

Deficiencies in Suicide Training in Primary Care Specialties: A Survey of Training Directors

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Objective: *A high percentage of suicide victims have seen a primary care physician in the months before committing suicide. Thus, primary care physicians may play an important role in suicide prevention.*

Method: *The authors mailed a survey to directors of training programs in family practice, internal medicine, and pediatrics, and 50.5% responded. Data obtained were analyzed with WebStat.*

Results: *Training directors reported deficiencies in training in suicide and depression. Notably, less than half of the internal medicine and pediatrics training directors who replied reported that teaching about suicide was adequate. The majority of them indicated a need for standardized curricular materials on suicide and depression.*

Conclusions: *Experts could provide standardized curricula to primary care residencies in the recognition and management of suicide and depression. More robust training about these vital mental health concerns in primary care could reduce morbidity and mortality.*

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A large percentage of individuals who commit suicide have received medical care around the time of their death (1). For example, data from 100 suicide victims in England indicated that 40 of them had seen their family physician during the week preceding their deaths and 59 had done so in the previous month (2). A recent review (3) found that on average, 45% of suicide victims had contact with their primary care physician within 1 month of death, while only 20% had contact with mental health services within that month.

Furthermore, studies report that up to 80% of individuals with depressive or anxiety disorders who see a primary care physician obtain suboptimal care for their psychiatric disorder. This is primarily due to the underrecognition and undertreatment of these disorders (4–7). Also, a study of internal medicine residents' ability to diagnose and characterize major depression has revealed low diagnostic accuracy and lack of skill in perceiving the severity of illness (8). Hence, the suggestion that inadequate physician training may be a contributor to the underrecognition and undertreatment of depression, which, in turn, may affect patients' potential to commit suicide (9, 10).

There is a great need for ongoing mental health training for primary care physicians (11–13). Studies in Great Britain and the United States have revealed that primary care residency trainees, junior general physicians, and clinical psychology trainees report receiving little training or reading assignments on the assessment and management of suicidal behavior (14–17). Many of those surveyed believed that their training had not prepared them adequately to identify patients who were imminently suicidal. Respondents overwhelmingly endorsed the need for more training in evaluating and treating suicidal patients (18). Moreover, a survey of U.S. training directors from multiple specialties found that more than half of them believed that their res-

idents should receive further training in emergency psychiatric evaluation skills. In fact, 75% of pertinent programs provided no readings on this topic, and 70% did not offer relevant lectures or seminars (16). This 1990 survey appears to be the only such assessment of training directors prior to our study.

We were specifically interested in the training of primary care physicians. Therefore, we surveyed training directors from three specialties of primary care providers to determine their views on the adequacy of teaching as it relates to suicide and depression. The directors were also asked to assess their level of confidence in the relevant clinical management skills acquired by residents.

Method

We used the Accreditation Council for Graduate Medical Education (ACGME) Directory of Residency Training Programs (2000) to generate a mailing list of all program directors in accredited residencies in family practice, internal medicine, and pediatrics specialties in the United States. This list allowed us to canvas as varied a group as possible involved in training programs in academic medical centers, medical school-affiliated hospital programs, and community-based residency programs. We included programs of all sizes, given that residencies are held to a uniform standard irrespective of the available training resources.

Survey Administration and Content

We mailed 1,111 copies of a questionnaire containing seven items to all directors of these three types of primary care provider residency programs (available on request). The questionnaire obtains their assessments of specific aspects of their departments' training programs in recognizing and treating suicide and depression.

The first two items of the questionnaire required an assessment of the adequacy of didactic teaching in the recognition and treatment of suicide and depression. Item 3 addressed the departmental origin of the teaching staff, and item 4 required indication of the residency year when such training was implemented. Item 5, a compound question, probed issues relating to actual clinical skills: "How confident are you that your residents are reasonably able to a) recognize depression in their patients, b) treat depression in their patients, and c) recognize which depressed patients are most at risk for suicide?" Item 6 inquired about forms of training, and item 7 about interest in a standardized curriculum on training on suicide and depression.

Data Analysis

The questionnaire was numerically coded and all data were entered into a Microsoft Excel® worksheet for tabulation. Because the frequency distributions for items 1, 2 and 5 were markedly skewed, with clusters falling at or near one end of the 4-point distribution, it was decided to treat the data for these variables as categorical rather than continuous. Also, because the number of responses in the extreme categories was relatively small, each distribution was dichotomized, using categories of "none or minimal" and "adequate or thorough" for items 1 and 2 and categories of "very or reasonably" and "minimally or not at all" for items 5a through 5c.

