feifel (1963) found that 60–90% of the physicians whom he interviewed did not approve of telling a patient when an illness was terminal. Since then doctors and nurses have come to realize that it is usually in the best interest of patients to tell them in a gentle but honest manner when their condition is terminal. The closed-awareness context of yesterday has given way in most instances to a more open awareness or "full disclosure."

Health-care professionals who work intensively with the dying, as in hospices, almost always advocate an open, honest approach to the dying patient (Saunders, 1984). Knowing the truth provides terminally ill patients with the time and, it is hoped, the incentive to review their lives and prepare for death. Rather than feeling devastated by the knowledge of a terminal diagnosis, they are more likely to be strengthened by it (Weisman, 1972).

Even when they are not told directly by a family member, a friend, a doctor or a nurse, a large majority of terminally ill patients realize that they are going to die in the very near future. They sense it in the changes in their bodies and the attitudes of other people. Consequently, an honest report on the part of others frequently comes as no surprise but simply confirms what the patient suspected all along (Kübler-Ross, 1969). Being told, whether outright or by intimation, however, opens the door for the ventilation of feelings and constructive discussion. Thus, a consequence of openness toward death is meaningful communication with others. It also provides patients with an opportunity to take care of financial matters, items pertaining to bequests, and other business, family, or spiritual concerns.

Communication and compassion go hand in hand. Dying people need to be aware of their impending death, but this knowledge can be dealt with more effectively in the presence of loving care and companionship. Open communication does not imply preoccupation with death talk, but rather openness to discussing the patient's worries and concerns. Fears can be expressed, confessions made, and emotional support and forgiveness found only with someone who cares. The dying person's need for a warm, supportive, caring listener, however, cannot be met by just anyone. As Kübler-Ross (1969) pointed out, to listen to a dying person in a warm, supportive manner requires acceptance of one's own mortality and a comfortable feeling in the presence of death. Such companionship is usually provided by a relative or perhaps a caring health professional. Talking with relatives, friends, clergy, social workers, and medical caregivers can help dying patients work through their anxieties, worries, depressions, and other emotions. Discussions with other dying patients, as in *peer counseling,* are also helpful. Nationwide support groups such as Make Today Count, the Candlelighters Childhood Cancer Foundation, and the Association for Death Education and Counseling (see Appendix B), as well as local support groups, have been established to meet the psychological needs of dying patients and their families.

Professional Counseling Procedures

As noted above, the process of counseling dying patients and their families does not always require the services of a professional counselor or psychotherapist. Paraprofessional counselors with minimal training but an empathic, nonjudgmental attitude and the patience and willingness to listen often do just as well as someone with an internship in clinical or counseling psychology or a residency in psychiatry. But whoever the counselor may be, the patient's family should be involved in the counseling process.

Although counseling or psychotherapy with dying patients involves no fixed prescription and is not limited to practitioners who possess specific professional credentials, professional counselors and psychotherapists are available to work with terminally ill persons whose dying trajectories permit longer term psychological treatment. Whether professional or nonprofessional, the counselor should be a caring, compassionate person who can share a feeling of mutual trust with the patient and assist him or her in coping with fears of the unknown.

In addition to helping dying people concentrate on taking one day at a time and living each day as joyfully and peacefully as possible, professional counselors and psychotherapists use a variety of techniques. These techniques include uncritical acceptance, attentive listening, reflection of feelings, life review, group-oriented therapy, and even consciousness-altering drugs. Three other specialized therapeutic techniques described by Samarel (1995) are meditation (focusing and concentrating attention), visualization (creating positive mental images), and therapeutic touch.

The specific objectives of counseling with the dying vary with both the patient and the situation, but some overall goals are to help patients overcome feelings of sadness and despair, to resolve interpersonal (especially intrafamilial) conflicts, and to obtain insight into the meaning and value of their lives. Counselors must be careful not to force their own values, religious or secular, on dying patients. Rather, they should attempt to understand and share the hopes, fears, and other feelings of dying persons and to assist them in finding their own ways of meeting death. The dying patient should set the pace, but an effective counselor is alert to symbolic and indirect communications and does everything possible to facilitate competent and effective behavior on the part of the patient.

One phenomenon that frequently occurs when a patient becomes aware that he or she is dying is a *life review*. According to Butler (1971), mentally reviewing one's life is a universal process ranging in duration from a split-second overview to a lengthy reminiscence. Whenever a life review occurs, in later life (which is more likely) or earlier, it provides an opportunity to relive old pleasures and sufferings and to work through persisting problems. Reviewing one's life can be a healing process, and it is recommended by Butler, Lewis, and Sutherland (1998) and others as a counseling technique for use with dying patients. Surveying, observing, and reflecting on one's past experiences leads to insight and understanding, a sense of continuity, a strengthening of one's identity, and a feeling of inner peace.

A major principle of hospice care and other psychosocially oriented programs of treatment is that dying patients and their families benefit from discussions with doctors

and nurses. A major question in interactions between medical personnel and these patients is how the latter can be helped to be respected human beings with some sense of dignity despite their condition and prognosis. Retaining one's individuality, identity, and dignity becomes difficult when the severe pain and feelings of despair experienced by a patient lead to regressive, childlike behavior.

For those physicians and nurses who are comfortable with Kübler-Ross's (1975) five-stage conception of the dying process, Herr and Weakland (1979) offered a number of counseling suggestions. To begin, counselors of the dying must realize that counseling goals are limited and that the least they can do is refrain from making a painful and difficult situation worse. In general, it is recommended that counselors be *gently available, quiet,* and *compassionately realistic*. Being gently available means that the counselors do not force themselves on patients or push them to talk. A counselor is attentive, however, and aware of subtle cues that the patient may be ready to talk about death (e.g., a sudden interest on the part of the patient in disposing of his or her property, giving up valued activities, arranging for the welfare of people and pets). Being quiet does not imply complete silence on the part of the counselor, but rather controlling his or her own anxieties while watching and listening to the patient. Compassionate realism means refraining from unrealistic optimism about the patient's condition on the one hand and unwarranted pessimism on the other.

Concerning specific aspects of counselor behavior based on Kübler-Ross's (1975) five-stage model, in responding to a patient who is *denying* the reality of the situation the counselor should realize that confronting the patient with the truth or arguing about it is futile. Rather, the counselor should be quietly available, neither confronting the patient with the terminal prognosis nor supporting unrealistic plans for the future.

Anger is one of the most difficult emotions for the counselor to contend with, because the patient's anger is often indiscriminate. Everyone, including the counselor, is subject to attack. As with denial on the part of the patient, confronting anger is useless. About all the counselor can do when the patient is angry is to accept the anger but not necessarily agree with it in terms of particulars.

Bargaining behavior is usually easier to deal with than denial or anger. But even so, the hope experienced by the patient in bargaining should be tempered with caution on the part of the counselor. *Depression* is contagious and difficult to deal with, but when it is expressed the counselor should continue to be available and not make the patient feel abandoned. Finally, if and when the patient has come to *accept* his or her impending death, the counselor can help with any practical matters or tasks that require attention. Family and friends can be brought in to say their last goodbyes, and under certain circumstances the counselor may even say the goodbyes for the patient.

SUMMARY

Most of the dying today is done in health-care institutions rather than at home. The consequences of this shift in the place of death have been mixed. Hospitals are better equipped to meet medical emergencies, and the treatment of dying patients is technically proficient. Compared to private homes, however, hospitals and other health-care establishments

are rather impersonal places where the psychological needs of patients are not always attended to. Medical personnel, who are trained primarily to cure illness and rehabilitate, often have difficulties in relating to dying patients.

Efforts made to sustain life and resuscitate persons who have stopped breathing tend to be less vigorous in the case of terminally ill patients, the elderly, and persons of lower socioeconomic status. These efforts also vary with the definition of death, both legal and medical. There is no uniform definition of death to which all states subscribe, but common definitions include cessation of circulation, breathing, and brain functions.

Effective control of pain—physical, psychological, and spiritual—in terminally ill patients is a primary goal of hospice care. Other important goals are personal, caring contact between dying patients, their families, and health personnel, and facing death with dignity. Hospice care, which was inaugurated by Cicely Saunders during the late 1960s, uses no heroic measures to keep dying patients alive, but rather concentrates on making dying as pleasant as possible. The traditional hospice model views treatment of the terminally ill as an individualized, team-oriented effort involving patient, medical staff, volunteers, and family members, in which the patient is maintained in the home environment as long as possible. However, various models of hospice care have been developed in recent years. This has led to some confusion about what hospice really is. The hospice movement has also been criticized as being overly romantic in its attitude toward death and as an inefficient type of health care. In general, however, the hospice concept has prompted a more humane approach to terminal care.

Health personnel have traditionally favored not telling patients when death was imminent, but medicine has changed in recent years and so have the attitudes of doctors and nurses toward death and dying. The conspiracy of silence, in which death was not discussed with dying patients, has become less common. Open communication between patients, medical staff members, and families is now more of the rule than the exception. Dying patients are usually strengthened rather than devastated by honesty regarding their condition. When combined with companionship and caring, open communication can be therapeutic.

Counseling terminally ill patients is an activity performed by many professionals — doctors, nurses, psychologists, psychiatrists, counselors, ministers, and social workers, as well as family members, friends, and other nonprofessionals. A variety of counseling methods can be used, the most basic of which are attentive listening and uncritical acceptance. It is recommended that counselors be gently available, quiet, and compassionately realistic. A life review of the patient's past can also be valuable. Certain counseling procedures are based on theories of behavior and the dying process, such as Kübler-Ross's (1975) five-stage theory.

QUESTIONS AND ACTIVITIES

1. What is a conspiracy of silence, and how should it be handled?
2. Have you ever been present when someone died? If so, describe the circumstances of the death: who died, where the death took place, the cause of death, how others reacted to the death, and your own reactions to it.

3. What are the similarities and differences in the actual process of dying among people of different chronological ages, genders, cultures (nationalities, social classes, religions, etc.)? How does the notion of a "good death" or a "bad death" vary with such demographic factors?
4. The following exercise can assist people of any age in realizing that they may be settling for a safe but zombielike existence and stimulate them into taking the remainder of their lives more seriously:

   Seat a group of five or so people in a circle in a quiet room and ask them to imagine that it is 10 years later and that they are seated in this same room. After they have succeeded in projecting themselves 10 years into the future, ask them to imagine that they have not achieved the goals or developed personally in the ways that they hoped to 10 years before. Suggest to them that they have not been able to face up to their fears or take advantage of their experiences and opportunities but rather have chosen to remain as they were rather than risk failure. Next ask them to talk about their lives as if they were going to die soon

   What did you and the other participants learn from this experience? Did it make you more aware of the age-old advice to "seize the day" and "make the most of your opportunities?" What else did you learn? How would you use this exercise in counseling people with terminal illnesses?
5. Evaluate Elisabeth Kübler-Ross's (1975) theory of the dying process in terms of its accuracy, utility, and fruitfulness in stimulating research. How does the theory fare in these respects compared with other psychological theories of stress in general and the stress of dying in particular?
6. What are the philosophy and goals of hospice treatment? What techniques and procedures are used to attain those goals? Why does the term *hospice* refer to a concept rather than a specific place or setting?
7. Schedule a visit to a hospice organization or a hospice ward of a hospital. Interview the director or head nurse about goals of the organization or ward and how its services actually work in practice.
8. What are the objectives or goals of counseling dying persons, and what techniques are used? How effective do you think such counseling is, compared with counseling people with other problems or conditions?
9. Web exercise: Rather than letting dying patients linger on when they no longer wish to, subject to expensive and sometimes painful treatments, and perhaps heavily sedated, emphasis in recent years has been on giving patients a choice as to how and when they wish to die. Among the organizations that have encouraged and supported such decision-making on the part of terminally ill patients, and the associated web sites, are the following: Choice in Dying *(www.choices.org)*. Compassion in Dying Federation *(www.compassionindying.org),* and Death With Dignity National Center *(www.deathwithdignity.org)*. Log on to each of these web sites and write a summary of the purposes and programs of the respective organizations.

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11
BEREAVEMENT AND WIDOWHOOD

TOPICAL OUTLINE OF THE CHAPTER:

Bereavement, mourning, and grief
- *Mourning in Judaism*
- *Postbereavement business*
- *The mourning process*
- *Grief and its symptoms*
- *Stages of grief*
- *Individual differences in grieving*

Effects of bereavement on illness and mortality
- *Pathological and traumatic grief*
- *Physical illness*
- *Mortality*

Bereavement counseling and therapy
- *Interpersonal relationships and grief groups*
- *Individual counseling and psychotherapy*
- *Counseling bereaved children*

Widowhood
- *Family relationships*
- *Extrafamilial relations*
- *Remarriage*
- *Living alone*
- *Economics and identity*
- *Changes in lifestyle*

QUESTIONS DEALT WITH IN THE CHAPTER:

- *How are the concepts of bereavement, mourning, and grief related, and how are they different?*
- *What psychological and physical changes are associated with grief?*
- *What are the various theories of grief, and how accurately do they describe the grieving process?*
- *How do emotions and behaviors associated with grieving vary from person to person?*
- *Under what circumstances can grief be considered pathological?*
- *What conclusions can be drawn from research relating mortality to bereavement?*
- *What techniques or procedures are used in counseling and psychotherapy with bereaved persons?*
- *How are family and social relationships affected by widowhood?*
- *What problems are encountered by widowed persons, and how are they dealt with?*

Just as there is death after life, there is also life after death. A person ceases to exist as a living human being at death, but most people believe in another plane of existence—an afterlife—beyond this one. Whatever the nature of the afterlife may be, and whether it

even exists, are matters of speculation and faith. But one thing is certain: At least a part of what we were continues to live in the minds of those whom we loved and who loved us in turn. These are the survivors, the bereaved who mourn and grieve for us.

BEREAVEMENT, MOURNING, AND GRIEF

Not all survivors of a relative or friend have been equally involved in the care of the person before and after death. The wife, husband, and daughter(s) of the deceased, in that order, are usually most attentive at the deathbed and presumably suffer most from the death (Shanas, 1979). Because of their greater longevity, women are more likely than men to be among the survivors, and consequently widows are the ones to whom society is most apt to think of as the bereaved. The state of *bereavement* applies, however, not only to people who were very close to the deceased at the time of death but to anyone for whom the death represents a loss or deprivation.

Grief, a mental state of sorrow and distress, is a natural reaction to bereavement, but it is not experienced by every bereaved person. The term *mourning* is frequently applied in the same manner as *grief* to describe the feeling of sorrow resulting from bereavement, but *mourning* is more appropriately used to designate the culturally prescribed pattern of behavior for expressing grief rather than as a synonym for grief.

Traditionally, the expected period of mourning varied with the relationship of the survivor to the deceased. It was expected in early Victorian England, for example, that a parent or spouse would be mourned for 12 months, a grandparent for 9 months, and an aunt or uncle for 3 months. By the end of the century, the accepted mourning periods for grandparents and aunts or uncles had changed to 6 and 2 months, respectively. The Victorians also frowned upon uncontrolled expressions of grief. Calmness and fortitude shown by the survivors were signs of inward grace and were thought to set an example for others (Boyle & Morriss, 1987). Such calmness and fortitude in the face of death, as opposed to a conspicuous display of emotion, has come to be expected of most Anglo-Americans and Europeans, and of upper class people in particular.

Mourning in Judaism

Certain religious customs prescribe not only the way in which mourners are to conduct themselves but also the duration of the mourning period. For example, consider the mourning customs in Judaism. Orthodox Judaism provides for three mourning periods: *shivah, shloshim,* and *avelut.* The first period, *shivah* (seven), consists of the 7 days after the funeral, during which mourners in the home of the deceased sit on low stools and do not wear leather shoes. Males let their facial and scalp hair grow, females do not use cosmetics, and all mourners avoid pleasures of any sort (bathing, sex, fresh clothing, etc.). Reading is limited to Job, Lamentations, parts of Jeremiah dealing with grief, and other sections of the Torah concerned with mourning.[41]

[41]In Orthodox Jewish families, shivah maybe observed even when a family member is not biologically dead but rather has renounced Judaism in favor of another religion. To the family, the spiritually departed individual is, for all intents and purposes, dead.

The period from the end of shivah to the 30th day after burial is called *shloshim* (meaning *thirty*). During this time, the mourner cannot attend parties, cannot get married, and does not shave or cut his or her hair. Shloshim concludes mourning for all relatives except the mother and father, who continue to mourn until 12 months after the burial. During this time, known as *avelut,* the parents avoid happy events, theaters, and concerts. Continuing to display grief after a year has passed is forbidden by Orthodox Judaism.

Postbereavement Business

Bereavement has both emotional and practical repercussions. There are various problems and duties with which the bereaved person must cope without the guidance and assistance of the deceased. For example, a surviving spouse must deal with household and business matters. In addition to taking care of one's own physical and psychological needs, there are often children and other relatives to be concerned with and financial matters that require attention. Medical, funeral, and legal bills, as well as routine expenses, become due fairly promptly. Inheritance, estate, gift, and income taxes must also be paid on time. Furthermore, the conditions of the decedent's will need to be understood and followed.

Other items of business that a surviving spouse or other close relative must attend to are bank accounts, insurance, and Social Security. All of these matters require specific actions on the part of the beneficiary and/or administrator (executor) of the estate. For example, joint bank accounts and safe-deposit boxes are automatically closed at the time of a tenant's death, and the surviving tenant must be accompanied by a legal official (e.g., a clerk of the court) in order for the account or box to be reopened. Survivors should also be aware of the financial benefits to which they are entitled. Under Social Security law, survivors are usually eligible for a lump-sum death benefit for burial expenses and a burial plot. If the deceased had a military-service-connected disability, the survivors may also be entitled to veterans benefits. Other monetary benefits are paid to survivors of deceased members of certain unions and fraternal organizations. All such benefits must be applied for and require proof of death (e.g., a death certificate) and proof of the applicant's relationship to the deceased (e.g., a marriage or birth certificate).

In addition to financial and other practical matters associated with death and its aftermath, there are psychological and social concerns with which the survivors must contend. Whatever their relationships to the deceased may have been, the survivors now face the task of accepting the death and not dwelling on it. This does not mean that the survivors must "let go" of the deceased or completely exclude him or her from their lives. In fact, data obtained from various populations demonstrate that the healthy resolution of grief enables survivors to maintain a continuing bond with the deceased, without denying the death, and to find a place for him or her in their continuing lives and communities (Klass, Silverman, & Nickman, 1996).

It takes time, typically a year or two in the case of a widow, to learn to accept and cope with the death of a spouse or other loved one. This process is sometimes made easier when the survivors take an active part in the funeral—viewing the corpse and mourning.

However, funerals in which there is no body to mourn over, or in which the body is not on display or is viewed only briefly, seem poorly designed to encourage acceptance of the death by the survivors and recognition of the need to stop dwelling on the past and make a new start.

The ability to reorganize and reconcentrate on one's own life after a death varies with a number of factors: the nature of the survivor's relationship with the deceased; the personality, age, and sex of the survivor; the manner in which death occurred and the duration of the illness or dying process; the cultural context in which death occurred and in which the survivor must continue to live. Whether the recovery process is rapid or slow, the death of a loved one leaves scars that can last for a lifetime.

The Mourning Process

BOX 11.1 Love and Loss

My life has lost its meaning since the hour you went away,
Now all I do is sit and wonder how to pass the day

Or how to spend the lonely night without you near to me.
Why you were taken from me now is more than I can see.
For we had just begun to find the love we lost before.
We planned again to stay together now and evermore.
But suddenly misfortune struck, and our plans disappeared,
Despite our hopes, despite our prayers, it happened—what we feared.
One long embrace, a promise sweet, a lingering goodbye,
Then you were gone, and all that I could do was wonder why
Your life was taken from me when we learned to love again,
And now it seems to me that I shall never lose the pain.