Data were then entered into WebStat, an Internet-based program for statistical computation that uses Java and the World Wide Web. Frequency of responses was compared across specialty by means of 3×2 chi-square tests of independence. Pairwise comparisons were then analyzed by 2×2 chi-square tests. For the latter analyses, both Pearson's chi-square value and Yates's correction for continuity were obtained; however, in all analyses, distributions of expected frequencies were sufficient not to require Yates's correction.

Results

There were 561 fully completed responses to our 1,111 inquiries, which represents a response rate of 50.5%.

Pediatrics directors (35%) and internal medicine directors (47%) were significantly less satisfied with the thoroughness of suicide-related didactic teaching than family practice directors (81%). Similar results were apparent when comparing the directors' perceptions of the adequacy of depression-related material taught in their programs (36%, 74%, and 96%, respectively) (Table 1). The directors in internal medicine were also considerably more dissatisfied with the coverage of suicide-related issues than they were with the coverage of depression-related information (53% versus 26%). Furthermore, a larger proportion of pediatrics directors, compared with directors in the other two specialties, were dissatisfied with the thoroughness of didactic content covering both suicide and depression (Table 1).

Confidence in the Recognition and Treatment of Suicide and Depression

Seventy-three percent of pediatrics directors were not confident in their residents' abilities to treat depression, and 30% were not confident in their ability to recognize suicide risk (Table 2). Family practice directors were sig-

nificantly more confident than both internal medicine and pediatrics directors in their residents' abilities to a) recognize depression (98%, 88%, and 80%, respectively); b) treat depression (97%, 77%, and 27%, respectively); and c) recognize suicide risk (91%, 68%, and 70%, respectively). Internal medicine directors were significantly more confident than pediatrics directors in their residents' abilities to recognize and treat depression (Table 2).

Implementation of Training on Suicide and Depression

Clinical training on suicide and depression in the three specialties is implemented throughout all 3 years of residency. Seminars and conferences were identified as the predominant teaching formats used. While the faculty implementing the suicide and depression programs in the internal medicine and pediatrics departments originated primarily from the psychiatry department, 85% and 76%, respectively, the program faculty in family practice originated primarily from the home department.

Question 7 provided information about training direc-

tors' need for a standardized curriculum that provided 1 to 2 hours of training on the recognition and treatment of suicidal and depressed patients. Eighty-three percent of family practice directors answered affirmatively to that query, as did over 90% of internal medicine and pediatrics directors.

Discussion

The low response rate should be put in the context of other surveys of physicians relating to this subject. Though the relatively low rate of response may have affected the results if there was a response bias, less than 50% of pediatrics and internal medicine training directors who replied expressed confidence that the didactic teaching on suicide in their programs was adequate. Thus, despite the ACGME's mandate for didactic sessions on the clinical recognition and treatment of suicide in adolescents, and the fact that it is the third leading cause of death among persons 15 to 24 years of age, the directors express a lack of confidence in their residents' abilities to recognize pa-

TABLE 1. Number and Percent of Primary Care Training Directors, by Specialty, Who Consider Suicide and Depression-Related Teaching in Their Program as "Adequate" or "Thorough"

	Pediatrics (N = 113)	Internal Medicine (N = 201)	Family Practice (N = 247)	χ^2 Value	p
Recognition and treatment of suicidal patients*	40 (35.40%)	95 (47.26%)	199 (80.57%)	85.243	<0.001**
Recognition and treatment of depression**	41 (36.28%)	149 (74.13%)	238 (96.36%)	155.501	<0.001*
*Comparisons on this item between internal medicine and family practice, and between family practice and pediatrics are significant ($p < 0.001$). Comparison between internal medicine and pediatrics is significant ($p = 0.042$). **All pairwise comparisons on this item, using $2 \times 2 \chi^2$ analysis, are significant ($p < 0.001$).					

TABLE 2. Number and Percent of Primary Care Training Directors, by Specialty, Who Are "Reasonably" or "Very" Confident in Their Residents' Ability to Recognize Suicide Risk in Depression.