Mourning and a moderate display of grief are socially acceptable and expected behaviors during the wake and the funeral. At this time, family members and friends usually provide both practical assistance and emotional support to the bereaved. Household chores are performed, dependents are cared for, and necessary business matters are attended to. The bereaved person is given a sympathetic ear, consoled, and encouraged. Nevertheless, there comes a time—typically a few days and at most a few weeks after the funeral—when such assistance is, for the most part, terminated. Relatives and friends are then seen less often, and the bereaved person is left alone for a large part of the day. This is the quiet time, and often the time when the loss of a spouse or other loved one is felt most keenly. It is the period when real mourning begins, and therefore a time when the comfort of family and friends is needed at least as much as it was immediately after the death. The need for other people to share one's grief is particularly intense if the death was unexpected, when a child dies, or when a young husband or wife dies.

Mourning is a normal and necessary process that does not automatically stop when the funeral is over. Not only does mourning provide a way for the social group to reaffirm the value of the deceased, but the expression of grief during the mourning period helps pave the way for the reaffirmation and reorganization of the survivor's own life. Friends and relatives frequently express concern that the survivor is mourning too long and would be better off to cheer up and get back into the swing of things as quickly as possible.

People sometimes mourn for years, and in such instances the process is rightly viewed as abnormal or pathological. But bereaved persons need time to sort out their feelings and recover from the loss, and the mourning period is usually too short rather than too long. In fact, a greatly shortened period of mourning may be just as pathological as prolonged mourning, and the forerunner of later psychopathology.

Grief and Its Symptoms

Feelings of grief are a natural reaction to any loss, but the duration and intensity of these feelings vary with who or what is lost and when the loss occurs. Customarily, people grieve more when a close relative or friend dies than when an admired movie star or public figure does. This is true despite the attention frequently paid by the media to the tragic deaths of celebrities such as Princess Diana or John F.Kennedy Jr.

The intensity of grief is related to the degree of deprivation produced by a death. The death of a parent, for example, may deprive one of many things—love, advice, guidance, a parenting model, and even a psychological buffer between the survivor and death. However, if death is expected or seen as likely to occur, as in an elderly invalid, the intensity and duration of grief are typically not as great as when a child or young adult dies.

The deceased does not have to be a person. Many people, young children and older adults in particular, are very close to their dogs, cats, or other pets, and they may grieve intensely when the animal dies. The psychological effect of losing a pet has many features in common with the loss of a loved one (Weisman, 1990–1991). In some cases the dead animal is buried in a pet cemetery, following a ritual or procedure similar to that in the case of a human death and include a grave marker, flowers, a picture of the animal on display and even an obituary notice.

Grief is expressed not only through feelings of sorrow and regret; anger, anxiety, and guilt may also be present. Anger may be directed toward anyone who might conceivably, either by commission or omission, have contributed to the death of the deceased. Among the targets of anger are nurses, physicians, friends, and family members whom the bereaved person perceives as having been negligent in their treatment of the deceased. Anger frequently gives way to feelings of guilt, especially when the bereaved individual realizes that he or she might not have done everything possible for the deceased before death. Many grieving persons also experience feelings of hopelessness, depersonalization, disorientation, and unreality, as well as a lack of interest in things and an inability to concentrate or remember. Somatic and behavioral symptoms such as crying, insomnia, loss of appetite and weight, lack of energy, and reliance on tranquilizers and alcohol are also common (Clayton, Halikes, & Maurice, 1971; Parkes, 1998).

Less common and seemingly more pathological reactions to a profound loss, but actually not all that unusual, are regression, hallucinations, obsessional review, overidentiflcation with the deceased, and idealization of the deceased. *Regression,* a common reaction to extreme stress, consists of childish behavior. Regression is rarely complete or permanent, but rather alternates with periods of maturity. *Hallucinations* occur, for example, when a widow feels the touch or presence of her dead husband or interprets a creak in the floor as him moving about the house. She may even momentarily forget that he has died and begin talking or acting as if he were in another room. Such hallucinatory experiences are consequences of old habits, forgetfulness, and a preoccupation with the deceased, constantly thinking about him or her and the way it used to be. The deceased may not only be seen, heard, and conversed with, but also dreamed about almost every night (Glick, Weiss, & Parkes, 1974; Grimby, 1998). And sometimes the dreams become confused with reality.

Another feature of grief, *obsessional review,* is when a bereaved person repeatedly engages in a review of events leading up to and immediately following the death. *Overidentification* with the deceased occurs, for example, when a widow begins to talk and act like her deceased husband—wearing his clothes, using his possessions, and so on. She may consult him, or at least her memory ("introject") of him, about financial matters and other practical problems and attempt to reason the way that he did.

Idealization or *sanctification* of the deceased occurs when only good things about the deceased are recalled. It is as if the survivor's memories of the deceased have been purified or sanctified, leaving only positive and pleasant recollections. This may occur even when the deceased abused the survivor and the latter actually felt hatred for the former. It is as if the survivor gained status by remembering only good things about the deceased and denied the occurrence of bad or unpleasant things (Lopata, 1996).

Stages of Grief

The notion that the process of grieving occurs in a series of stages, similar to Kübler-Ross's (1969) psychological stages in the dying process, has been proposed by a number of writers. As seen in Table 11.1, three-stage, four-stage, five-stage, and even seven-stage theories of grief or mourning have been proposed. The first stage in almost every formulation is described as a period of shock, numbness, or disbe-lief, lasting a few days or at most a few weeks. Overwhelming sorrow, loss of self-control, reduced energy, lack of motivation, bewilderment, disorientation, and a loss of perspective characterize this initial period in the grieving process. Following the first stage is a long period of grief and related emotions (pining, depression, guilt, anger) in which the bereaved tries to find some meaning in the loss. Every bereaved person has the task of learning to accept the reality of the loss, endure the grief, adjust to an environment without the presence of the deceased, and redirect emotional energy from the deceased toward other relationships (Worden, 1982). In a large percentage of cases, the bereavement process runs its course after approximately a year following the death. By that time, the bereaved individual has usually relinquished any hope of recovering the deceased and is ready to reorganize his or her life and focus on new objects of interest.

As with any theory of developmental stages or periods, there is a danger that the notion of stages of grief will be interpreted as a fixed sequence through which bereaved

people must pass without exception. The different stages of grief actually blend together and overlap; they are not necessarily successive, they vary in intensity and duration, and each stage is not necessarily experienced by every bereaved person (Bugen, 1977). Consequently, interpreting stage theories of the grieving process as anything more than a descriptive account of successive emotions experienced by bereaved people over time is somewhat fanciful. It should be emphasized, however, that most of the theorists whose conceptualizations are summarized in Table 11.1 have recognized that a particular mourner need not go through all the stages and not necessarily in a specific order.

Individual Differences in Grieving

It is normal to grieve when a severe loss has been sustained, but some people never go through this process and remain emotionally calm and efficient throughout the wake, the funeral, and the postfuneral period. At the other extreme are those who react with intense emotion and take years to recover or perhaps never recover at all. Individual differences in the intensity and duration of the grieving process are a function of many variables, including the age, sex, and personality of the bereaved, as well as the sociocultural context, the relationship of the bereaved to the deceased, and whether the death was expected or unexpected.

With respect to age, children who experience the loss of a close relative, a friend, or even a pet grieve just as adults do. Every year, thousands of American children and adolescents lose one or both parents. In general, these children have greater difficulty adjusting to the loss of a family member when relationships within the family are strained. With some notable exceptions, however, children tend to work through the problems of bereavement and get on with their lives more quickly than adults (Baker& Sedney, 1996).

The death of a spouse or a child is typically the most traumatic loss for an adult. However, emotional reactions to the loss of a husband are usually less intense in older than in young widows. Young women tend to have more profound grief reactions toa spouse's death, at least in the short run, and may wonder where in the world they are going to find another partner (Lichtenstein, Gatz, Pedersen, Berg, & McClearn, 1996). On the other hand, older adults often have strong feelings of grief several months after the death of a spouse (Sanders, 1980–1981; Wisocki & Averill, 1987).

TABLE 11.1 Stages of Grief According to Six Theories

Gorer (1965)

1. Initial shock (first few days): characterized by loss of self-control, reduced energy, lack of motivation, bewilderment, disorientation, and loss of perspective.
2. Intense grief (several months): periodic crying, confusion, and inability to understand what has actually happened.
3. Gradual reawakening of interest: acceptance of reality of loved one's death and all it means.

Stephenson (1985)

1. Reaction: period of initial shock when news of death is encountered; shock followed by numbness and a dazed lack of feeling, bewilderment, anger, and attempts to make sense of loss.
2. Disorganization and reorganization: reality sets in; bereaved is disappointed that the loss cannot be recovered.
3. Reorientation and recovery: person organizes the symbolic world and gives the deceased a new identity outside the world of the survivor.

Glick Weiss, and Parkes (1974)

1. Initial response: characterized first by shock and then by an overwhelming sorrow.
2. Coping with anxiety and fear: characterized by worry of nervous breakdown; some people depend on tranquilizers.
3. Intermediate phase: consists of an obsessional review of how the death might have been prevented and a review of old memories of times with the deceased.
4. Recovery (begins after 1 year): person is proud that he or she has survived an extreme trauma and begins to develop a positive outlook.

Bowlby (1960)

1. Concentration directed toward the deceased.
2. Anger or hostility toward the deceased or others.
3. Appeals to others for support and help.
4. Despair, withdrawal, and general disorganization.
5. Reorganization and direction of the self toward a new love object.

Hardt (1978–1979)

1. Denial (from time of death up to 1 month).
2. False acceptance (from 1 to 2 months).
3. Pseudoreorganization (from 2 to 3 months).
4. Depression (from 3 to 8 months).
5. Reorganization/acceptance (8 months or longer).

Kavanaugh (1974)

1. Shock: physical and emotional shock; real and unreal worlds collide.
2. Disorganization: person feels totally out of touch with ordinary proceedings of life.
3. Volatile emotions: mourner unleashes volatile emotions, upsetting those around him or her.
4. Guilt: mourner feels guilty and depressed.
5. Loss and loneliness: may be the most painful stage.
6. Relief: may be difficult for mourner to acknowledge and openly adjust.
7. Reestablishment: friends become important at this stage.

One explanation for age differences in grieving is that in the case of an older woman, the death of her (usually older) husband is more likely to have been expected, thus providing an opportunity to prepare for it. Regardless of the age of the survivor, it would seem that preparatory or anticipatory grieving would provide the survivor with an

opportunity to begin working through the complex of emotions associated with a death and thereby hasten the recovery process.

Death is particularly shocking when it occurs suddenly or unexpectedly, as in a fatal accident or an illness of sudden onset, and the survivors have no opportunity to prepare psychologically for the loss. However, a long period of anticipatory grieving, as when death occurs after a prolonged chronic illness, is often more prognostic of poor recuperation by survivors than when the dying trajectory and hence the anticipatory grieving period are shorter (Gerber, Rusalem, Hannon, Battin, & Arkin, 1975). In any event, the therapeutic effects of a preparatory period prior to the actual death of a loved one seem to be greater in the case of younger than older widows (Ball, 1977; also see Rando, 1986).

The duration and intensity of grief, as well as its quality, are also associated with the personality and sex of the bereaved individual. Although bereaved persons manifest a wide range of reactions and there is little consistency among different persons, there is a marked degree of consistency within individuals. The frequency and intensity of emotions and other behavioral manifestations shortly after a loss are positively related to the symptoms present a year later (Bornstein, Clayton, Halikes, Maurice, & Robins, 1973). Furthermore, the personality of the grieving individual is related to the person's responses to bereavement and the resolution of grief (Sanders, 1999). The sex of the bereaved person is also a factor, in that men are expected to and usually do respond less emotionally than women (e.g., Moss, Resch, & Moss, 1997). However, older men are less likely than older women to have friends other than their spouse who can help them cope with bereavement stress (E.A.Powers, Keith, & Goudy, 1975; Thuen, 1997). The death of a loved one also appears to mean different things to men than to women; women tend to feel abandoned, whereas men tend to feel dismembered (Glick et al., 1974). This is consistent with the fact that women are usually more concerned about their relationships with other people, whereas men are more interested in their occupations and other ventures and achievements.

The effects of interpersonal or social factors on grieving have been investigated extensively (e.g., Lopata, 1979). Included among these factors are such things as the relationship of the survivor to the deceased, the socioeconomic status of the family, and the presence of children in the home. As might be expected, the strength of the relationship between a married couple has a pronounced effect on the grief shown by the surviving member. The stronger the emotional bond, the more difficult is the recovery process (Lopata, 1973, 1996). Relationships characterized by extreme dependency or persisting conflict are indicative of a poor prognosis for recovery. However, when the marital relationship is built on mutual trust and fulfillment, the widowed person can usually get on more quickly with the process of readjustment and self-renewal. Social status is also related to the intensity of grief experienced. The popular stereotype is that widows of higher social status reveal less emotion in public than lower class widows. However, the middle class widows in Lopata's (1973) Chicago study actually experienced more difficulty than their lower class counterparts in dealing with grief. Though middle class women tend to have more problems in dealing with grief than lower class women, the former usually have a wider friendship network than the latter (Atchley, 1991). Rather than social status per se, the results of numerous studies show that recovery from loss is affected by the social support received by a bereaved individual (e.g., Gluhoski, Fishman, & Perry, 1997; Nolen-Hoeksema & Larson, 1999; Wisocki, 1998).

It would seem that the presence of children in a family would affect the severity and duration of the grieving process, but this does not appear to be the case (Glick, Weiss, & Parkes, 1974; Lopata, 1973). However, lone parents frequently have difficulty meeting the needs of their children while continuing to cope with their own bereavement sorrow.

EFFECTS OF BEREAVEMENT ON ILLNESS AND MORTALITY

Caring for a chronically ill person is emotionally and physically taxing under the best of circumstances, and particularly so when the illness is terminal. In this case, the effects of prebereavement stress may combine with the shock and grief of bereavement in contributing to both mental and physical disorders.

Pathological and Traumatic Grief

Emotions such as anxiety, fear, depression, guilt, and anger are not in themselves abnormal responses to bereavement. Whether or not they are pathological depends on their intensity, how long they persist, and the presence of other behavioral and physical symptoms. Most people react to bereavement with some combination of these symptoms and occasionally even experience hallucinations and suicidal thoughts. In *pathological grief,* however, the symptoms either persist in intensified form or become noteworthy by their total absence. Excessive guilt and self-blame are common manifestations of pathological grief, but there are other signs as well.

A condition referred to as *traumatic grief,* a combination of symptoms of pathological grief and post-traumatic stress disorder, has also been identified (Frank et al., 1997). The symptoms of traumatic grief are quite disabling, and are often accompanied by health disorders, functional impairments, and suicidal thoughts.

In most cases, the grieving process is resolved by finding a new direction for one's life or engaging in some kind of constructive activity. Nevertheless, a small percentage of bereaved individuals find it impossible to accept the death of a loved one and are reluctant to let go and get on with their own lives. The results of some research studies indicate that such people are likely to have low self-esteem (Lund et al., 1985–1986). They may also be highly dependent, insecure persons who had an almost neurotic attachment to the deceased, and who, after the death, find it impossible to break the connection and reinvest their emotional energy in alternative sources of gratification.

In a study of parents who had lost an adult child in a traffic accident, Shanfield and Swain (1984) found that they grieved intensely and had psychotic symptoms and physical health complaints for months after the death. In another study, it was found that parents who had lost a child through homicide grieved for months and had lingering fears about what might happen to their other children (Rinlear, 1988). Rarely is the shock of bereavement so great that it immediately precipitates a mental disorder, but this can occur (see Box 11.2). More common pathological reactions are chronic grief, delayed grief, or even a permanent inhibition of grief.

BOX 11.2 A Pathological Grief Reaction with a Positive Outcome

Nadine, a 66-year-old former high school teacher, lived with Charles, age 67, her husband of 40 years (also a retired teacher). The couple had been nearly inseparable since they met—they even taught at the same schools during most of their teaching careers. They lived in a semirural community where they had worked and had raised their children, all of whom married and moved to a large metropolitan area about 100 miles away. For years they had planned their retirement and had hoped to travel around the country visiting friends. A week before their fortieth anniversary, Charles had a heart attack and, after five days in the intensive care unit, had a second heart attack and died.

Nadine took Charles's death quite hard. Even though she had a great deal of emotional support from her many friends and her children, she had great difficulty adjusting. Elaine, one of her daughters, came and stayed a few days and encouraged her to come to the city for a while. Nadine declined the persistent invitation even though she had little to do at home. Friends called on her frequently, but she seemed almost to resent their presence. In the months following the funeral, Nadine's reclusive behavior persisted. Several wellwishers reported to Elaine that her mother was not doing well and was not even leaving the house to go shopping. They reported that Nadine sat alone in the darkened house—not answering the phone and showing reluctance to come to the door. She had lost interest in activities she had once enjoyed.

Greatly worried about her mother's welfare, Elaine organized a campaign to get her mother out of the house and back to doing the things she had formerly enjoyed. Each of Nadine's children and their families took turns visiting and taking her places until she finally began to show interest in living again. In time, Nadine agreed to come to each of their homes for visits. This proved a therapeutic step since Nadine had always been fond of children and took pleasure in the time spent with her eight grandchildren—she actually extended the visits longer than she had planned.

Note. From *Abnormal Psychology and Modern Life* (9th ed., pp. 154–155), 1992, New York: HarperCollins. Reprinted with permission.

Chronic, unresolved grief is characterized by yearning and sadness for the lost loved one for years after the death. Chronic grief is more likely to occur when a spouse dies without warning, when death ends a troubled relationship, or when the survivor has strong feelings of dependency toward the deceased (Parkes & Weiss, 1983). Time does not heal the grief of such persons, who are deeply depressed and apathetic and have illogical fears, occasional hallucinatory experiences, and other symptoms of fragile contact with reality.

Another symptom of seemingly pathological grief is *mummification* of the deceased. In mummification, everything that the deceased owned is kept in order, his or her clothes

are laid out every day, and the bereaved individual continues the routine of living just as if the deceased were still alive. Such was reportedly the mental state and behavior of England's Queen Victoria for years after the death of her husband, Prince Albert:

> *Queen Victoria remained in seclusion for many years after her husband died, and wore black for the rest of her life. Albert's rooms were maintained exactly as they had been when he was alive; the servants even brought hot water for shaving to his dressing room each morning. None of this was particularly unusual during the Victorian era, however. In time Victoria's depression lifted and she resumed her royal duties, but she never ceased mourning for Albert.*[42]

Chronic, unresolved grief is also seen in *anniversary reaction,* in which emotional responses recur on the anniversary of the death of a loved one. In other pathological cases, grief may be delayed for 5 years, 10 years, or even several decades after the death. This delay or permanent inhibition of grief is not without cost. Blocking feelings that are normally associated with death has repercussions in other areas, being expressed in physical and psychological disorders.

In many cases, repressed grief leads to neurotic and even psychotic behaviors, including regression to earlier stages of development and attempted suicide. Suicide is believed to be almost always the result of some kind of loss—if not the death of a loved one, then the loss of a job or position of status, health, youth, or a close relationship. Because they are likely to have suffered several such losses in a year or so and consequently developed a *bereavement overload,* elderly people—and elderly widowers in particular—fall into the high-risk group of potential suicides. A serious clinical problem in at least 10–20% of widows and widowers during the first year of bereavement is *postbereavement depression*. This condition can lead to attempted suicide, a particularly serious risk for older men who have lost a wife (W. Stroebe & Stroebe, 1987).

Pathological grief reactions are more common in some situations than others, for example, when a child or young adult in apparently good health dies unexpectedly. Suicide, homicide, stillbirth, and death caused by accident are especially likely to produce pathological reactions in the survivors. Relatives of suicide victims have special problems with guilt, shame, anger, and the need to find someone or something to blame for the tragedy. A pathological response is also more common when the bereaved person has unresolved conflicts with and ambivalent feelings toward the deceased or lacks appropriate social and emotional supports.

Physical Illness

Grief-stricken people suffer not only from loneliness, depression, anxiety, and other psychological symptoms, but also from various physical problems. Loss of appetite, weight loss, and sleep disturbances are particularly common during the first stage of grief. General body pains, headaches, dizziness, muscle weakness, chills, tremors, choking sensations, shortness of breath, visual problems, and menstrual irregularities are also prevalent. These symptoms seem to occur more often in younger than in older adults, and they may be harbingers of further deterioration in health, including alterations

[42]Quoted from web site *http://www.geocities.net/Athens/Aegean/8545/Victona.html*

in endocrine and immune functioning (Zisook & Schuchter, 1993; Zisook et al., 1994), during the first year of bereavement and even afterward (Clayton, Halikes, & Maurice, 1971).

Older research findings indicated that asthma, arthritis, cancer, colitis, diabetes, cardiovascular disorders, leukemia, and tuberculosis are more common among recently bereaved persons (A.C.Carr & Schoenberg, 1970; Parkes, 1998). In a classic study, Parkes, Benjamin, and Fitzgerald (1969) found that 75% of a group of widows whom they surveyed had seen a physician during the first 6 months of bereavement for physical and psychological problems that were associated with grief. Compared with the 6 months prior to bereavement, there was a 63% increase in visits to doctors' offices during the postbereavement period. It is possible, of course, that this increase was due to the fact that the survivors were simply attending to health problems that had been neglected during the prebereavement period.

An observed increase in physical disorders and visits to doctors' offices after a death may also be caused, at least in part, by the cumulative effects of attending to dying persons during a long illness. Taking care of a person and worrying about him or her during a long illness appears to have a debilitating effect on the health of the survivors. Although it may appear that a long-term terminal illness would provide a greater opportunity than a short-term illness for the reputed beneficial effects of anticipatory grieving, the medical prognosis for survivors is often better when the dying period is short (Gerber et al., 1975). On the other hand, Lundin (1984) found that when the death of a loved one was sudden, the survivors were more likely to suffer a decline in physical health. Seemingly contradictory findings of this sort maybe interpreted as indicating that whether a short or a long dying trajectory is best for survivors from a health standpoint depends on various personal and environmental factors. Under some circumstances, a long trajectory may be best, whereas under others a short trajectory—particularly when death is expected—is best.

Furthermore, a distinction should be made between short-term and long-term effects: A fatal short-term illness or accident may have greater short-term effects on a survivor, whereas a long-term illness may have a greater long-term effect. In addition, the severity of these effects—whether short-term or long-term—will vary with the effectiveness of the mechanisms used by the survivor to cope with the stress of the loss.

With regard to the merits of anticipatory grieving, it clearly does not eliminate postbereavement grieving and may not even reduce it. Still, it may keep the loss from becoming overwhelming and provide survivors with the time to make plans and cope with their grief after the death (Rando, 1986).

A related area of research is concerned with the reported increase in infection and malignancy in bereaved persons. The effects of stress on the functioning of the body's immune system, resulting in the expression of pathogens such as the Epstein-Barr virus in disease, have been documented by various researchers (e.g., Fredrick, 1983–1984). For example, high levels of corticosteroid hormones, which increase during stress, appear to impair the functioning of the immune system and thereby increase vulnerability to

disease. The role of the immune system in bereavement stress is also seen in a decline in the functioning of T-cells during postbereavement. The extent to which bereavement affects physical health is, however, not entirely clear and a matter of some dispute (L.E.Thomas, DiGiulio, & Sheehan, 1988).

Mortality

During the 15th century, grief was legally accepted as a cause of death and could be listed as such on a death certificate (DeSpelder & Strickland, 1999). Although it is no longer considered to be a primary cause of death, the effects on mortality of the stress associated with bereavement have been studied extensively. The results of a number of research studies (e.g., Clayton et al., 1971; Helsing, Szklo, & Comstock, 1981; Lichtenstein, Gatz, & Berg, 1998; Martikainen & Valkonen, 1996a, 1996b; Parkes, Benjamin, & Fitzgerald, 1969) indicate that bereaved persons have a higher death rate than other individuals of comparable age.

In a classic study of 4,500 British widowers aged 55 and over, Parkes et al. (1969; Parkes, 1998) found that 213 died during the first 6 months after bereavement. This death rate was 40% higher than that expected in the entire group during the first year, but it returned to normal after 5 years. Parkes referred to the heightened rate of death, which in most cases resulted from coronary thrombosis, arteriosclerotic heart disease, and other forms of heart disorder, as a "broken heart syndrome/' The dynamics of this syndrome are not clearly understood, but the condition has been known for centuries. Parkes argued that bereavement may produce changes in blood pressure and heart rate, as well as affecting the circulation and blood chemistry, and thereby act as a precipitating factor for blood clotting in coronary arteries.

Also associated with bereavement is an excess number of deaths due to accidents, alcohol, violence, and lung cancer (Martikainen & Volkonen, 1996b). Increased mortality after bereavement is also related to age, sex, ethnicity, marital status, living situation, and other demographic variables. The effects of bereavement on mortality are reportedly greater for the young-old (under 70 years) and the recently widowed than for those over 69 and the longer term widowed (Lichtenstein et al., 1998; Smith & Zick, 1996), and greater for non-Whites than Whites (Helsing et al., 1981). With respect to sex differences, not only do widowers tend to suffer greater deterioration in health after the death of a spouse than widows (M.S.Stroebe, 1998), but the mortality rate is also greater in widowers than in widows (Martikainen & Valkonen, 1996a). The same factors that cause women to live longer than men apparently make them more resistant to the stresses of bereavement and widowhood.

Consistent with the physiological and psychological benefits of marriage that were discussed in chapter 1, remarriage after the death of a spouse is associated with a lower mortality rate. This effect is particularly pronounced in men, for whom the marital state makes more of a difference in mortality than it does for women. Although a woman's chances of dying are essentially unaffected by the death of her husband, a man whose wife dies is much more likely to die within a few years than his counterpart whose wife is alive. Helsing et al., (1981) found that the mortality rate for widowed men between the

ages of 55 and 65 was 60% higher than that for married men in the same age group. On the other hand, widowers who remarry have an even lower mortality rate than their married peers whose wives have not died.[43]

An important factor related to the marital status of a widowed person is his or her living situation. Compared with being married, a situation in which physical care as well as social and emotional supports contribute to longer life, living alone is associated with a higher mortality rate. Moving into a nursing or retirement home is also significantly related to increased mortality (Helsing et al., 1981).

Earlier studies of the relationship of mortality to bereavement indicated that the mortality rate was higher, and hence the risk of death greater, during the first 6 months after bereavement (Clayton et al., 1971). However, a subsequent study of 1,204 men and 2,828 women in a semirural Maryland county who were widowed between 1963 and 1974 found no evidence that either widows or widowers were significantly more likely to die than nonbereaved persons during the early months after bereavement. A higher mortality rate for these widowed persons, more specifically the widowers, was noted after the first few months following bereavement. This finding suggests that the important factor in promoting increased mortality is the stress of widowhood rather than the stress of bereavement. More recently, however, a study of a large sample of Swedish widows found an increased mortality rate during the first years after bereavement but a marked decrease in mortality among widows who survived 4 years after bereavement (Lichtenstein et al., 1998). A large-scale study of Finnish widows also found that mortality was higher for short durations than for long durations of bereavement (Martikainen & Valkonen, 1996a, 1996b).

Though the results of research on the effects of bereavement on illness and mortality are not entirely consistent, on the whole the findings are consistent with the *desolation-effects hypothesis* (Epstein, Weitz, Roback, & McKee, 1975). This explanation states that both the event of widowhood and the circumstances stemming from it have deleterious effects in terms of grief, feelings of hopelessness, new worries and responsibilities, and changes in the diet, work routine, and financial situation of the bereaved person. Epstein et al. (1975) also discussed four other hypotheses that were proposed as explanations of increased mortality after bereavement. The two most plausible of these hypotheses, but perhaps not as convincing as the desolation-effects explanation, are the *nongrief-related behavior-change hypothesis* and the joint unfavorable environment hypothesis. According to the nongrief-related behavior-change hypothesis, survivors are more likely to die because they fail to eat properly, do not take their medicines regularly, and are less likely to visit the doctor when they are ill. The *joint unfavorable environment hypothesis* points out that by having shared a common unfavorable environment, widowed persons and their spouses are exposed to similar environmental risk factors. These three hypotheses are, of course, not mutually exclusive; the factors described in any or all of them may influence postbereavement mortality.

[43]The trauma of losing a wife through death sometimes leads a widower to make a seemingly strange choice in a new mate, one who is quite different from his former partner. Adelson (1998) found, for example, that widowers tended to select new wives who were unkind to them, as in the stepwives or wicked stepmothers of fairy tales.

BEREAVEMENT COUNSELING AND THERAPY

Time by itself does not heal all things, but it is a curative factor in grief. Given enough time, most people are able to adjust to the death of a loved one and reconstruct a life independent of the presence and support of the deceased. The first 6 months after bereavement are usually the most difficult, particularly the 3rd to 6th months, when the shock has worn off and the reality of the loss and the pain associated with it come into focus.

The adjustment process is usually easier when there has been an opportunity to prepare for the loss, when the bereaved person feels that there is some meaning in the death and/or when there is something left to live for. Thus, recovery from a severe loss can be facilitated by relying on religious or philosophical beliefs that emphasize the future, by intensifying old social relationships or forming new ones, and becoming actively involved with children, work, and other activities.

Sticking to a routine of getting up every morning, dressing, eating regular meals, pursuing work or hobbies, and making plans and lists of things to do and places to go can help in coping with feelings of depression and unreality. Holidays, which remind the survivor of good times with the deceased and provide time off from work to brood and meditate may be especially difficult when spent alone. Despite the efforts of the bereaved themselves and others to "renormalize" the world of the bereaved, many survivors require special assistance in coping with bereavement and grief.

Interpersonal Relationships and Grief Groups[44]

The understanding and support of other people can have a therapeutic effect following the death of a loved one. Warm, supportive family members and friends who appreciate the bereaved person's situation and feelings and who continue to visit him or her during the weeks and months after the funeral can have a definite influence on recuperation and healing. In addition to family members and friends, the physicians, funeral directors, lawyers, clergy, and other professional persons with whom the bereaved person interacts can be helpful. Talking about the circumstances of the death and its repercussions with an interested, sympathetic and understanding human being may do more than all the tranquilizers and other medications combined to assist the bereaved in coping with loss and grief.

Many people do not know how to act toward a bereaved person and are not very helpful in what they say or do. They may make well-intentioned but nonhelpful remarks such as "God had a purpose," "I know how you feel," "Time makes it easier," "You have to keep going," or "You're not the only one who suffers," More f acilitative with respect to coping with grief are statements such as "You're being very strong," "It's okay to be angry at God," "It must be hard to accept," and "That must be very painful for you" (Berardo, 1988). In addition, efforts to assist the bereaved person by providing companionship, transportation, and help in other practical matters is appreciated if carried out with sensitivity and respect for the person's feelings.

[44]Two web sites that may be helpful to bereaved persons are *www.rivendell.org* and *www.fortnet.org/WidowNet.* The first site is that of GriefNet, which connects the user to an internet community of more than 30 email support groups and two web sites. The second site is that of WidowNet, an information and self-help resource for, and by, widows and widowers. It provides information that is helpful to people of all religious backgrounds and sexual orientations who have lost a spouse or partner by death.

In many localities, social and psychological assistance for bereaved persons is available from a number of public and private organizations. Churches, mental health clinics, community bereavement centers, and mutual aid societies such as widow-to-widow programs offer help to bereaved persons and families. National organizations such as Helping Other Parents in Normal Grieving, Seasons: Suicide Bereavement, Bereavement Services, Parents of Murdered Children, The Compassionate Friends, The Candlelighters Children's Cancer Foundation, Parents Without Partners, and Big Brothers/Big Sisters of America can also provide information and assistance.[45] These organizations are staffed by professionally trained individuals who provide both individual and group counseling, or at least directions on where and how to obtain it, and to assist people in dealing with the personal and practical problems caused or aggravated by bereavement. Among the problems are alcoholism, sexual dysfunctions, marital discord, child behavior disorders, and other family difficulties stemming from bereavement.

As expressed in its mission statement, The Compassionate Friends is a mutual assistance, self-help organization that provides friendship and understanding to families in which a child has died. The primary purpose of the organization is to assist families in the positive resolution of their grief and to give support to them in their efforts to achieve physical and emotional health, as well as information and education. The counselors, or "befrienders," are often mothers and fathers who themselves have lost a child and wish to help others learn to cope as they did. It is usually comforting to parents who have lost a child to be with other parents who have incurred a similar loss. As expressed by one parent (Klass, 1988):

> *My friends didn't understand and I felt lonely. I felt I needed somebody or something but I didn't know what. I wanted to talk to someone who had gone through what I had gone through. I felt it would be best to get out and get involved in some activities, since I had so much time on my hands…. My son took me to the first meeting and attended two or three meetings with me after that. (p. 102)*

In addition, the parents in these groups often find that they can help themselves by reaching out to comfort other parents who have lost children.

The rationale and goals of peer counseling are basic to *widow-to-widow counseling programs,* in which newly bereaved widows are counseled by trained individuals who themselves have lost a spouse and have already completed their grief work. Counseling by other widows, either individually or in a group setting, is often more helpful than

[45]Addresses and telephone numbers of these and related organizations are given in Appendix B.

family support (Morgan, 1989; Silverman, 1986). Young widows, for whom the death of a husband may have been unexpected and who are apt to take the death harder than older widows, receive particularly strong support from other widows. In addition to providing understanding and sympathy, these volunteer counselors make referrals to other sources when assistance and information beyond their training are needed. The effectiveness of these widow-to-widow counseling programs is enhanced when they are led by widows who have been trained in peer counseling, as by the Widowed Persons Services of the American Association of Retired Persons.

Social support for bereaved individuals, particularly during the critical 6 months after bereavement, maybe provided by *grief groups.* These groups consist of a small number of persons who share the common trauma of having lost a loved one. Under the direction of a professional counselor, the members of a grief group talk about their feelings and how to survive bereavement. The role of the counselor-director is to provide both information and a focus for group discussion. Group counseling can be supplemented with individual counseling or psychotherapy for members who require it.

Individual Counseling and Psychotherapy

Although group counseling is often more efficient than individual counseling or psychotherapy and sometimes more effective in dealing with problems of human relationships and feelings of isolation, individual and group techniques are complementary rather than independent approaches. As applied to the treatment of postbereavement stress, both approaches emphasize the expression of feelings of depression, anger, shame, guilt, and other emotions associated with death and loss. With an empathic, supportive therapist or group leader, survivors come to accept these emotions as normal and find that expressing them can serve a healing function. One organization that provides for such *postvention therapy* when someone close dies is Hospice Outreach (Costa, 1989). In addition to encouraging the expression of emotions, postvention programs teach bereaved individuals to rely less on defense mechanisms such as denial. Participants in postvention therapy also come to realize that patience and time are needed to recover from the death of a spouse or other loved one and to cope with the ensuing grief.

A number of special techniques have been devised for the treatment of grief by means of individual psychotherapy. As with any form of psychological intervention, the specific techniques must be adapted to the personality, problems, circumstances and other salient characteristics of the bereaved person (Marmar, 1981). Directive techniques, such as providing advice and reassurance and giving the counselee homework assignments or tasks to test reality and to practice coping with frustration, are used by some counselors. Recognizing that a major psychological problem associated with bereavement is an unwillingness to let go of the deceased, some form of reworking technique is fairly standard in grief therapy. An example is a technique known as *guided imagery,* which may be used with both children and adults. As applied to the treatment of bereaved adults, during the initial guided imagery sessions the bereaved person is told to recall the affection that he or she shared with the deceased. At first, this reexperiencing process is disturbing to the person, but a sense of self-identity and self-worth is often revived by it. During a subsequent session, the bereaved individual is told to close his or her eyes and

mentally go through the experiences of receiving the news of the death, viewing the body, attending the funeral, and walking away from the grave. The person is asked to describe these events out loud, exactly as if they were occurring right now. "Conversing" with the deceased and asking his or her permission to cultivate new relationships and a new life is also encouraged. Finally, the bereaved person is urged to say his or her last goodbyes to the deceased individual and then to let go (Melges, 1982).

Counseling Bereaved Children

Adults who are preoccupied with their own grief and with reorganizing their own lives after the death of a spouse or other loved one sometimes overlook the fact that the surviving children are also experiencing grief and other emotions associated with the death. The death of a parent or sibling, in particular, can be quite distressing and confusing to a child who has little knowledge of death and has not been prepared by being taken into the confidence of adult survivors. Whatever the circumstances may be, a bereaved child should be permitted to ask questions and encouraged to express his or her feelings about the death and the deceased. Adults should take the time to answer the child's questions and to acknowledge his or her feelings, including those of anger, guilt, anxiety, and sadness. Although negative feelings and memories should be accepted and worked through, adults should encourage the child to concentrate on the happy moments that were shared with the deceased and to think about something that was done to please him or her. Throughout the counseling sessions, the child should be given frequent reassurances of love and understanding.

When the deceased is a parent or another adult to whom the bereaved child was very close, the child must learn to redirect his or her love toward another adult. So that a condition of extreme dependency on only one person, such as the surviving parent, does not develop, the child should be encouraged to establish close relationships with several adults within, and even outside, the family circle. Because many parents find it difficult to help their children cope with the death of another person (or pet), the support of peer groups is often enlisted (see Bacon, 1996; Valentine, 1996).

Effective counseling of bereaved children requires the cooperation of various individuals, not only parents and other family members but also teachers, doctors, professional child therapists, and peers. Recommended counseling activities include reading and discussing fairy tales that refer to death in a nonthreatening manner, play therapy, role playing or reenacting a situation or story related to death and dying, guided imagery, and drawing pictures with the deceased in them.[46] Fundamental to all therapeutic efforts with bereaved children, however, are patience, openness, understanding, and love.

WIDOWHOOD

Approximately 800,000 Americans are widowed every year. In 1998, an estimated 13.6 million Americans, or 6.5 percent of the noninstitutionalized population of the United

[46]The technique of before and after drawings of, for example, a rosebush (see Glazer, 1998), has been used not only as a play therapy technique with young children but also as a means of evaluating changes in feelings produced by therapy and other postbereavement experiences.

States, had lost a spouse by death and not remarried. Women constituted 11 million and Whites 11.5 million of this group of widowed persons. The number of widowed persons increases rapidly after age 55, and, consistent with the decline in the population as a whole in very old age, drops after age 84. Also as shown in Fig. 11.1, the percentage of a specified age group who are widowed increases continuously after midlife.

The majority of widowed Americans are White females (9.4 million in 1998),[47] and in all ethnic groups widows outnumber widowers by a sizable margin (see Fig. 11.2). Two reasons for this sex difference in the number of widowed persons are that women tend to live longer than men, and that a greater percentage of widowers than widows terminate their widowed status by remarrying fairly soon after their wives have died (Schneider, Sledge, Schuchter, & Zisook, 1996). Consequently, widowhood in the United States is primarily a status of women, and the problems of widowhood are by and large women's problems.

Family Relationships

The death of a husband or wife affects all the family relationships of a widowed person. If there are children in the home, the widow or widower may now have to play the roles of both mother and father. Although members of the extended family (brothers, sisters, aunts, uncles, etc.) are usually in close contact with the widowed person for a while after the death of the spouse, interactions with them become less frequent as time passes. This is particularly true if the children are grown.