	Pediatrics (N = 113)	Internal Medicine (N = 201)	Family Practice (N = 247)	χ^2 Value	p
Recognizing which depressed patients are most at risk for suicide*	79 (69.91%)	137 (68.16%)	224 (90.96%)	39.321	<0.001*
Recognizing depression in their patients**	90 (79.65%)	177 (88.06%)	242 (97.98%)	33.63	<0.001**
Treating depression in their patients***	31 (27.43%)	155 (77.11%)	40 (97.17%)	206.549	<0.001***
*Comparisons on this item between internal medicine and family practice and between family practice and pediatrics are significant ($p < 0.001$) **Comparisons on this item between internal medicine and family practice and between family practice and pediatrics are significant ($p < 0.001$). Comparison between internal medicine and pediatrics is significant ($p = 0.045$) ***All pairwise comparisons on this item, using $2 \times 2 \chi^2$ analysis, are also significant ($p < 0.001$)					

tients at high risk for suicide. This survey was performed prior to the recent black box warning on the use of antidepressants in children and adolescents, which underscores the need for specialized training in their use and administration. Adolescents shift their care from pediatricians to family physicians and obstetrician-gynecologists as they age, underscoring the vital need for specific training in dealing with suicide and depression in this age group in specialties other than pediatrics (19, 20). The lack of confidence indicated by training directors may also suggest a need to develop assessment tools that, when used in evaluating clinical practice patterns and outcomes, can accurately reflect the efficacy of training in suicide and depression.

Training directors may not consider lectures, seminars, and readings to be an adequate method of learning about suicide and depression because those educational formats do not provide the hands-on clinical experiences for residents. It is likely to be easier for residents in primary care to get direct clinical experience with patients with depression rather than with suicidal patients, since depression occurs much more frequently. Instead, residents might benefit from supervised encounters with standardized patients and clinical feedback. Specific case reviews of depressed patients' outcomes and chart reviews for evidence of the implementation of screening procedures may be more helpful to directors as indicators of their trainees' clinical effectiveness in the recognition and treatment of suicide and depression (21, 22).

The between-specialty differences in the directors' assessments of the adequacy of their training programs might partly reflect the differences in the specific training programs mandated by the ACGME as well as the paid faculty available for teaching. For example, the relatively high level of confidence of directors of family practice departments in the adequacy of their teaching programs may be related to the fact that the teaching staff in family practice generally often originates from within that department. There is a requirement within family practice training to include far more behavioral medicine and training in psychosocial issues facing patients, but it is not specified that psychiatrists provide this training. The ACGME requires an integrated clinical experience for family practice residents in "human behavior and mental health" in which "family physicians, psychiatrists and behavioral scientists should be involved in teaching" (23). These departments are much more likely to have paid faculty to teach residents about suicide and depression.

The increased confidence of family practice directors could be attributable to the program's training coming from "in house" rather than from outside experts, increasing the familiarity and confidence of the training director about the training that residents receive. The training directors in pediatrics and internal medicine report a wider use of external faculty for the training of their residents and may be less familiar and involved with what the residents learn about depression and suicide. We were unable to find any studies about the confidence of psychiatry trainees or training directors to compare with the results in other specialties.

Training directors in all specialties are challenged with dwindling academic resources and frequently have only meager budgets to pay for teaching that may take place in other departments. Thus, to train primary care residents adequately, the support of a multidisciplinary body of experts who can provide standard curricula and case material for primary care training directors may be necessary, rather than have each department use its resources for providing raw materials for the didactic training of residents. This curriculum would be particularly helpful in residencies that do not emphasize psychiatry in the program requirements.

An ACGME-mandated requirement, in conjunction with an authoritative syllabus and relevant training materials on suicide and depression, would provide a common information base for primary care providers, and potentially help to change attitudes of primary care providers toward psychiatric patients. The percentage of patients presenting with psychiatric illnesses in primary care specialties warrants more robust training in basic recognition and management of depression and suicide. In this regard, it is noteworthy that the U.S. Preventative Services Task Force recently published recommendations that primary care providers improve depression screening, management and assessment of suicide risk in patients with psychiatric disorder in practice (24). A structured program in consecutive years, which includes exercises in interviewing patients and access to informational resources, might provide practical and useful tools for subsequent patient care. In addition, open discussion among residents that addresses their thoughts and feelings of anxiety associated with patient suicide may enhance their comfort level toward this critical aspect of patient care.

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