Because of their lack of preparation for widowhood, the need to care for younger children, and assorted practical problems, younger widows usually have more difficulty adjusting than older widows (Glick et al., 1974; Lopata, 1973). The parents of young widows are their most important source of social support, and widowhood can be extremely trying for young women who have no close relatives living nearby. Unlike the awkward social status of young widows, however, widowhood in older women is considered more normal. Older widows tend to receive greater social support from family members and the wider community, making the transition from wife to widow less traumatic for older than for younger women.

Regardless of age, a woman who did not have congenial relations with her in-laws while her husband was alive may experience even greater difficulties with them when she becomes a widow. In any event, social support is more likely to come from the widow's own family. Older widows, for example, tend to grow closer to their own children, and their daughters in particular. Sometimes they move in with their children, but the potential for intergenerational conflict makes this situation an undesirable one for most people. As one widow cautioned (Vinick, 1977):

[47]Data from Unpublished Tables—Marital Status and Living Arrangements: March 1998 (Update). Washington, DC: U.S. Census Bureau.

Never try to live with your children. It's no good. I stayed there (at her daughter's house) a couple of months and I couldn't stand it. The kids, you know, have to do what they want to do. When I was listenin' to my TV, they were playin' games on the other side…. My daughter has a husband you can't take to, you know what I mean? The minute he come home, I went upstairs and I stayed there, (p. 3)

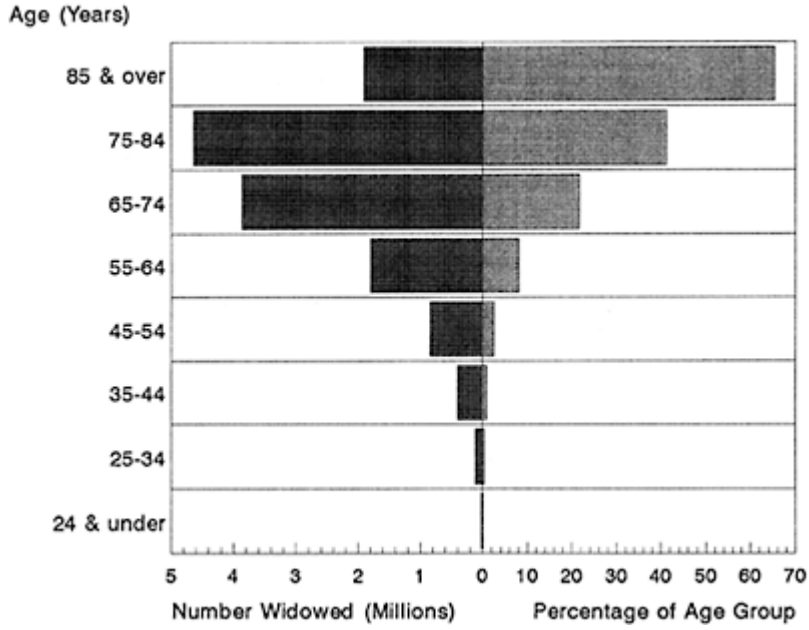

FIGURE 11-1 Widowed persons by age group in the United States in 1998.

(Based on data from Unpublished Tables—Marital Status and Living Arrangements: March 1998 (Update). Washington, DC: U.S. Census Bureau.

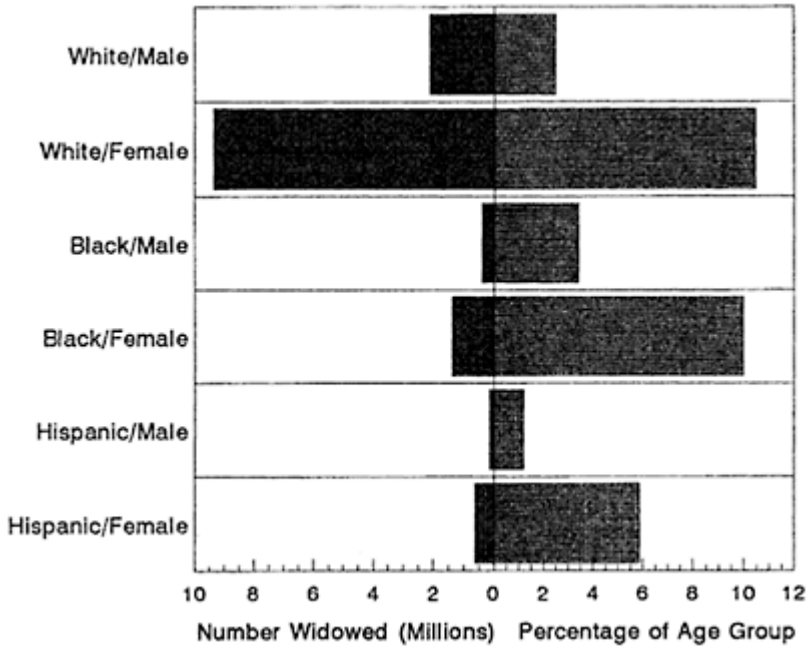

FIGURE 11-2 Widowed persons by race and sex group in the United States in 1998.

(Based on data from Unpublished Tables—Marital Status and Living Arrangements: March 1998 (Update). Washington, DC: U.S. Census Bureau.

A widow who lives with her adult son or daughter is expected to help with the household chores and take care of the grandchildren. Unfortunately, the widow's position in her son's or daughter's household usually carries no real status or authority, and the fear of intruding makes her feel uncomfortable.

Unfamiliarity with the family finances and lack of experience in managing money can lead to chronic uncertainty—about where and how to live, whether to buy or invest in this or that—on the part of a widow (O'Bryant & Morgan, 1989). A widow can become so desperate for advice and guidance that she may even try to communicate with her dead husband in the spirit world. Mediums and other spiritualists often exploit this uncertainty in geographical areas where a large number of retirees have settled, holding séances and providing other hocus-pocus services for sizable fees. In most cases, however, living relatives and close friends are willing to serve as confidants and advisers.

Extrafamilial Relations

A person who has recently lost a spouse is likely to disengage somewhat from social activities. In cases where a widow's social life was provided in large measure by her

husband's occupational contacts, the reduction in social activities may continue for some time (Glick et al., 1974).

So where does a widow seek companionship, and how does she live if she is unwilling to search for a new mate or is unable to find one? The picture is not quite as bleak as one might suppose. Although widows, as a group, experience frequent loneliness, especially at first (Lopata, 1973, 1975), the great majority are able to cope satisfactorily in the absence of a marital relationship. It is typically not very difficult for a widow to establish friendships with other widows in similar circumstances. Furthermore, churches, adult and senior centers, and various volunteer organizations provide opportunities for socialization. However, widows are usually careful to avoid heterosexual situations in which they may be perceived as predatory "swinging singles" or "merry widows" who are making a play for someone else's date or mate. Perhaps because the death of a spouse is more expected in old age, widowhood is usually less traumatic for older women than for younger ones, at least during the early phases of bereavement.

The loss of a husband obviously creates problems for many women. Among the most serious problems are finances, loneliness, and unfamiliar duties (e.g., home repairs and automobile maintenance; Connidis, 1990; Kalish, 1985a). Income, social life, and living accommodations may all decline after the death of one's husband. However, even widows who are happily married, and who are admittedly lonely at times, typically become more competent and independent with time. A widow may miss the companionship of her husband, but she soon discovers that she has time to devote to personal interests and to develop skills and abilities that have been neglected during her marriage years. This is less likely to occur if, as in the case of Queen Victoria, a widow was extremely dependent on her husband or identified with him too closely:

> *Victoria was distraught (at Albert's death). She wrote to her eldest daughter, 'How I, who leant on him for all and everything—without whom I did nothing, moved not a finger, arranged not a print or photograph, didn't put on a gown or bonnet if he didn't approve it, shall go on, to live, to move, to help myself in difficult moments?' (see footnote 42)*

Strange as it may seem, a widow who experienced the greatest amount of difficulty getting along with her husband may find herself least able to get along without him. Whatever the cause may be—feelings of guilt, abandonment, or anger, adjustment is often quite difficult for widows who had unhappy marriages.

Problems of adjusting to the death of a spouse are often worse for a woman than for a man, but most men whose wives have died are more likely to be faced with loneliness and a need for companionship. A widow usually has more friends from whom she can seek sympathy and support than a widower. Pets, plants, and hobbies can also help to fill her time and assuage her grief. On the other hand, a widower may discover that he was more dependent on his wife for physical and emotional support than he realized. Compared with women, most men are not as close to other people and have greater difficulty making friends with other bereaved persons. Even when her husband is alive, a woman is likely to have a confidante or close friend of the same sex. Married men may also have close friendships with other men, but such is less often the case. Those men

who failed to develop close relationships with other men while their wives were alive may become even more socially isolated as widowers (Connidis, 1989; Connidis & Davies, 1990a, 1990b).

Remarriage

Many widowers experience problems with loneliness and homemaking duties, the former because of a scarcity of same-sex widowed peers and the latter because of a lack of experience. There is, however, an up side to being a widower, especially when one becomes aware of the large number of widows who are available to compete for the attention of a significantly smaller number of widowers. Competition among widows for their favors can be embarrassing to some widowers, but other widowers are undoubtedly flattered by all the attention and the many social-sexual outlets provided by it. In any event, the large number of available women presents more opportunities for older men than for older women to remarry. Having discovered that the companionship, sex, and physical and emotional support provided by a wife are things they would rather not do without, the majority of widowers remarry within 2 years after their wife's death. Understandably, widowers who engage in new romantic relationships tend to have higher monthly incomes and to be more highly educated than those who do not. Often they marry someone whom they have known for years, long before they were widowed, and usually someone quite a few years younger than they (L.S.Schneider et al., 1996). They remarry for reasons of romance, affection, companionship, security, regard, and so forth—many of the same reasons why they married the first time. Understandably, marriages between widowed persons tend to be more stable than marriages between divorced couples (U.S. Bureau of the Census, 1992).

The ancient Hebrew custom of the *levirate,* according to which under certain circumstances a widow married the brother of her deceased husband (Deuteronomy. 25:5–10), was one way of coping with the fact that widows outnumber widowers. Unfortunately, a contemporary American widow who wishes to remarry cannot depend on her brother-in-law to assume that responsibility. Finding herself in competition with a number of other women in similar circumstances, remarriage is not a likely prospect for an elderly widow. The reason is probably a combination of motive and opportunity, the former as seen in the negative feelings expressed by many widows with respect to new romantic involvements, and the latter due to the smaller number of available men. Even those widows who remarry do so in most instances only several years after the death of their husband. Younger widows are more apt to remarry than older ones, not only because of greater opportunity to do so but also because of social expectations. Older widows are expected to keep the memory of their husband alive and to establish friendships with other widows rather than with unattached (or attached!) men.

As difficult as remarriage in later years may seem, research suggests that it is easier for older men and women to remarry than one may think (Jacobs & Vinick, 1979). A typical couple might meet through friends at a dinner party or other social occasion, begin seeing each other, and eventually marry. Older men usually show greater eagerness to get involved and to remarry than older women, but in later life traditional sex roles are often reversed and the woman takes the initiative (Vinick, 1977):

> *He was sitting near me at the Golden Agers, and I didn't even know him. He was looking so depressed. You could see that the man needs something. The trouble is, when I see someone lonely, I want to know what's the matter. He was sitting just like a chicken without a head [sic]. After that, he went his way. I went my way. So [the next meeting], he was sitting there again. So my friend said, 'Let's sit down with him. It will warm him up a little.' It was awfully windy. We sat down, and then we started to talk. You know the way it is. (p. 6)*

Living Alone

As a consequence of their changed status, widowed persons are faced with many problems and choices. One of these is where to live. To a great extent, the decision about where to live depends on a person's economic situation. Widowhood is often accompanied by reduced income, which may be a factor in deciding to move to smaller living quarters. Many older widowed persons prefer to live alone rather than with a married child, and a small percentage own their own homes. However, the cost of maintenance and utility bills, possible health problems, fear of crime, and loneliness force many widows to move in with a married son or daughter or into a retirement home or rental housing. Others may solve the problem by taking in tenants or, if the health or loneliness problems are more serious than the financial ones, hire a live-in companion or nurse. For whatever reasons—habit, a desire to be free and independent, a concern with imposing on other people, a majority of widows who own their own homes remain in them as long as possible and prefer to live by themselves.

Living alone should not be equated with loneliness. On the whole, widows become accustomed fairly quickly to living alone, especially when there is a high concentration of other widows in the neighborhood. Still, as a group older widows are lonelier than older married people, and younger widows tend to be even lonelier than older ones. Widows who live in metropolitan areas are lonelier than those who live in medium-sized cities or small towns, and lower class widows are generally lonelier than middle class widows (Atchley, 1975; Kunkel, 1979; Lopata, 1973). These differences are associated with the number of social contacts maintained or established by the widow. Older widows have more friends than young ones, mainly because the pool of older widows is larger and they have had more time to make friends. In fact, older widows tend to have even higher rates of social interaction than older married women (Atchley, Pignatiello, & Shaw, 1975). Similarly, middle-class widows, like middle-class women in general, have more time and a greater tendency than working-class widows to establish friendships with individuals of their own sex and age group.

Economics and Identity

There is no question that widowhood is a major life crisis for men and women. A widowed person loses more than a friend, lover, helpmate, and a part of his or her identity as a human being. In most instances there are also economic losses. The financial condition of a typical widow is far from good, although an exceptional few—recipients of windfall income from insurance policies, estate settlements, and profit-sharing trusts—are even better off financially than they were during their marriage years. However, the great majority of widows must get by on small savings, a modest

insurance or death benefit, and Social Security payments. Younger widows tend to have more financial woes than older widows, but both groups find that money and its management can be a serious problem (Wyly & Hulicka, 1975).

Decreased income has repercussions in many areas of living. Social and other interests and activities that require money to pursue have to be reduced, and the overall lower standard of living also has an effect on one's self-concept. Widows who depended almost totally on their husband to keep the home, the car, and other possessions in good repair, to drive the car, and to manage their finances feel insecure and inadequate when they are forced to rely on their own resources. Some widows are unable to adapt successfully to their changed circumstances and the necessity of developing a new identity and different social roles. The resulting adjustment problems may be expressed through alcohol and drug addiction, mental illness, and even a loss of the will to live. Widowers, for whom the role of husband was a central part of their self-concept, may experience similar problems of adjustment and self-identity when their wives die (Glick et al., 1974). As with bereavement, widowhood appears to have more detrimental physical effects on men than on women (W.Stroebe, Stroebe, & Abakoumkin, 1999).

Changes in Lifestyle

Despite the image of a widowed person as a poor, forlorn creature with bad health whom nobody cares about, only a small percentage of widows are physically impaired or emotionally incapacitated to such an extent that they cannot function properly. For most people, widowhood is not a particularly desirable state, but their situation is not entirely negative. Widowhood appears to be somewhat kinder to women than to men, but even for men the increased freedom and independence offered by widowhood can provide new opportunities and rewards. Understandably, most widows and widowers miss the deceased spouse's companionship, but many widows find that their housework is lightened and that they have more time to travel and devote to personal interests and the cultivation of talents and skills. In fact, two reasons why older widows typically cope better than older widowers are their greater social aptitude and the blossoming of special skills (Lopata, 1979; Seltzer, 1979). Perhaps for similar reasons, some surveys have found that older widows have even higher morale than older married women (e.g., L.A.Morgan, 1976).

A number of options are open to widows if they choose to take advantage of them. Not all widows need to or do become "social isolates." Many elect to continue the same level of activity in similar roles and situations that they assumed prior to widowhood. Another broad option chosen by widows whom Lopata (1973) labeled "self-initiating women," is to adopt new roles and develop new friendships. Thus the majority of widows are not poor old souls who are relegated to the rocking chair, but rather women who can look forward to living as long as another generation and getting more joy than ever out of life.

SUMMARY

Bereavement is the state of loss or deprivation resulting from the death of another person. Grief is the feeling of sorrow and distress that results from bereavement, and

mourning is the culturally prescribed behavior pattern for expressing grief. Numer-ous practical, psychological, and social considerations must be dealt with by bereaved persons. An important psychological process consists of learning to cope with problems and to enjoy life without the presence and assistance of the deceased.

Not only grief but also anger, anxiety, depression, guilt, and feelings of hopelessness are common emotional reactions to bereavement. Other reactions are disorientation, difficulties in concentrating and remembering, crying, insomnia, reliance on tranquilizers and alcohol, and loss of appetite, energy, and weight. Regression, hallucinations, obsessional review, and overidentification with or idealization (sanctification) of the deceased are less common responses to bereavement, but even they are not necessarily pathological.

Various stage theories of grief have been proposed, most of which conceptualize the process as beginning with a period of shock or numbness, giving way to a long period of grief and related emotions, and ending in recovery and life reorganization. Stage theories of grief are probably best viewed as descriptive accounts of emotional reactions experienced by grieving people rather than fixed sequences which all bereaved people follow on their way to recovery. There are wide individual differences in the intensity and quality of reactions to bereavement, depending on such factors as the age, sex, culture and ethnicity, social class, and personality of the bereaved.

The diagnosis of grief as pathological depends on its intensity and duration and the presence of abnormal behaviors (e.g., mummification, anniversary reactions, delayed grief, attempted suicide). Grief is more likely to be pathological when the death was unexpected, when the bereaved person has unresolved conflicts with or ambivalent feelings toward the deceased, or when social and emotional support is lacking.

Not only mental disorders, but physical illness and even death may be precipitated or exacerbated by prolonged grieving. The broken heart syndrome, in which a bereaved individual develops coronary thrombosis or some other form of heart disease, is most often cited as an important cause of the increased mortality rate observed after bereavement. The stress of caring for a dying person and the stress created by the adjustment problems of widowhood are undoubtedly as important as the stress of bereavement itself in the increased mortality rate of survivors. The desolation-effects hypothesis, according to which both the event of bereavement and the circumstances stemming from it have deleterious effects on the body, is the most plausible and popular explanation of the high mortality rate during the first year or so after the loss.

Two factors that are important in recovering from bereavement are time and the emotional support of other people. Various organizations, such as The Compassionate Friends and widow-to-widow programs, offer assistance to bereaved individuals. Group-oriented bereavement counseling (grief groups) and individual counseling or psychotherapy for the bereaved use a variety of techniques. Reworking through the events associated with a death and funeral is a common therapeutic approach, but the specific therapeutic techniques depend on the age and personality of the bereaved and the particular symptoms manifested.

Although substantial numbers of men and non-Whites are widowed, because of their much larger numbers, the problems of widowhood and the programs related to them in the United States are primarily associated with older White women. The ratio of over four widows to one widower is a consequence of the fact that husbands tend to die before their wives and widowers remarry more often than widows. A large percentage of

widows live alone, and loneliness is a problem for many of them. However, widows are more likely than widowers to have a number of same-sex friends of their own age and to participate in social activities.

In addition to loneliness, widows list money and its management as their most serious worries. Problems of identity (Who am I? What are my social roles?) are also common in widowhood. Most widows adapt fairly well to their situation despite these problems, but others suffer serious adjustment difficulties. Drug and alcohol abuse, mental illness, and suicide may result from the stresses of widowhood.

As they do at other times of life, widowed persons have a number of lifestyle options—to continue doing the same things as before widowhood, to select new roles and develop new friendships, or to disengage from others and retreat into social isolation. The options that are chosen depend to some extent on economic and social supports, but to an even greater extent they are determined by the individual's personality and interest in controlling her or his experiences and making the most of opportunities to have a happy and self-fulfilling existence.

QUESTIONS AND ACTIVITIES

1. Describe the various stage theories of grief, and evaluate their accuracy in depicting the grieving process.
2. What rituals and customs play a part in the grieving process? Are these rituals and customs a source of comfort or discomfort to the bereaved persons?
3. Can you remember an experience of grief when a close relative, a friend, a pet of yours died? What emotions and physical symptoms did you experience? Did your experience correspond to any of the stage theories of grief discussed in this chapter? Do you think that the grief experience was beneficial to you, that is, did it help you to grow as a person and contribute to your personal well-being and philosophy of life?
4. What are the differences between a normal and a pathological grief reaction? Have you had experiences with either or both types of reactions?
5. How does the nature of grief vary with whether it was expected or unexpected? With the age of the person who died? With the relationship of the person to you?
6. The loss of any prized possession, animate or inanimate, can produce symptoms in the owner similar to those observed when a close friend or relative dies. Have you ever endured a loss that made you depressed, angry, and/or physically ill? If so, describe it.
7. Interview a half-dozen widows or widowers and obtain their answers to the following questions:

a. How many years were you married?
b. How long have you been widowed?
c. How many children do you have, and what are their ages?
d. How difficult was it for you to adjust to widowhood?
e. Did your relatives help you to adjust to widowhood? In what ways?
f. Where do you live? Do you live alone or with someone else?
g. Which of the following is the biggest problem that you have experienced in widowhood: loneliness, insufficient money, time on your hands, lack of skill in fixing things, lack of love, relationships with relatives, worries about the future, other problems.

h. In your opinion, what are the major advantages of being a widow or widower?
i. In your opinion, what are the major disadvantages of being a widow or widower?
j. Would you like to get married again? Do you think it will ever happen?
k. What advantages would being remarried have over being a single widow or widower?
l. Do you have many friends who are widows or widowers?

From the answers, what impression did you obtain about the state of widowhood? Are widows (widowers) generally satisfied or dissatisfied with their situation? What are the relative advantages and disadvantages of being widowed?

8. Web exercise: In addition to web sites for specific organizations or associations that provide information and services to bereaved persons (e.g., The Compassionate Friends at *www.compassionatefriends.org* and The St. Francis Center at *www.moore.net/~sfcgrief*), there are network sites that can connect the user with various resources related to bereavement and grief. Three such sites are the following: GriefNet *(www.rivendell.org),* Hospice Net *(www.hospicenet.org),* and WidowNet *(www.fortnet.org/WidowNet).* Log on to each of these sites and familiarize yourself with their uses. How effective do you think that grief counseling on an internet site or by email is when compared with a face-to-face situation as in Widow-to-Widow counseling programs?

SUGGESTED READINGS

Bowman, T. (1999). Literary resources for bereavement. *Hospice Journal, 14*(1), 39–54.

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Corr, C.A., & Corr, D.M. (Eds.). (1996). *Handbook of childhood death and bereavement.* New York: Springer.

DiGiulio, R.C. (1989). *Beyond widowhood: From bereavement to emergence and hope.* New York: Free Press.

Figley, C.R., Bride, B.E., & Mazza, N. (1997). *Death and trauma: The traumatology of grieving.* Washington, DC: Taylor & Francis.

Heinlein, S., Brumett, G., & Tibbals, J. (Eds.). (1997). *When a lifemate dies: Stories of love, loss, and healing.* Minneapolis, MN: Fairview Press.

Klass, D. (1995). Spiritual aspects of the resolution of grief. In H.Wass & R.A. Neimeyer (Eds.), *Dying: Facing the facts* (3rd ed., pp. 212–241). Washington, DC: Taylor & Francis.

Lopata, H.Z. (1996). *Current widowhood: Myths and realities.* Thousand Oaks, CA: Sage.

Rando, T.A. (1995). Grief and mourning: Contributions of five major clinical theorists. In H.Wass & R.A.Neimeyer (Eds.), *Dying: Facing the facts* (3rd ed., pp. 212–241). Washington, DC: Taylor & Francis.

Appendix A

REPRESENTATIVE LIST OF NAMES AND ADDRESSES OF PERIODICALS CONCERNED WITH DEATH AND DYING

Advances in Thanatology
Foundation of Thanatology Foundation
Book & Periodical Division 630 West
168th Street
New York, NY 10032
Tel. 212-928-2066

Bereavement Care
126 Sheen Road
Richmond, Surrey TW9 1UR, England
Tel. 44-181-940-4818
Fax 44-181-940-7638

Death and Dying
Box 2348
Boca Raton, FL 33427-2348
Tel. 561-994-0079, 800-232-SIRS
Fax 561-994-4704 *www.SIRS.com*

Death Row U.S.A. Reporter
William S.Hein & Co., Inc.
1285 Main Street
Buffalo, NY 14209-1987
Tel. 716-882-2600, 800-828-7571
Fax 716-883-8100

Death Studies
Taylor & Francis, Inc.
1900 Fiost Road
Suite 101
Bristol, PA 19007-1598
Tel. 215-785-5800, 800-821-8312
Fax 215-785-5515
www.tandf.com

DWD Newsletter
Dying With Dignity
188 Eglinton Avenue, E.

Suite 706
Toronto, ON M4P 2X7, Canada
Tel. 416-486-3998
Fax 416-489-9010
www.web.apc.org/dwd

G E I Newsletter

Grief Education Institute
3540 S. Poplar Street
Suite 202
Denver, CO 80237-1362

Hastings Center Report
Hastings Center
Route 9D
Garrison, NY 10524
Tel. 914-762-8500
Fax 914-762-2124

Hospice

National Hospice Organization
1901 North Moore Street Suite
901
Arlington, VA 22209
Tel. 703-243-5900
Fax 703-525-5762

Hospice Bulletin

Saint Christopher's Hospice
Hospice Information Service
51–59 Lawrie Park Road
London SE26
6DZ England
Tel. 44-181-778-9252
Fax 44-181-776-9345

Hospice Journal

Haworth Press, Inc.
10 Alice Street
Binghamton, NY 13904-1580
Tel. 607-722-5857, 800-342-9678
Fax 607-722-6362
www.haworth.com

Hospice Letter

Health Resources Publishing
P.O. Box 456
Allenwood, NY 08720
Tel. 732-292-1100
Fax 732-292-1111
www.themcic.com

Hospice Management Archives
American Health Consultants
3525 Piedmont Road, N.E.
Building 6, Suite 400
Tel. 404-262-7436

Fax 800-284-3291
www.abcpub.com

Hospice Today

Hospice of the Florida Suncoast
300 East Bay Drive
Largo, FL 34640
Tel. 813-586-4432
Fax 813-586-5213

Journal of Palliative Care

Centre for Bioethics
Clinical Research Institute of Montreal
110 Pine Avenue, W.
Montreal, Quebec H2W 1R7 CANADA
Tel. 514-987-5617
Fax 514-987-5695

Journal of Psychosocial Oncology
The Haworth Press, Inc.

10 Alice Street
Binghamton, NY 13904-1580
Tel. 607-722-5857, 800-342-9678
Fax 607-722-6362

Loss, Grief & Care

The Haworth Press, Inc.
10 Alice Street
Binghamton, NY 13904-1580
Tel. 607-722-5857; 800-342-9678
Fax 607-722-6362

The NAACP Legal Defense & Educational Fund, Inc.
Suite 301
1275 K Street, NW
Washington, DC 20005

The National Coalition to Abolish the Death Penalty
1436 U Street, NW, Suite 104
Washington, D.C. 20009
Tel. 888-286-2237, 202-387-3890
Fax 202-387-5590

Omega: Journal of Death and Dying
Baywood Publishing Company, Inc.
26 Austin Avenue
Box 337
Amityville, NY 11701
Tel. 516-691-1270
Fax 516-691-1770
www.baywood.com

Series in Death Education, Aging, and Health Care
Taylor & Francis, Inc.
Suite 101
1900 Frost Road
Bristol, PA 19007-1598
Tel. 215-785-5800, 800-821-8312
Fax 215-785-5515

Suicide and Life Threatening Behavior

American Association of Suicidology
Guilford Publications, Inc.
72 Spring Street, Department 7L
New York, NY 10012
Tel. 212-431-9800, 800-365-7006
Fax 212-966-6708

Thanatology Abstracts

Foundation of Thanatology
630 West 168th Street
New York, NY 10032
Tel. 212-928-2066

Thanatology Librarian

Center for Thanatology Research and Education, Inc.
391 Atlantic Avenue
Brooklyn, NY 11217-1701
Tel. 718-858-3026

Appendix B

REPRESENTATIVE LIST OF NAMES AND ADDRESSES OF ORGANIZATIONS CONCERNED WITH DEATH AND DYING

AIDS Action Council
1875 Connecticut Avenue, NW, Suite 700
Washington, DC 20009
Tel. 202-986-1300 *www.thebody.com/index.shtml*

AIDS Resource Foundation for Children
St. Claire's Home for Children
182 Roseville Avenue
Newark, NJ 17107-1619
Tel. 973-483-4250
www.community.nj.com/cc/aidsresource

ALCOR Life Extension Foundation
7895 East Acoma Drive, Suite 110
Scottsdale, AZ 85200-6916
Tel. 800-367-2228
www.alcor.org

Alzheimer's Association
919 North Michigan Avenue, Suite 1000
Chicago, IL 60611-1676
Tel. 800-272-3900
www.alz.org

American Association of Retired Persons
601 E Street, NW
Washington, DC 20049
Tel. 202-434-2277
www.aarp.org

American Association of Suicidology
4201 Connecticut Avenue, NW, Suite 310
Washington, DC 20008
Tel. 202-237-2280 *www.suicidology.org*

American Cancer Society, Inc.
1599 Clifton Road, NE
Atlanta, GA 30329
Tel. 404-320-3333
www.cancer.org

American Cryonics Society
P.O. Box 1509
Cupertino, CA 95015

Tel. 650-254-2001
www.jps.net/cryonics

American Foundation for AIDS Research
120 Wall Street, 13th Floor
New York, NY 10005-3902
Tel. 212-806-1600
www.amfar.org

American Foundation for Suicide Prevention
120 Wall Street, 22nd Floor
New York, NY 10005-4001
Tel. 212-363-3500
www.afsp.org

American Heart Association 7272
Greenville Avenue
Dallas, TX 75231-4596
Tel 214-373-6300, 888-333-AFSP
www.heartsource.org

American Hospital Association 1
North Franklin, Suite 27
Chicago, IL 60606
Tel. 312-422-3000
ahanc.library.net

American Institute of Life Threatening Illness and Loss
630 West 168th Street
New York, NY 10032
Tel. 212-928-2066

American Medical Association
515 North State Street
Chicago, IL 60610
Tel. 312-464-5000
www.ama~assn.org

American Sudden Infant Death Syndrome Institute
2480 Windy Hill Road, Suite 380
Marietta, GA 30067
Tel. 770-612-8277
www.sids.org

Association for Death Education and Counseling
342 North Main Street
Hartford, CT 06117-2507
Tel. 860-586-7503
www.adec.org

Bereavement Services

Gundersen Lutheran Medical Center
1910 South Avenue
La Crosse, WI 54601
Tel. 608-791-4747
www.gundluth.org/ bereave

Big Brothers/Big Sisters of America
230 North 13th Street
Philadelphia, PA 19107
Tel. 215-567-7000
www.bigbro.com

Brass Ring Society 500
Macaw Lane, No. 5
Fern Park, FL 32730
Tel. 407-339-6188
www.brassring.org

The Candlelighters Childhood Cancer Foundation
7910 Woodmont Avenue, Suite 460
Bethesda, MD 20814-3015
Tel. 301-657-8401, 800-366-CCCF (2223)
www.candlelighters.org

Center for Bioethics and Human Dignity
2065 Half Day Road
Bannockburn, IL 60015
Tel. 847-317-8180
www.bioethix.org

Center for Death Education and Research
c/o Robert Bendiksen
University Of Wisconsin
Lacrosse, WI 52661
Tel. 612-624-1895

Center for the Rights of the Terminally Ill
P.O. Box 54246
Hurst, TX 76054-2064
Tel. 817-656-5143

Choice in Dying
1035 30th Street, NW
Washington, DC 20007
Tel. 202-338-9790, 800-989-9455
www.choices.org

Compassion in Dying Federation
6312 SW Capitol Highway
Suite 415
Portland, OR 97201
Tel. 503-221-9556
www.compassionindying.org

Compassionate Friends, The
P.O. Box 3696
Oak Brook, IL 60522-3696
Tel. 630-990-0010
www.compassionatefriends.org

Cremation Association of North America
401 North Michigan Avenue

Chicago, IL 60611-4267
Tel. 312-644-6610
www.cremationinfo.com/cope

Death Penalty Information Center
1320 18th Street NW, 5th Floor
Washington, DC 20036-1811
Tel. 202-293-6970
www.essential.org/dpic

Death Row Support Project
Dept. E, P.O. Box 600
Liberty Mills, IN 46946
Tel. 219-982-7480 *www.scn.org/activism/wcadp/write.htm*

Death With Dignity National Center
c/o Charlotte L.Ross
520 South El Camino Real
Suite 710
San Mateo, CA 94402-1720
Tel. 650-344-6489
www.deathwithdignity.org

Dying With Dignity
55 Eglinton Avenue East
Suite 705
Toronto, Ontario M4P 1GB
Canada
Tel. 800-495-6156
www.web.apc.org/~dwdca/index.html

Helping Other Parents in Normal Grieving
1215 East Michigan Avenue
P.O. Box 30480
Lansing, MI 48909
Tel. 517-483-3873

Hemlock Society. U.S.A.
P.O. Box 10810
Denver, CO 80250-1810
Tel. 303-639-1202, 800-247-7421
www.hemlock.org

Hospice Association of America
228 7th Street, SE
Washington, DC 20003-4306
Tel. 202-546-4759 *www.hospice-america.org*

Hospice Education Institute
190 Westbrook Road
Essex, CT 06426
Tel. 860-767-1620 or 800-331-1620
www.hospiceworld.org

Hospice Foundation of America
2001 S Street NW, Suite 300
Washington, DC 20009
Tel. 800-854-3402
www.hospicefoundation.org

The Hospice Information Service

St. Christopher's Hospice
51–59 Lawrie Park Road
London SE26 6DZ
Tel. 0181-778-9252

International Anti-Euthanasia Task Force
P.O. Box 760
Steubenville, OH 43952
Tel. 740-282-3810
www.iaetf.org/

International Association for Near-Death Studies
P.O. Box 502
East Windsor, CT 06028
Tel. 860-528-5144
www.iands.org/iands

International Institute for the Study of Death
P.O. Box 63-0026
Miami, FL 33163-0026
Tel. 305-936-1408

Leukemia Society of America
600 Third Avenue, 4th floor
New York, NY 10016
Tel. 800-955-4LSA
www.leukemia.org

Living/Dying Project

P.O. Box 357
Fairfax, CA 94978
Tel. 415-456-3915

Make A Wish Foundation of America
100 West Clarendon Ave., Suite 2200
Phoenix, AZ 85013-3518
Tel. 602-279-9474 *www.makeawish.org*

Make Today Count
c/o Mid-Atlantic Cancer Center
1235 East Cherokee Street
Springfield, MO 65804-2203
Tel. 800-432-2273

Mothers Against Drunk Driving
511 E. John Carpenter Freeway
Suite 700
Irving, TX 75062

Tel. 214-744-MADD
www.madd.org/

NAACP Legal Defense and Educational Fund, Inc.

99 Hudson Street, Suite 1600
New York, NY 10013-2897
Tel. 212-965-2200
www.ldfla.org/ldf.html

National Association for the Terminally Ill

P.O. Box 368
Shelbyville, KY 40066
Tel. 888-847-0390
www.terminallyill.org

National Association of People with AIDS
1413 K Street NW
Washington, DC 20005-3442
Tel. 702-898-0414
www.napwa.org

National Cancer Institute
National Institutes of Health
31 Center Drive, MSC 2590
Bethesda, MD 20892-2580
www.nci.nih.gov

National Coalition to Abolish the Death Penalty
1436 U Street, NW
Suite 104
Washington, DC 20009
Tel. 202-387-3890, 888-286-2237 *www.ncadp.org*

National Funeral Directors and Morticians Association, The
3951 Snapfinger Parkway, Suite 570
Omega World Center
Decatur, GA 30035
Tel. 404-286-6680
www.ndfma.com

National Funeral Directors Association
11121 West Oklahoma Avenue
Milwaukee, WI53227-4096
Tel. 414-541-2500
www.nfda.org

National Hospice Organization, Inc.
Suite 901
1901 North Moore Street
Arlington, VA 22209
Tel. 703-243-5900
www.nho.org

National Safety Council
1121 Spring Lake Drive

Itasca, IL 60143-3201
Tel. 630-285-1121
www.nsc.org

Oregon Death With Dignity Legal Defense and Education Center
625 SW 10th Avenue
Suite 284-C
Portland, OR 97205
www.oregondwd.org

Parents of Murdered Children, Inc.
100 East 8th Street, B-41
Cincinnati, Ohio 45202
Tel 888-818-POMC *www.pomc.com*

Parents Without Partners
401 North Michigan Avenue
Chicago, IL 60611-4267
Tel. 312-644-6610
www.parentswithoutpartners.org

Samaritans
500 Commonwealth Avenue
Kenmore Square
Boston, MA 02215
Tel. 617-536-2460 or 617-247-0220
www.samaritans.org

Seasons: Suicide Bereavement
c/o Tina Larsen
P.O. Box 187
Park City, UT 84060
Tel. 801-649-8327

Society for the Right to Die
250 West 57th Street
New York, NY 10107
Tel. 212-246-6973

Starlight Children's Foundation 12424
Wilshire Boulevard, Suite 1050 Los
Angeles, CA 90025-1044
Tel. 310-207-5558
starlight.org

St. Francis Center
4880-A McCarthur Boulevard, NW
Washington DC 20007-1557
Tel. 202-333-4880 *www.moore.net/*
~sfcgrief

Sudden Infant Death (SIDS) Alliance
1314 Bedford Ave., Suite 210

Baltimore, MD 21208
Tel. 800-221-SIDS
www.sidsallianee.rg

Sunshine Foundation 2001
Bridge Street
Philadelphia, PA 19124
Tel. 215-535-1413
www.sunshinefoundation.org

Survival Research Foundation
P.O. Box 63-0026
Miami, FL 33163-0026
Tel. 305-936-1408

Theos Foundation, Inc.
322 Boulevard of the Allies, Suite 105
Pittsburgh, PA 15222-1919
Tel. 412-471-7779

Appendix C

REPRESENTATIVE LIST OF BOOKS ON DEATH AND DYING FOR CHILDREN AND ADOLESCENTS

Preschool and Primary Grades (Ages 3–8)

Allen, N. (1997). *Heaven.* New York: Harper Festival.

Berger, T. (1971). *I have feelings.* New York: Human Sciences Press.

Bonnet, S. (1974). *About death.* New York: Stein, Walker.

Brown, L.K., & Brown, M. (1996). *When dinosaurs die: A guide to understanding death.* Boston: Little, Brown.

Brown, M.W. (1965). *The dead bird.* Glenview, IL: Scott Foresman.

Bunting, E. (1982). *The happy funeral.* New York: Harper & Row.

Buscaglia, L. (1982). *The fall of Freddie the leaf: A story of life for all ages.* Thorofare, NJ: Charles B.Slack.

Carrick, C. (1976). *The accident.* New York: Seabury/Clarion.

Clifton, L. (1983). *Everett Anderson's good-bye.* New York: Holt, Rinehart & Winston.

Coburn, J.B. (1964). *Anne and the sand dobbies: A story about death for children and their parents.* New York: Seabury Press.

Cohen, M. (1984). *Jim's dog Muffins.* New York: Green willow.

Cohn, J. (1987). *I had a friend named Peter: Talking to children about the death of a friend.* New York: Morrow.

Cohn, J. (1994). *Molly's rosebush: A concept book.* Morton Grove, IL: Albert Whitman.

De Paola, T. (1973). *Nana upstairs and Nana downstairs.* New York: Putnam.

Dodge, N.C. (1986). *Thumpy's story: A story of love and grief shared by Thumpy the Bunny.* Springfield, IL: Prairie Lark.

Gerstein, M. (1987). *The mountains of Tibet.* New York: Harper & Row.

Hogan, B. (1983). *My grandmother died.* Illustrations by Nancy Munger. Nashville: Abingdon.

Hoopes, L.L. (1981). *Nana.* New York: Harper & Row.

Fassler, J. (1971). *My grandpa died today.* New York: Behavioral Publications.

Kantrowitz, M. (1973). *When Violet died.* New York: Parents Magazine Press.

Maple, M. (1992). *On the wings of a butterfly.* Seattle, WA: Parenting Press.

Miles, M. (1976). *Annie and the old one.* Boston: Little, Brown.

Mobley, J. (1979). *The star husband.* New York: Doubleday.

Newman, L. (1995). *Too far away to touch.* New York: Clarion.

Peavy, L. (1981). *Allison's grandfather.* New York: Charles Scribner's Sons.

Porte, B.A. (1985). *Harry's mom.* New York: Greenwillow/Morrow.

Rogers. F. (1988). *When a pet dies.* New York: Putnam.

Shector, B. (1973). *Across the meadow.* New York: Doubleday.

Stein, S. (1974). *About dying.* New York: Walker.

Stull, E. (1964). *My turtle died today.* New York: Holt, Rinehart & Winston.
Tressalt, A. (1971). *The dead tree.* New York: Parents Magazine Press.
Tsuchiya, Y. (1988). *Faithful elephants: A true story of animals, people, and war.* Boston: Houghton Mifflin.
Varley, S. (1984). *Badger's parting gifts.* New York: Lothrop, Lee & Shepard.
Viorst, J. (1971). *The tenth good thing about Barney.* New York: Atheneum.
Warburg, S. (1969). *Growing time.* Boston: Houghton Mifflin.
White, E.B. (1952). *Charlotte's web.* New York: Harper & Row.
Zolotow, C. (1974). *My grandson Lew.* New York: Harper & Row.
Zolotow, C. (1980). If you listen. New York: Harper & Row.

Elementary Grades (Ages 8–12)

Bohlmeijer, A. (1997). *Something very sorry.* New York: Putnam.
Carlson, N. (1970). *The half sisters.* New York: Harper & Row.
Carrick, C. (1981). *The accident.* New York: Clarion.
Clifton, L. (1983). *Everett Anderson's goodbye.* New York: Henry Holt.
Coerr, E. (1977). *Sadako and the thousand paper cranes.* New York: Putnam.
Corley, E. (1973). *Tell me about death, tell me about funerals.* Santa Clara, CA: Grammatical Sciences.
Daisaku, I. (1991). *The cherry tree.* New York: Knopf.
Erdman, L. (1973). *A bluebird will do.* New York: Dodd, Mead.
Farley, C. (1975). *The garden is doing fine.* New York: Atheneum.
Gaes, J. (1987). *My book for kids with cansur: A child's autobiography of hope.* Aberdeen, SD: Melius & Peterson.
Graeber, C. (1982). *Mustard.* New York: Macmillan.
Greene, C.C. (1976). *Beat the turtle drum.* New York: Viking.
Harris, A. (1965). *Why did he die?* Minneapolis, MN: Lerner Publications.
Hazen, B.S. (1985). *Why did Grandpa die?* New York: Golden.
Henkes, K. (1997). *Sun & spoon.* New York: Greenwillow.
Hitchcock, R. (1988). *Tim's dad: A story about a boy whose father dies.* Springfield, IL: Human Services.
Holden, L.D. (1989). *Gran-Gran's best trick: A story for children who have lost someone they love.* New York: Magination Press.
Hunter, M. (1974). *A sound of chariots.* New York: Harper & Row.
Lancaster, M. (1985). *Hang tough.* New York: Paulist Press.
LeShan, E. (1976). *Learning to say goodbye: When a parent dies.* New York: Macmillan.
Levine, J. (1992). *Forever in my heart: A story to help children participate in life as a parent dies.* Burnsville, IN: Mountain Rainbow.
Lorenzo, C.L. (1974). *Mama's ghosts.* New York: Harper & Row.
McLendon, G.H. (1982). *My brother Joey died.* Photographs by H.Kelman. New York: Simon & Schuster.
Napoli, D.J. (1997). *Stones in water.* New York: Dutton.
Orgel, D. (1970). *The mulberry music.* New York: Harper & Row.

Simon, N. (1989). *I am not a crybaby.* Morton Grove, IL: Albert Whitman.
Smith, D.B. (1973). *A taste of blackberries.* New York: Crowell.
Tott-Rizzuti, K. (1992). *Mommy, what does dying mean?* Pittsburgh, PA: Dorrance.
Varley, S. (1984). *Badger's parting gifts.* New York: William Morrow.
Vigna, J. (1991). *Saying goodbye to daddy.* Morton Grove, IL: Albert Whitman.
Watts, R. (1975). *Straight talk about death with young people.* Philadelphia: Westminster.
Weir, A.B. (1992). *Am I still a big sister?* Newton, PA: Fallen Leaf Press.
White, E.B. (1952). *Charlotte's web.* New York: Harper & Row.
Young, A.E. (1991). Is *my sister dying?* St. Petersburg, FL: Willowisp.

Junior and Senior High School (Ages 12 and up)

Agee, J. (1959). *A death in the family.* New York: Avon.
Arrick, F. (1980). *Tunnel vision.* Scarsdale, NY: Bradbury.
Bach, A. (1980). *Waiting for Johnny Miracle.* New York: Harper & Row.
Bach, R. (1970). *Jonathan Livingston Seagull.* New York: Macmillan.
Breebaart, J., & Breebaart, P. (1993). *When I die, will I get better?* New York: Peter Bedrick.
Cohn, J. (1987). *I had a friend named Peter.* New York: William Morrow.
Deaver, J.R. (1988). *Say goodnight, Gracie.* New York: Harper & Row.
DeVries, P. (1961). *Blood of the lamb.* Boston: Little, Brown.
Fox, P. (1996). *The eagle kite.* New York: Dell/Laurel-Leaf.
Gilbert, B.S. (1996). *Stone water.* Arden, NC: Front Street.
Grollman, E.A. (1993). *Straight talk about suicide for teenagers.* Boston: Beacon.
Grollman, S. (1988). *Shira: A legacy of courage.* New York: Doubleday.
Hughes, M.C. (1984). *Hunter in the dark.* New York: Atheneum.
Hunter, M. (1972). *A sound of chariots.* New York: Harper & Row.
Hurwin, D.W. (1997). *A time for dancing.* New York: Puffin.
Irwin, H. (1988). So *long at the fair.* New York: McElderry-Macmillan.
Kerr, M.E. (1986). *Night kites.* New York: Harper & Row.
Klein, N. (1974). *Sunshine.* New York: Avon.
Krementz, J. (1989). *How it feels to fight for your life.* New York: Simon & Schuster.
Lee, V. (1972). *The magic moth.* Boston: Houghton Mifflin.
L'Engle, M. (1980). *The summer of the great-grandmother.* New York: Seabury.
L'Engle, M. (1980). *A ring of endless light.* New York: Farrar, Straus & Giroux.
LeShan, E. (1976). *Learning to say goodbye: When a parent dies.* New York: Macmillan.
Mazer, N.F. (1987). *After the rain.* New York: William Morrow.
McDaniel, L. (1992). *Sixteen and dying.* New York: Bantam.
McDonald, J. (1997). *Swallowing stones.* New York: Delacote.
Mellone, B., & Ingpen, R. (1983). *Lifetimes: The beautiful way to explain death to children.* New York: Bantam.
Myers, W.D. (1988). *Fallen angels.* New York: Scholastic.
Novac, A. (1997). *The beautiful days of my youth: My six months in Auschwitz and Plaszow.* New York: Henry Holt.

Olander, J., & Greenberg, M.H. (1978). *Time of passage.* New York: Taplinger.
Richter, E. (1986). *Losing someone you love: When a brother or sister dies.* New York: Putnam.
Schmidt, G.D. (1996). *The sin eater.* New York: Dutton.
Yumoto, K. (1996). *The friends* (Trans, by C. Hirano). New York: Farrar, Sraus & Giroux.

Appendix D

QUESTIONNAIRES, INVENTORIES, AND SCALES FOR ASSESSING FEARS, ANXIETY, AND ATTITUDES TOWARD DEATH

Alpha-Omega Completed Sentence Form (R. Klein et al; 50 items, higher education; developed to identify and measure an individual's adaptational approaches to information concerning his or her own death or the possible death of a significant other; ERIC Document Reproduction Service, 7420 Fullerton Road, Suite 110, Springfield, VA 22153–2852, ED 167 218)

Attitudes Toward Death Measure (D.V.Hardt; 20 items, age 13–17, adults; developed to be a valid and reliable attitude scale to measure attitudes toward the concept of death; *Journal of School Health,* 1975, *45*(2), 96–99)

Collett-Lester Fear of Death Scale (D.Lester & L.J.Collett; 36 items; adults; measures four dimensions of the general fear of death: death of oneself, death of others, dying of oneself, and dying of others) *Journal of Psychology,* 1969, *72,* 179–181.

Communication Apprehension-Dying Scale (B. Hayslip; 30 items, adults; rating scale that assesses the apprehension individuals have about communicating with people who are dying; items focus on the types of conversation one might avoid when speaking to a terminally ill person, and the anxiety the individual might harbor about speaking to a terminally ill person; *Omega: Journal of Death and Dying,* 1986–1987, *17,* 251–261)

Corriveau-Kelly Death Anxiety Scale (M.N. Kelly & D.P.Corriveau; *Omega: Journal of Death and Dying,* 1995, *31,* 311–315)

Death Anxiety Questionnaire (H.R.Conte et al.; 15 items; adults; designed to measure attitudes toward death and dying; covers fear of the unknown, fear of suffering, fear of loneliness, and fear of personal extinction; *Journal of Personality and Social Psychology,* 1982, *43,* 775–782)

Death Anxiety Scale (D.I.Templer; 15 items; adults; designed to assess attitudes con-cerning death; Dr. Donald I.Templer; California School of Professional Psychology, 1350 M Street, Fresno, CA 93721)

Death Anxiety Scale for Children (D.Schell & C.Seefeldt; rating scale consisting of 63 neutral and anxiety-producing (death-related) words; *Omega: Journal of Death and Dying,* 1991, *23,* 227–234)

Death Attitude Profile (G.Gesser et al.; 21 items; adults; designed to measure attitudes about death according to five different factors: Fear of the State of Death; Fear of the Process of Dying; Approach-Oriented Death Acceptance, where death is viewed as an entrance to a happy afterlife; Escape-Oriented Death Acceptance, where death is viewed as an escape from pain and suffering; and Neutral Acceptance, where death is viewed as a reality; 5-point response scale; *Omega: Journal of Death and Dying,* 1987–1988, *18,* 113–128)

Death Attitude Profile—Revised (P.T.Wong, G. T.Reker, & G.Gesser; 32 7-point scale items; adults; five subscales: Fear of Death/Dying (having negative thoughts and feelings

about death as a state and dying as process), Approach Acceptance (viewing death as a passage to a satisfying afterlife), Escape Acceptance (seeing death as an alternative to a painful existence), Neutral Acceptance (understanding death as a reality that is to be neither feared nor welcomed), Death Avoidance (a defensive attempt to keep thoughts of death out of one's consciousness; see Neimeyer (1994) *Death anxiety handbook: Research, instrumentation, and application* (pp. 121–148). Washington, DC: Taylor & Francis.

Death Concern Scale (L.S.Dickstein; 30 items; higher education; designed to measure individual differences in the degree to which an individual consciously confronts death and is disturbed by is implications; *Psychological Reports,* 1972, *30,* 563–571)

Death Depression Scale (D.I.Templer et al.; 17 true-false or Likert-type items, adolescents and adults; designed to assess depression associated with the topic of death; found to have six factors associated with death: Despair, Loneliness, Dread, Sadness, Depression, and Finality; *Journal of Clinical Psychology,* 1990, *46,* 834–839)

Fear of Death and Fear of Dying Scale (D.Lester; 26 items, adults; designed to measure fear of death of self, others, fear of the act of dying of self, others; uses 6-point agree-disagree scale; ASIS/HAPS, c/o Microfiche Publications, P.O. Box 2513, Grand Central Station, New York, NY 10163–3513, Doc. #00418)

Fear of Death Scale (D.Lester; 21 items; adults; designed to measure the fear of death in an individual; Educational Testing Service Test Collection Library; Rosedale and Carter Roads; Princeton, NJ 98541)

Fear of Death Scale (I.Sarnoff & S.M.Corwin; 5 items; adults; developed for use in a study to test the hypothesis that individuals who have a high degree of castration anxiety will show a greater fear of death after being exposed to sexually arousing stimuli than those with a low degree of castration anxiety; *Journal of Personality,* 1959, *27,* 274–385)

Fear of Personal Death Scale (V.Florian & S. Kravetz; 31 Likert-type items; adults; measures 31 consequences that cause people to fear death; *Journal of Personality and Social Psychology,* 1983, *44,* 600–607)

Grief Experience Inventory (C.M.Sanders et al.; 135 true-false statements; adults; validity scales are Denial, Atypical Responses, and Social Desirability; bereavement scales sample the multidimensional domain of the grief experience; Consulting Psychologists Press, Inc. 3803 East Bayshore Road, Palo Alto, CA 94303)

Grief Experience Questionnaire (T.W.Barrett & T.B.Scott; 55 items; adults; designed to compare the differences in the bereavement experiences of individuals who have had a spouse commit suicide and individuals who have had a spouse die an accidental or natural death; measures 11 dimensions: somatic reactions, general grief reactions, search for explanation, loss of social support, stigmatization, guilt, responsibility, shame, rejection, self-destructive behavior, and unique reactions; *Suicide and Life-Threatening Behavior,* 1989, *19,* 201–215)

Klug Death Acceptance Scale (L.Klug & A. Sinha; 16 true-false items; adults; measures death acceptance by assessing two components: confrontation of death and integration of death; *Omega: Journal of Death and Dying,* 1987–1988, *18,* 229–235)

Leming Fear of Death Scale (M.R.Leming; 15 items; adults; assesses eight areas of death concern: fear of dependency at death; isolation at death; pain in the dying process; indignity of dying; concern for the unknown and afterlife; fear of the fate of the body; apprehension about the finality of death and not being able to complete unfinished business; anxiety over leaving loved ones; *Omega: Journal of Death and Dying,* 1979–1980, *10,* 347–364)

Lester Attitude Toward Death Scale (D.Lester; 21 items; adults; designed to assess an individual's attitude toward death; Educational Testing Service Test Collection Library, Rosedale and Carter Roads, Princeton, NJ 98541)

Multidimensional Fear of Death Scale (J.W. Hoelter; 48 Likert-type items; eight subscale measures: Fear of Dying, Fear of the Dead, Fear of Being Destroyed, Fear for Significant Others, Fear of the Unknown, Fear of Conscious Death, Fear for Body After Death, and Fear of Premature Death; *Journal of Consulting and Clinical Psychology,* 1970, *47,* 996–999)

Multidimensional Measurement of Death Attitudes (L.D.Nelson; 15 items; higher education; designed to assess three factors of attitudes toward death: Death Avoidance, Disengagement From Death, and Death Fear; *Psychological Record,* 1978, *28,* 525–533

Omega Scale (I.M.Staik; 25 Likert-type items, adults; developed to assess the attitudes of college students toward their own deaths, burial practices, traditional versus nontraditional funeral options, and preferences as to the disposition of their bodies after death; factors include Non-Traditional Secular Funeral, Personal Funeral Arrangement, Traditional Funeral, and Preferred Disposition of the Body; an ERIC Reproduction Service; 7420 Fullerton Road, Suite 110; Springfield, VA 22153–2852; ED 292820)

Revised Death Anxiety Scale (J.A.Thorson &F. C.Powell; *Death Studies,* 1992, *16,* 507–521; also see Neimeyer, 1994, pp. 31–43)

Revised Twenty Statement Test (J.A.Durlak, W. Horn, & R.A.Kass; to the question "What does your own death mean to you?", participants give 20 open-ended responses, which are then coded into ten categories; *Omega: Journal of Death and Dying,* 1990, *21,* 301–309)

Templer/McMordie Death Anxiety Scale (W.R. McMordie; 15 items; adults; 7-point agree-disagree rating scale to measure participants' death anxiety; Educational Testing Service Test Collection Library, Rosedale and Carter Roads, Princeton, NJ 08541)

Texas Revised Inventory of Grief (T.R. Faschingbauer; 26 items; adults; Likert-type measure of grief following bereavement; Thomas R.Faschingbauer, 5015 Montrose, Houston, TX 77006)

Threat Index (S.R.Krieger, F.R.Epting, & L. M.Leitner; designed to assess the respondent's interpretation of the concepts of death and self on opposite poles of a sample of bipolar adjective constructs; *Omega: Journal of Death and Dying,* 1974, *5,* 299–310)

You and Death (E.S.Shneidman; 75 items, adults; designed to assess individuals' attitudes about death, suicide, wills, death rituals, and afterlife; *Psychology Today,* 1970, 4 (3), 67–72)

Appendix E

TEST ON FACTS ABOUT DYING, DEATH, AND BEREAVEMENT

Directions: Write "T" next to the item number if the statement is true; write "F" if the statement is false.

1. As people grow older, they become more and more afraid of dying.
2. Life span depends more on lifestyle than on heredity.
3. As far as we know, no one has lived longer than 125 years.
4. Starving people can be cured quickly by letting them eat as much as they want.
5. More Americans die of heart disease than any other condition.
6. More American teenagers die from accidents than from any other cause.
7. The highest death rate for murderers and their victims occurs among young men.
8. More women than men commit suicide.
9. The suicide rate is higher among elderly men than in any other age or sex group.
10. Thousands of people throughout the United States are in comas at any one time.
11. Abortion during the first trimester of pregnancy is legal in most states.
12. The Black Plague killed over a quarter of the population of Europe during the 14th century.
13. All religions teach that there is an afterlife.
14. The doctrine of the soul was originated by early Christians.
15. Burial customs during ancient times were motivated by hygienic and festive considerations rather than mythical or religious ideas.
16. The closer one comes to death, the more intense the fear of death becomes.
17. A human body is not property in a legal sense, so nobody owns it.
18. The laws of most states require that a corpse be embalmed before it is buried.
19. Your relatives cannot donate your organs after you die if you did not expressly authorize it yourself.
20. Near-death experiences are evidence for life after death.
21. Near-death experiences are usually pleasant.
22. Children have a very limited capacity to understand death, so it is better not to expose them to it or discuss it with them.
23. Hindus and Buddhists believe in reincarnation but not in resurrection.
24. If dying people really wanted to know what the future has in store for them, they would ask more questions.
25. The United States has one of the highest murder rates of any country in the world.
26. Individual counseling is more effective than group counseling for bereaved individuals.
27. It is better not to discuss death with the dying patient, because it just upsets them.
28. The hospice approach to treating terminally ill people emphasizes death with dignity and freedom from pain.
29. Widows generally adjust better than widowers to widowhood.
30. More American soldiers died in the Civil War than in any other war in which our country has fought.

31. In most cases the national decision to go to war is an irrational rather than a rational one.
32. A major reason why soldiers fight is so they will not let their buddies down.
33. It is impossible for human beings to become reconciled with or prepared for death.
34. Atheists and devout believers are less afraid of death than less devout or uncertain believers.
35. Because of Abraham's obedience, God promised personal immortality to him and his descendants.
36. It is considered pathological to grieve for more than a year after the death of a loved one.
37. Burial is decreasing and cremation is increasing as a method of disposing of corpses.
38. Only suicidal and mentally ill people are willing to die.
39. Whether they are adults or children, dying people are usually depressed most of the time and seldom angry.
40. Most Americans are over age 65 when they die.
41. The big three causes of death in the United States are heart disease, cancer, and accidents.
42. Most fatal accidents involve motor vehicles.
43. Time of death can be controlled to some extent by the dying person.
44. In the great majority of murders in the United States, Blacks kill Blacks and Whites kill Whites.
45. Of all funerary monuments, the most famous are the pyramids of Egypt.
46. Physicians are trained to deal with all phases of the dying process.
47. Sudden infant death syndrome (SIDS) is caused by the mother lying on the child while it is sleeping.
48. A majority of people who are sentenced for murder in the United States are Black males.
49. The 20th century is characterized by the denial of death.
50. Human beings are the only creatures that bury their dead.

Scoring Key: 1-f, 2-f, 3-t, 4-f, 5-t, 6-t, 7-t, 8-f, 9-t, 10-t, 11-t, 12-t, 13-t, 14-f, 15-f, 16-f, 17-t, 18-f, 19-f, 20-f, 21-t, 22-f, 23-t, 24-f, 25-t, 26-f, 27-f, 28-t, 29-t, 30-t, 31-f, 32-t, 33-f, 34-t, 35-f, 36-f, 37-t, 38-f, 39-f, 40-t, 41-f, 42-t, 43-t, 44-t, 45-t, 46-f, 47-f, 48-f, 49-t, 50-f

GLOSSARY

Abortion. Any procedure that results in the expulsion and death of a human fetus, usually during the first 12 weeks of pregnancy.

Acceptance. According to Elisabeth Kübler-Ross, the final stage in a person's reactions to impending death. This phase is characterized by quiet expectation and acceptance of the inevitability of death. The dying person wants to be alone with one or two loved ones and desires only freedom from pain.

Active euthanasia. As contrasted with *passive euthanasia,* using active measures to end a suffering person's life.

Acute phase (of dying). The first phase inE. M.Pattison's three-phase model of psychological reactions during the living-dying interval. Anxiety and anger, which are at a peak during this phase, are reduced by defense mechanisms and other affective and cognitive responses of the dying person.

Advance directive. Legal document containing instructions given by a person with respect to the medical care he or she wishes to receive in the event that, because of serious illness or incapacity, he or she becomes unable to make decisions.

Age-adjusted death rate. The death rate used to make comparisons of relative mortality risks across groups and over time. This rate should be viewed as a construct or an index rather than as a direct or actual measure of mortality risk. Statistically, it is a weighted average of the age-specific death rates, where the weights represent the standard (1940) population proportions by age.

Age-specific death rate. Deaths per 1,000 or 100,000 population in a specified age group, such as 1- to 4-year-olds or 5- to 9-year-olds for a given period.

Aging. The continuous process (biological, psychological, social), beginning with conception and ending with death, by which organisms mature and decline.

AIDS. Acquired immune deficiency syndrome, a disease caused by the human immunodeficiency virus (HIV) that weakens the immune system by attacking T-helper cells.

Algor mortis. Gradual decline, after death, of the body temperature to that of the external environment.

Altruistic suicide. Durkheim's label for harakiri, suttee, and other "conventional" suicides.

Alzheimer's disease. A chronic brain syndrome, usually occurring in later life, characterized by gradual deterioration of memory, disorientation, and other features of dementia.

Amniocentesis. Prenatal diagnostic procedure in which a sample of amniotic fluid is withdrawn by syringe and tested to determine if the fetus is suffering from problems such as Down syndrome or Tay-Sachs disease.

Anger. According to Elisabeth Kübler-Ross, the second stage in a person's reactions to impending death. During this stage the person partially accepts the knowledge that he or she is going to die but becomes angry at the unfairness of having to die while other people go on living.

Angina pectoris. Chest pain, with feelings of suffocation and impending death, due most often to insufficient oxygen supply to heart tissue and brought on by effort or excitement.

Angor anima. Fear of impending death, sometimes precipitated by a heart attack. *Anniversary reaction.* A condition in which an emotional reaction in a survivor associated with the death of a loved one occurs on the anniversary of the death. *Anomic suicide.* Durkheim's label for suicide that is a response to a loss of social equilibrium caused, for example, by a catastrophic event such as a stock market crash.

Anticipatory grief. Grieving or mourning that begins in the survivor before the death of a loved one.

Apnea. Cessation of breathing during sleep.

Apoplexy. See *cerebrovascular accident.*

Ars Moriendi. A written treatise, apparently prepared by German monks in the Middle Ages, that provides details on how to die in a dignified, holy manner. *Arteriosclerosis.* Abnormal hardening and thickening of the walls of the arteries in old age.

Asceticism. The practice of extreme self-denial or self-mortification for religious reasons.

Atherosclerosis. A type of arteriosclerosis resulting from an accumulation of fat deposits on the walls of arteries; the arteries thicken and lose their elasticity.

Autoimmunity theory. Theory that the immunological defenses of a person decrease with age, causing the body to "turn on itself," increasing the likelihood of an autoimmune disease such as arthritis.

Autointoxication. A state of being poisoned by toxic substances produced within the body.

Autopsy. Postmortem examination and dissection of a body after death to determine the cause of death.

Bargaining. According to Elisabeth Kübler-Ross, the third stage in a person's reactions to impending death. This stage is characterized by attempts to buy time by bargaining with the doctors, God, or with anyone or anything that the person believes can protect him or her from death.

Benign tumor. Nonmalignant but abnormal swelling or growth on any part of the body.

Bereavement. The loss of a loved one by death.

Bier. Frame or stand on which a corpse or coffin is laid before burial.

Biological death. Somatic death; the irreversible breakdown of respiration and consequent loss of oxygen utilization by a living organism.

Black Death. Form of bubonic plague that spread over Europe during the 14th century, killing an estimated one-quarter of the European population.

Brain death. Irreversible cessation of all functions of the entire brain, including the brainstem.

Breakdown theories. Theories that conceptualize aging as the result of wear and tear, stress, or exhaustion of body organs and cells.

Cadaver. Dead human or animal body usually intended for dissection.

Calaveras. As depicted in the art of Juan Posada, the Mexican Dance of Death of skeletons engaged in everyday human activities and illustrating the follies of human existence.

Capital punishment. Punishment for a crime by the death penalty.

Carcinogen. Cancer-causing substance.

Carcinoma. Malignant tumor (cancer) that spreads and often recurs after being removed.

Cardiopulmonary resuscitation (CPR). Set of procedures used to restart the heart and/or restore breathing in a person who has suffered cardiac or respiratory arrest, including artificial respiration and intubation to support or restore breathing, and chest compression, electrical stimulation, or medication to support or restore heart functioning.

Cardiovascular diseases. Diseases involving structural damage and malfunctioning of the heart and blood vessels.

Carpe diem. Latin for "seize the day"; enjoy the present, instead of placing all hope in the future.

Catalogical thinking. According to E.M. Shneidman and N.L.Farberow, a mode of thinking in certain suicidal individuals in which they feel helpless, fearful, and pessimistic about involvement in personal relationships.

Catastrophic illness. Fatal or terminal, frequently chronic, physical disorder.

Centenarian. A person who is at least 100 years old.

Cerebral arteriosclerosis. Chronic hardening and thickening of the arteries of the brain in old age.

Cerebrovascular accident (CVA). A sudden rupture *(hemorrhage)* or blockage *(thrombosis)* of a large cerebral blood vessel, leading to impairment of brain functioning *(stroke, apoplexy)*.

Chronic living-dying phase. Second phase in E.M.Pattison's three-phase descriptive model of the dying process. During this phase, anxiety is reduced and the patient asks questions about what will happen to him or her as well as family and friends after death.

Cirrhosis of the liver. Chronic disease of the liver, one of the major causes of death in the United States.

Civil death. In old English common law, refers to the loss of civil rights by a person who is still living.

Clearance rate. Rate of solving particular crimes.

Cockayne's syndrome. A childhood form of *progeria* (premature aging).

Codicil. Supplement (addition or modification) to a will.

Coding. A medical directive specifying the extent to which efforts at resuscitation should be made when the heart and lungs stop functioning.

Cohort. A group of people of the same age, class membership, or culture (e.g., all people born in 1900).

Collagen. Fibrous protein material found in the connective tissue, bones, and skin of vertebrates; becomes gelatinous when heated.

Columbarium. A vault or other aboveground structure containing recesses in the walls to house cremated remains.

Compassionate realism. When counseling the dying, refraining from unrealistic optimism as well as abject pessimism about the patient's condition.

Competency. Legal determination that a person's judgment is sound and that he or she can manage his or her own property, enter into contracts, and so on.

Conspiracy of silence. Tacit agreement on the part of family, friends, and medical personnel not to talk with a dying person about death.

Contaminated thinking. According to E.M. Shneidman and N.L.Farberow, a type of thinking, as represented by hara-kiri, that perceives suicide as a way of saving face or as a transition to a better life.

Coronary. A heart attack, resulting from obstruction of a coronary artery and usually destroying heart muscle.

Coroner. An official whose chief function is to investigate, by inquest, any death that is not clearly the result of natural causes.

Countershock. Electric shock applied to the chest to restore heartbeat.

Cremains. Bone fragments and calcium residue (ashes) remaining after cremation.

Cremation. To reduce a dead body to ashes *(cremains)* by means of heat or direct flame.

Crematory. Place or establishment for purposes of cremation.

Crib death. Condition in which an infant, for unclear reasons, suddenly stops breathing, also known as *sudden infant death syndrome (SIDS)*.

Cross-linkage. Inadvertent coupling of large intracellular and extracellular molecules, causing connective tissue to stiffen.

Cross-sectional study. Comparisons of the physical and psychological characteristics of people of different chronological ages.

Crude death rate. Total deaths per 1,000 or 100,000 population for a specified period. The crude death rate represents the average chance of dying during a specified period for persons in the entire population.

Cryonics. Deep-freezing of human bodies at death for preservation and possible revival in the future.

Crypt. Subterranean chamber or vault used as a burial place; a concrete chamber for a casket.

CVA. See *cerebrovascular accident*.

Dakhma (tower of silence). Circular platform, typically 30 feet high, on which the Parsee people of India leave their dead to be devoured by vultures.

Danse macabre (dance of death). A symbolic dance in which Death, represented as a skeleton, leads people or skeletons to their graves; common representation in art, especially during the Middle Ages.

Death. Total and permanent cessation of all vital functions of an organism.

Death angel. The angel Azrael.

Death anxiety. Learning emotional response of extreme fear in response to death-related stimuli.

Death awareness movement. Increased interest in the previously taboo topic of death during the 1960s through the mid-1970s.

Death bell (death knell, passing bell). Bell announcing a death.

Death benefit. Amount of money to be paid under the terms of an insurance policy to a designated beneficiary upon the death of the insured.

Death certificate. Certificate signed by a physician giving identifying information (age, sex, etc.) and the time, place, and cause of death of a person.

Death day. Day or anniversary of the death of a person.

Death duty. An inheritance tax (British).

Death instinct. Suicidal tendency or predisposition toward self-destruction. According to psychoanalysis, the instinct to aggress or destroy *(Thanatos),* which opposes the instinct of survival and creation (Eros).

Death mask. A cast taken of a deceased person's face.

Death of the other. According to Philippe Aries, the prevailing attitude toward death during the early 19th century, in which death was viewed as a beautiful event leading to a happy reunion in paradise of disembodied spirits.

Death of the self. According to Philippe Aries, the prevailing attitude toward death during the late Middle Ages when individuality was minimized. The dead were believed to be judged at the moment of death, and hence that moment became especially feared.

Death qualified jury. In U.S. law, a trial jury pronounced fit to decide a case involving the death penalty.

Death rate. Number of deaths per 1,000 or 100,000 population during a particular period of time, usually a year.

Death rattle. A rattling or gurgling sound produced by air passing through mucus in the lungs and air passages of a dying person.

Death system. R.J.Kastenbaum and R. Aisenberg's term for a conglomerate of rituals and beliefs by means of which a society attempts to cope with death and come to terms with it.

Death tax. A levy imposed on the estate left by a decedent or on the inheritance of a beneficiary.

Death's head. A human skull, a symbol of mortality.

Death warrant. Official order authorizing the execution of a death sentence.

Death watch. Vigil beside a dying, dead, or condemned person.

Death wish. Suicidal desire, manifested by passivity, withdrawal, and absorption in thoughts of death. More generally, a desire for the death of oneself or another person.

Defense mechanisms. In psychodynamic theory, psychological techniques that defend the ego against anxiety, guilt, and loss of self-esteem resulting from awareness of certain impulses or realities.

Delusion. A false belief, characteristic of paranoid disorder. Delusions of grandeur, persecution, and reference are common in these psychotic conditions.

Demography. The science of vital and social statistics (births, marriages, deaths, diseases, etc.) of populations.

Denial. According to Elisabeth Kübler-Ross, the first stage in a person's reactions to impending death. During this stage the person refuses to accept the fact of death and seeks reassurance from other people.

Denial of death. State of mind in which people are intellectually aware of death but act as if it could not happen to them or their loved ones.

Depersonalization. Condition in which the reality of oneself or the environment is no longer perceived.

Depression. According to Elisabeth Kübler-Ross, the fourth stage in a person's reactions to impending death. The person fully accepts the fact of death but becomes depressed by all that he or she has suffered and all that will be lost in dying.

Desolation-effects hypothesis. Epstein's hypothesis that both the event of widowhood and the circumstances stemming from it have deleterious effects in terms of grief, feelings of hopelessness, new worries and responsibilities, and changes in the diet, work routine, and financial situation of the bereaved.

Diastole. Period of dilation of the heart ventricles, occurring between the first and second heart sounds.

Dies Irae (day of wrath). A work written in the 13th century by a Franciscan monk; designates the Day of Judgment.

Differential association (principle of). Theory that criminal and deviant behavior is learned through close and frequent association with behavior patterns, norms, and values manifested by criminals and other social deviants.

Do-not-resuscitate order (DNR). A written order from a physician stating that health care providers should not attempt CPR with a patient in case of cardiac or respiratory arrest.

Doctrine of assurance. Early Protestant doctrine, related to the doctrine of predestination, that one can never be certain of salvation, regardless of his or her "good works."

Double-effect principle. Principle, espoused by the Catholic Church, according to which an action that has the primary effect of relieving human suffering may be justified even when it shortens human life.

Double indemnity. Clause in a life- or accident-insurance policy providing for payment of twice the face value of a policy when death is accidental.

Durable power of attorney. Document ascribing to a surrogate the legal authority to make decisions concerning medical treatment of a patient who is incompetent to make those decisions.

Dying trajectory. The rate of decline in functioning from health to death; can be fast or slow, with many starts and stops, depending on the nature of the disorder, the patient's age and lifestyle, the kinds of medical treatment received, and various psychosocial factors.

Egoistic suicide. Emile Durkheim's term for suicide committed by an individual who, through failure to become socially integrated, lacks social supports to help him or her through a crisis.

Elegy. Funeral song or lament for the dead.

Embalming. Treatment of a dead body with chemicals, drugs, or balsams in order to preserve it.

Embolism. Obstruction of a blood vessel by an air bubble or other abnormal particle *(thrombosis)*.

Endocannibalism. Primitive rite in which the deceased is consumed by members of the family.

Endorphins. Opiate substances produced by the brain and pituitary gland in response to stimulation or stress.

Entombment. Opening the crypt, placing the casket inside, and then closing the crypt.

Epic of Gilgamesh. A mythological tale from ancient Babylonian times that deals with the adventures of a Sumerian king who is searching for the secret of eternal life.

Epicurean philosophy. Philosophical doctrine espoused by Epicurus, who maintained that the highest good is pleasure, interpreted as freedom from disturbance or pain.

Epitaph. Commemorative inscription on a tomb or mortuary monument; also a brief poem or writing praising a deceased person.

Eschatology. Theological term for any system of doctrines concerning last, or final, matters, such as death, the Last Judgment, and so on.

Escheat. Reverting of property of a decedent to the state when there are no legally qualified heirs.

Estate taxes. Taxes imposed on a decedent's property, assessed on the gross estate before distribution to the heirs.

Eucharist. Sacrament of Holy Communion; the Lord's Supper.

Euthanasia (*"good death"* or *"mercy killing"*). Either active or passive contribution to the death of a human being or animal suffering from a terminal illness or injury. The patient may either give *(voluntary active euthanasia)* or not give (*involuntary* or *nonvoluntary active euthanasia*) his or her fully informed consent to have medical measures (e.g., a lethal injection) taken to end his or her life.

Executor (execu trix). Person named in a will by the decedent to carry out the provisions of the will.

Exhumation. Disinterment; removal of a corpse from its place of burial.

Existentialism. Philosophical school that emphasizes the importance of the individual as being responsible for his or her own choices and that stresses efforts to find meaning in a purposeless, irrational universe.

Extreme unction. Roman Catholic ritual, now called *anointing of the sick,* in which a dying person's eyes, nose, mouth, ears, hands, and feet are anointed with sacred olive oil while prayers are said for the person's health.

Fatalistic suicide. Emile Durkheim's term for suicide committed by an individual who has been overcontrolled or held to strict rules or oppressed by others and who, acting out of a sense of despair over a lack of opportunity to fulfill his needs and potential, decides to kill himself or herself.

First-degree murder (murder one). Murder committed with malice aforethought, characterized by deliberation or premeditation or occurring during the commission of a felony, such as robbery or arson.

Free radicals. Highly reactive molecules or parts of molecules that may connect to and damage other molecules; thought to play a role in the process of aging.

Geriatrics. Branch of medicine dealing with the prevention and treatment of health problems of the elderly.

Gerontology. A branch of knowledge (science) concerned with the characteristics and problems of the aged.

Gift tax. Tax imposed on the transfer of money or property from one living person to another by gift, payable by the donor.

Gompertz law. A statistical concept, proposed by British actuary Benjamin Gompertz in 1825, which holds that mortality rates increase exponentially with age.

Grave goods. Food, weapons, valuables, and other materials placed in the grave and buried with the deceased.

Grave liner (vault). A concrete or metal container designed to hold a casket or urn in such a way that the ground around it does not settle.

Grief. Severe mental distress resulting from loss or affliction; acute sorrow or painful regret.

Grief group. A group consisting of a small number of persons who share the common trauma of having lost a loved one and who, under the direction of a professional counselor, talk about their feelings and how to survive bereavement.

Grim Reaper. Representation of death (in art, etc.) in which a skeleton is depicted as carrying a scythe.

Guided imagery. Therapeutic process in which patients relive the loss of a loved one by mentally reexperiencing the death and learning to say goodbye.

Hades. The Greek god of the dead; also the underworld inhabited by departed souls. The Revised Version of the New Testament refers to the abode or state of the dead as Hades.

Hallucination. Perception of an object or situation in the absence of an external stimulus.

Hara-kiri (seppuku). Ceremonial suicide by ripping open the abdomen with a dagger or knife; formerly practiced by members of the Japanese warrior class (samurai) when disgraced or sentenced to death.

Hel. In Scandinavian mythology, the goddess ruling Niflheim, the home of the dead.

Hemorrhage. Heavy discharge of blood from a blood vessel; uncontrollable bleeding. See also *cerebrovascular accident*.

HIV. Human immunodeficiency virus, exposure to which can lead to *acquired immune deficiency syndrome* (AIDS) or *AIDS-related complex (ARC),* an intermediate stage in which symptoms are represented and immunosuppression detectable but in which the intensity of the illness is more moderate than AIDS.

Holographic will. An unwitnessed will prepared in the testator's (legator's) own handwriting; recognized as valid in some states.

Homeostatic imbalance theory. Theory that aging is an accumulation of homeostatic errors or faults and a consequent loss of the ability to maintain a steady homeostatic internal balance.

Homicide. The killing of one human being by another, whether intentional or not. *Hormonal theories.* A group of theories that aging is caused by a decline in the secretions of one or more hormones by the thyroid gland, pituitary gland, hypothalamus, or some other glandular structure.

Hospice care. Program for delivering palliative care and support to persons who are in the final stages of terminal illness, as well as support to the patient's family when the patient is dying and afterward.

Hutchinson-Gilford syndrome. See *progeria*.

Hypertension. Markedly elevated diastolic and systolic blood pressure.

Hypertensive heart disease. Hypertension associated with a cardiac problem. *Hypertensive heart and renal disease.* Hypertension associated with both cardiac and kidney problems.

Iconography. Representation of objects, events, or persons by means of visual symbols.

Idealization of the deceased. When survivors remember only good things about a deceased person. Also called *sanctification of the deceased*.

Immortality. Unending life; not subject to death.

Immunological theory. Theory that biological aging is due to deterioration of the immune system, in which its level of protection against foreign substances and mutant cells declines and the chances of cellular dysfunction and disease increase.

Incompetency. Legal decision that a person is suffering from a mental disorder, causing a defect of judgment such that the person is unable to manage his or her own property, enter in to contracts, or take care of other affairs.

Infant mortality. Death during the first year after birth.

Inheritance tax. Tax levied on an heir, the rate being a percentage of the value of the property inherited by the heir.

Inhumation. Interment; burial in the earth.

Initial shock. The first stage of G.Gorer's three-stage conception of mourning. It lasts only a few days, and is characterized by a loss of self-control, reduced energy, lack of motivation, bewilderment, disorientation, and a loss of perspective by the mourner.

Inquest. An investigation made by a coroner into the cause of a death.

Intense grief. The second state of G.Gorer's three-stage conception of mourning. It often lasts for several months and is characterized by a loss of self-control, reduced energy, lack of motivation, bewilderment, disorientation, and a loss of perspective by the mourner.

Interment. Burial of a corpse in a grave or tomb.

Intestate. To die without leaving a will.

Intubation. Life-sustaining procedure in which a tube is inserted through the mouth or nose into the trachea (windpipe) to create and maintain an open airway to assist breathing.

Involuntary commitment. Legal process by which a person is committed to a mental hospital against his or her will.

Involuntary manslaughter. Nonwillful killing of another human being without malice aforethought, as during a misdemeanor (e.g., reckless driving).

Ischemic heart disease. Disease caused by deficiency of blood supply to the heart, resulting from constriction or blockage of an artery and consequent reduction of blood flow to the heart.

Irreversibility (of death). Understanding that death is final.

Jihad. A holy war undertaken by Muslims as a sacred duty.

Justifiable homicide. Killing of a felon by a law enforcement officer in the line of duty or by a private citizen while a felony is being committed.

Ka. In ancient Egyptian religion, a spirit believed to lie within the individual and to survive the body after death.

Karma. In Hinduism or Buddhism, actions leading to inevitable good or bad results for the individual, either in the person's present life or in a reincarnation.

Last Judgment. The final trial of all people, both living and dead, at the end of the world.

Learned helplessness. Psychological state in which the individual feels that external events are uncontrollable, and consequently that one is helpless in the face of them.

Legal death (civil death). When a person is adjudged dead by a legal authority and his or her possessions are distributed accordingly.

Levirate. Custom of marriage between a man and his brother's widow, required by the Hebrews in Biblical times under certain circumstances, such as when the deceased was childless.

Libido. Psychic energy of the sexual drive.

Life expectancy. The average life span of people born in a certain year; probable length of life of an individual.

Life review. Reminiscence, or a split-second review of one's life when in serious danger.

Life span. Longevity of an individual or longest period of life of a member of a given species.

Limbo. In Roman Catholic theology, a region on the border of hell or heaven that serves as the abode after death of unbaptized infants and righteous people who died before the coming of Christ.

Lingering trajectory. B.G.Glaser and A.L. Strauss's term for dying over a long period of time, in which the patient seems to "drift out of the world, sometimes almost like imperceptibly melting snowflakes."

Lipofuscin (age pigments). A pigmented granule containing lipids, carbohydrates, and protein. The number of lipofuscin granules in various body cells increases with aging.

Living-dying interval. In E.M.Pattison's three-stage theory of dying, the interval between the initial death crisis and the actual time of death.

Living will. A legal document that permits persons to specify what medical treatments they wish to receive at the end of their lives. This document, which in some states may be called a *medical directive, health care declaration,* or *directive to physicians,* instructs physicians, relatives, or other people to refrain from using extraordinary life-support measures to prolong one's life in case of a terminal illness.

Livor mortis. Purplish-red discoloration of the skin occurring after death.
Longevity. Length of life; long duration of life.
Lymphoma. Cancer of the lymph nodes.
Mahabharata. An ancient Hindu poem in which Mara (or Mrtya), a beautiful, dark-eyed woman, came from within Brahma, creator of the world, and was ordered by him to kill all the world's creatures. Only by the intercession of the god Shiva were the deaths not made permanent, the slain individuals being reincarnated as other forms of life.
Major stroke. Heart failure resulting from blockage of a large cerebral blood vessel. See also *cerebrovascular accident*.
Manslaughter. Illegally killing another human being without malice aforethought.
Mass murder. Murder of several people, either simultaneously or individually over a period of time *(serial murder)*.
Mausoleum. Building or wall above ground for housing the bodies of many individuals, usually members of the same family.
Medicaid. Comprehensive health care program, in which funds for emergency and long-term care are made available to the poor.
Medical examiner. Physician appointed by a county or municipality to investigate, by inspection of the corpse, autopsy, and so on, the causes and circumstances of death in individuals presumed to have died from unnatural causes.
Medical power of attorney. Document that permits a trusted friend or member of a person's family to make medical decisions for the person in case he or she becomes unable to communicate.
Medicare. National health insurance program, primarily for acute care of persons 65 and over who are covered by Social Security.
Memento mori ("Remember that you must die"). Any object, such as a human skull, that reminds one of death or mortality.
Memorial. Something designed to preserve the memory of a person or an event, such as a monument or a holiday (e.g. Memorial Day).
Memorial society. An organization dedicated to the practice of simple, dignified, and economical funeral arrangements.
Mercy killing. See eu thanasia.
Metastatic tumor. Cancerous cells transferred to another part of the body by way of the blood or lymphatic vessels or membranous surfaces.
Metempsychosis. Ancient doctrine (Hinduism, Orphism, Pythagorean) of the passage (transmigration) of the soul after death from a human or animal body to some other human or animal body.
Mitochondria. Structures (organelles) in the cytoplasm of the cells that function in energy production.
Morbidity. The percentage of deaths resulting from a specific disease.
Mortality. Being subject to death.
Mortality rate. Number of people per 1,000 or 100,000 in a specified population dying within a fixed period of time, usually 1 year.
Mortality table. An actuarial table showing the percentage of people in a specified population dying at any given age.
Mortician. A funeral director.

Mortuary cannibalism. Eating the corpse of a deceased person, in whole or in part. See *endocannibalism.*

Mourning. Manifestation of sorrow or lamentation for the death of a person; usually indicated by wearing black clothes or a black armband, hanging flags at half mast, and other cultural rituals. The period during which people mourn.

Mummification. Process of embalming and drying by which a dead body is made into a mummy.

Mummification of the deceased. Everything that the deceased owned is kept in order, his or her clothes are laid out every day, and the bereaved individual continues the routine of living just as if the deceased were still alive.

Murder. Killing another person with malice aforethought and with (a) deliberation, premeditation, or while committing another serious crime (*first-degree murder,* or *murder one*), or (b) with intent but without deliberation of premeditation (*second-degree murder* or *murder two*).

Mutual will. Special type of will containing reciprocal provisions, as when a husband and wife decide to leave everything to each other without restrictions.

Myocardial infarction. Damage to heart muscle deprived of oxygen, usually due to blockage of a coronary artery, accompanied by chest pain radiating down one or both arms.

Near-death experience (NDE). Paranormal experiences occurring when an individual almost dies; may include sensations of leaving the body *(out-of-body experiences),* meeting with dead relatives and supernatural beings, feelings of peacefulness, and so on.

Necrolatry. Worship of the dead.

Necrology. List of persons who have died within a certain time period.

Necromancy. Divination (foretelling future) through alleged communication with the dead; magic or witchcraft; the black arts.

Necromimesis. Pathological state in which a person believes himself or herself to be dead.

Necrophilia. Love of the dead; an erotic attraction to corpses and other dead things.

Necrophobia (thanaphobia). An abnormal fear of death.

Necropolis ("city of the dead"). A large historic or prehistoric burial ground in an ancient city.

Necropsy. See *autopsy*.

Necrosis. Death of a certain part of animal or plant tissue.

Neonatal death. Death of an infant aged 0–27 days.

Nirvana (nibbana). In Buddhism, escape from the cycle of personal reincarnations, and the associated suffering, as a result of the dissolution of delusion, passion, and hatred in the individual.

Nonfunctionality (of death). Understanding that all life functions cease at death.

Nuncupative will. A will made by an oral (unwritten) declaration of the testator; valid only under certain conditions.

Obituary. Notice, as in a newspaper, of the death of a person, often including a biographical sketch.

Obolus. In ancient Greece, a small coin placed in the mouth of the deceased to pay Charon, the boatman on the river (Styx) to Hades.

Obsessional review. Frequent, periodic review by the bereaved of the events leading up to and immediately following the death of the deceased.

Open communication. Nondefensive communication about death or other matters of concern to a dying person.

Orphism. Religious/philosophical school centered around the cult of Dionysus or Bacchus; presumably founded by Orpheus, a poet and musician, son of Calliope and Apollo, in Greek mythology.

Os resectum. Severed finger joint of the deceased, buried after cremation of the body in ancient Roman funerals.

Ossuary. A place or receptacle for the bones of the dead.

Out-of-body experience. Hallucinatory experience of leaving the body that occurs in certain drugged states and as a part of a near-death experience. It appears to the individual as if he were floating above his body and observing it.

Overidentification with the deceased. When a survivor identifies excessively with a deceased person, as, for example, when a widow begins to talk and act like her dead husband.

Paddle doll. A doll, shaped from thin strips of board into small canoe paddles, placed in Egyptian tombs to act as a servant or friend to the deceased in the spirit world. *Paleological thinking.* According to E.M. Shneidman and N.L.Farberow, a type of thinking in certain suicidal individuals in which the person responds with the act of suicide to accusatory delusions or hallucinations involving shame and that promise redemption only through death.

Palliative care. Comprehensive treatment approach to serious illness that attempts to achieve the best quality of life available to the patient by relieving suffering, controlling pain and symptoms, and enabling the patient to achieve maximum functional capacity. Sometimes referred to as *comfort care* or *hospice-type care,* palliative care focuses on the physical, psychological, spiritual, and existential needs of the patient, while respecting his or her culture, beliefs, and values.

Parasympathetic death. Overactivity of the parasympathetic nervous system, resulting in an extreme reduction in heart action and a fatal lowering of blood pressure; may occur when a sick or despairing person feels so helpless or desperate that he or she simply gives up and quits trying to fight or live.

Passive euthanasia. As contrasted with *active euthanasia,* simply letting a terminally ill person die without applying lifesaving measures of any kind.

Pathological grief. Grief in which the typical symptoms persist in intensified form or become noteworthy by their complete absence.

Perinatal death. Death of a child during or just before or after birth. *Physician-assisted suicide.* Suicidal situation in which a physician writes a prescription and counsels the victim on how to take the medication to end his or her life.

Plaque. Accumulation of fatty tissue and calcified material in the cerebral blood vessels of old people, resulting in clogged arteries and interference with blood circulation.

Political murder. Assassination of a political or religious leader; war, genocide, and other killings carried out for political purposes.

Postneonatal death. Death of an infant aged 28 days–1 year.

Posttraumatic stress disorder (PTSD). Persisting anxiety reaction precipitated by a severe stressful experience, such as a disaster or military combat. PTSD is characterized by a reliving of the stressful event and the avoidance of stimuli associated with it. Other symptoms include feelings of estrangement, recurring dreams and nightmares, and a tendency to be easily startled.

Postvention. Therapeutic intervention for the bereaved, especially persons who have experienced very intense or prolonged grief.

Predestination. Foreordaining by God of whatever comes to pass, such as foreordaining that certain souls will be saved and others not.

Prefunerary rites. Ritualistic preparations for death and funerals, particularly characteristic of former times, as described, for example, in the Egyptian and Tibetan Books of the Dead and the *Ars Moriendi*.

Preneed funeral arrangements. The prearranging and prefunding of a funeral.

Presumptive death. Refers to a situation in which a person has been physically absent from his or her place of residence and out of contact with family and acquaintances for some unexplained reason for several years (usually 7).

Primary aging. Refers to a genetically regulated set of biological processes that occur over time and result in gradual deterioration of the organism.

Probate. Procedure followed by a probate court for determining the authenticity of a will.

Progeria. A very rare disorder that mimics premature aging. A progeric child typically begins to look old as early as age 4. Also known as *Hutchinson-Gilford Syndrome*.

Prospective study. Research investigation that follows up, over time, people having different characteristics or lifestyles to determine which ones develop a particular condition or disorder.

Psychological autopsy. Postmortem analysis of the psychosocial aspects of a person's death.

Psychological death. When the mind (seat of conscious experiencing and knowledge) ceases to function, even though the individual is biologically alive.

Purgatory. According to Roman Catholicism and certain other religions, a place in which the souls of those who died penitent are purified from venial sins; middle ground between Heaven and Hell.

Pyre. Pile of wood or other combustible material for burning a dead body, as in Hindu funeral rites.

Quick dying trajectory. A.L.Strauss and B. G.Glaser's term for patients who die quickly, an event that may or may not have been expected by the hospital staff.

Rational suicide. Suicidal situation in which the person is not mentally disturbed and understands what he or she is doing.

Regression. Repetition of behavior more characteristic of an earlier stage of development.

Reincarnation (samsara). Belief that when the body dies the soul comes back to earth in another body or form.

Remote death. According to Philippe Aries, the prevalent attitude toward death during the 17th and 18th centuries, in which death was perceived as a sorrowful but remote event.

Resurrection. Act of coming back to life, rising from the dead.

Retrospective study. Comparison of the incidence of a disorder or other condition in two or more groups of people with different backgrounds, behaviors, or other characteristics.

Rigor mortis. Stiffening of the muscles of the body after death.

Sarcoma. Cancer of the bone.

Sarcophagus. A stone coffin, usually bearing inscriptions, sculpture, and so on.

Second-degree murder (murder two). Murder by intent but without deliberation or premeditation.

Secondary aging. Decrements in bodily structure and function produced by disease, trauma, and other environmental events that are not directly related to heredity.

Senescence. The state of being old or the process of growing old.

Seppuku. See *hara-kiri*.

Sepulchral iconography. Art of inscribing and sculpting an event in the life of the deceased, such as the deceased carrying out some action for the last time and the grieving of the survivors, as well as other artistic renditions on a stone monument or sepulcher.

Sexton. Church custodian assigned the job of maintaining the buildings and grounds of the church.

Sheol. In Hebrew theology, the abode of the dead or of departed spirits.

Shiva ("the Destroyer"). Third member of the Hindu Trimurti, also including Brahma (the "Creator") and Vishnu (the "Preserver").

Shivah. In traditional Judaism, a period of 7 days after the funeral for mourning the death of a deceased parent, sibling, child, or spouse.

Small stroke. Blockage of a small blood vessel in the brain.

Social death. When others act toward a person as if he or she were dead even though the person is biologically alive.

Soul. The spiritual part, or disembodied spirit, of a human being, distinguished from the physical part; the moral aspect that survives death and is subject to happiness or misery in a life to come.

Spiritual death. Loss or absence of spiritual life.

Stoic philosophy. Philosophical school founded by Zeno, who taught that people should be free from passion, unmoved by grief or joy, and submit without complaint to unavoidable necessity.

Stress theory. Theory of aging (Hans Selye) that holds that every person inherits a fixed amount of adaptation energy at birth and that the rate of aging varies directly with how liberally this energy is expended by the individual and the stresses to which he or she is subjected.

Stroke. Condition with sudden onset caused by an acute vascular lesion of the brain, such as a hemorrhage or an embolism. Also called *cerebrovascular accident,* or *CVA*.

Sudden infant death syndrome (SIDS). Death caused by the sudden cessation of breathing in a seemingly healthy infant, almost always during sleep; sometimes traceable to chronic oxygen deficiency. Also known as *crib death*.

Suicide cluster. When a number of suicides occur close together in time and/or place.

Suttee (sati). Old Hindu custom in which a devoted wife is voluntarily cremated on the funeral pyre of her husband.

Sympathetic death. Death resulting from extreme stress and fear, as in voodoo; extreme shock leads to excessive activity of the sympathetic nervous system and consequently dramatic increases in heart rate and blood pressure.

Systole. Period of contraction of the ventricles of the heart.

Tahorah. Ritualistic cleansing of a dead body in Orthodox Judaism; a burial society washes the body in a special purification process.

Tame death. According to Philippe Aries, the predominant attitude toward death during the Middle Ages, when death was accepted and expected as a terrible but necessary human misfortune.

Term life insurance. Insurance policy providing coverage for a limited period of time. The value of the policy is paid only if the insured person dies within the term, nothing being paid on expiration of the policy.

Terminal drop. Decline in mental functions (intelligence, memory, cognitive organization, sensorimotor abilities, personality) during the last few months of life; observed in many elderly people.

Testamentary capacity. The legally determined competency of a person to make a will

Testator. A person who makes out a will.

Thanaphobia. An unreasonable fear or dread of dying and death.

Thanatology. A branch of knowledge concerned with the study of dying and death.

Thanatomimesis. When a person appears to be dead but is actually alive, as in catalepsy and certain other conditions.

Thanatos. Ancient Greek personification of death; in psychoanalysis, the death instinct, as expressed in extreme aggression toward the self or other people.

Thrombosis. See *Embolism.*

Transmigration of the soul (metempsychosis). Belief that when the body dies the soul passes into another human or animal body.

Transubstantiation. Changing one substance into another, as the bread and wine into the body and blood of Christ in the Eucharist.

Triumph of death. Theme in art, especially during the Middle Ages, depicting Death as triumphant over all, regardless of one's situation or station in life.

Trust. A legal, fiduciary relationship in which one person (the trustee) holds the title to property (the trust estate or trust property) for the benefit of another (the beneficiary).

Type-A personality. Personality pattern characterized by a combination of behaviors, including aggressiveness, competitiveness, hostility, quick actions, and constant striving; associated with a high incidence of coronary heart disease.

Type-B personality. Personality pattern characterized by a relaxed, easygoing, patient, noncompetitive lifestyle; associated with a low incidence of coronary heart disease.

Ultrasound. A technique using sounds to produce an image of a developing organism in the prenatal environment.

Universality (of death). Understanding that all living things die.

Universal life insurance. Flexible life insurance policy that permits either increasing or decreasing coverage and associated premiums.

Urn. A container for holding the cremated remains of a body.

Vanity theme. Theme in art, especially during the Middle Ages, in which a beautiful young person is simultaneously depicted as old, and decayed.

Variable life insurance. Life insurance policy on which the premiums or minimum coverage remain fixed, but which permits switching from money markets to different kinds of stocks.

Vital signs. Pulse rate, body temperature, blood pressure, and respiration rate.

Vital statistics. Statistics concerning human life, the conditions affecting it, and the maintenance of the population (e.g., births, marriages, divorces, and deaths) during a specified time period.

Will. A legal declaration of a person's desires concerning the disposition of his or her property after death; usually written and signed by the person (testator) and witnessed (attested to) by two or more witnesses.

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AUTHOR INDEX

SUBJECT INDEX