

Patient Suicide in Institutions: Emotional Responses and Traumatic Impact on Swiss Mental Health Professionals

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The reactions of professionals after a patient suicide are still a subject of controversy in academic literature. This article reports on retrospective data about the aftermath experienced by mental health professionals working in institutional settings in Switzerland. Findings indicate that both self-rated emotional responses and traumatic impact were low for the majority of the 258 professionals surveyed. Variables that mediated the impact included the support received and the characteristics of the professional-patient relationship. No significant differences were found with regard to gender and profession.

Patient suicide is very likely to occur during the career of mental health professionals (Campbell & Fahy, 2002) and could be reasonably viewed as an occupational hazard (Chemtob, Hamada, Bauer, Kinney, & Torigoe, 1988). Scientific literature indicates that among the participants in various studies, 51% to 82% of psychiatrists, 22% to 39% of psychologists (Henry, Séguin, & Drouin, 2003), 33% of social workers (Jacobson, Ting, Sanders, & Harrington, 2004), and 55% of nurses (Takahashi et al., 2011) were faced with patient suicide.

For mental health caregivers, losing a patient by suicide can trigger various personal and professional reactions. The most common emotional responses are shock, sadness, guilt (Wurst, Kunz, Skipper, Wolfersdorf, Beine,

& Thon, 2011), anger, helplessness, feelings of failure, shame, anxiety, fear of being considered professionally incompetent, fear of legal action (Gaffney et al., 2009), denial, intrusive thoughts or flashbacks, loss of self-esteem, and questions on the reasons for such an act (Gitlin, 2007). On a cognitive level, professionals frequently start questioning their own liability or doubting their actions (Campbell & Fahy, 2002). Behavioral reactions are also reported, such as avoidance of people, places, and situations related to the suicide, social withdrawal, disruption of relationships (Foley & Kelly, 2007), at-risk behaviors (addiction, suicidal behavior), impaired coping strategies, reduced effectiveness in dealing with daily matters, and poor sleep or insomnia (Alexander, Klein, Gray, Dewar, & Eagles, 2000).

Findings on traumatic impact are more heterogeneous. Incidence of traumatic impact vary from 7–14% (Pieters, Gucht, Joos, & Heyn, 2003; Takahashi et al., 2011) to 52% (Yousaf, Hawthorne, & Sedgwick, 2002). The present study seeks to contribute to this discussion.

Previous research has largely focused on the reactions of psychiatrists and psychologists; research on nurses

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(Joyce & Wallbridge, 2003; Takahashi et al., 2011) and social workers (Jacobson et al., 2004) is limited and no data is available on professionals in educational psychology. In Europe, a professional in educational psychology carries out behavioral and socioeducational care work in residential institutions or community-based programs with disabled people or clients facing integration issues. Data concerning the influence of the type of occupation on the reactions of patient suicide is divided: Some studies found no differences between various professions (Grad, Zavasnik, & Groleger, 1997; Henry, Séguin, & Drouin, 2004); others found that psychiatrists were more distressed than psychologists (Wurst et al., 2010). This type of data is very scarce in Switzerland, as the only findings available concern the emotional responses of patient suicide on psychiatrists working in private practice ($n = 21$) in the Swiss-German speaking state of Basel (Wurst et al., 2010). Thus, the present study's aims were to assess emotional responses, traumatic impact (if any), and their predictors (professional's or patient's characteristics, relationship with the patient, the institutional context, subgroups more affected) on professionals following a patient suicide.

METHOD

Procedure

Based on public directories, researchers sent a brief questionnaire to 559 sociomedical institutions (psychiatric hospitals and outpatient psychiatric services, social and medical services, residential homes for people with mental health or addiction problems, care homes for elderly, and prisons) in French-speaking Switzerland (states of Fribourg and Vaud) to identify those services confronted with suicide in the five years prior to the survey and to determine the characteristics of professionals and patients. The five-year criterion for the time elapsed was based firstly on the introduction of some more systematic suicide prevention measures within institutions in the two concerned states, and secondly on the experiences and time range of previous studies which set a time limit (i.e., Wurst et al., 2010, 2011).

A total of 400 institutions responded (response rate = 72%); 116 among them reported a patient suicide, and 104 agreed to participate in the second phase of the study. We mailed an anonymous questionnaire to 1,336 mental health professionals (psychiatrists, nurses, psychologists, professionals in educational psychology and social workers) practicing in these 104 institutions. In 68 complex organizational settings (such as major hospitals), local referents were trained to encourage professionals to participate in the study; they acted as mediators between the research group and eligible

participants. Participation was voluntary. The study was approved by the Medical Ethics Committee of the Psychiatric Department of the Vaud State University Hospital.

In all, 448 professionals completed and returned the questionnaire (response rate = 34%). Among these, 314 (70%) had experienced a patient suicide during their career. Professionals who had experienced more than one patient suicide were asked to focus on the most recent one.

Participants

Of these 314, 126 (40%) were nurses, 67 (21%) social workers, 50 (16%) psychiatrists, 30 (10%) educational psychologists, and 41 (13%) psychologists and other nonidentified types of professionals. The latter category was excluded from further analysis because of its heterogeneous composition. Respondents with multiple missing values were excluded. Thus, the final study sample consisted of 258 professionals, nearly two-thirds women (63%, $n = 162$). The mean age of the participants was 44 (interquartile range [IQR] = 35–52, $SD = 9.7$) with an average of 16.7 years of professional practice (IQR = 8–25, $SD = 10.0$).

Most respondents had faced more than one patient suicide during their career ($M = 3.8$, IQR = 1–4, $SD = 3.7$). The mean time since the last patient suicide was 3.7 years (IQR = 1.5–4.0, $SD = 4.8$). A few ($n = 43$) had had a patient commit suicide more than 60 months prior to the study. Analysis of variance indicated no significant differences between respondents who had a patient commit suicide more recently (up to 12 months, ≥ 12 months and ≤ 60 months) and least recently (> 60 months) in terms of emotional response and traumatic impact.

Concerning the deceased patients, 58% were men, and the largest group (21%) was 31–40 years old. Among all patients, 77% had a mental health disorder other than addiction, 31% had addiction disorder, and 43% had important psychosocial and socioeconomic difficulties at the time of suicide (multiple responses possible). Also, 29% of professionals were aware of a previous suicide attempt by the deceased patient and 51% knew about suicidal ideation at the time of suicide. Of all patients, 23% committed suicide within the institutional setting and 8% in the neighborhood; 15% of professionals saw or discovered the deceased's body.

The length of the relationship between professional and patient varied (33% between 4–12 months, and 33% between 1–20 years). Fifty-nine percent of respondents were still in contact with the patient at the time of suicide, 50% met him/her several times a week, 55% felt responsible for the deceased, and 50% felt close to him/her. In the aftermath of the patient suicide, 78% of the respondents reported receiving sufficient support

to cope with the event and 5% reported having received professional counseling. Finally, 11% of professionals reported having been blamed by the patient's relatives, 1% having been subject to judicial proceedings after the patient suicide, and 9% reported publicization of the patient suicide.

Materials

Data was collected by means of a questionnaire including 60 questions and nine scales (adapted from Henry et al., 2004) on: professional setting, characteristics of suicide, deceased patient's profile, professional relationship between caregiver and patient, personal and professional reactions, type and quality of support received, institutional procedures following patient suicide, and training in suicide prevention.

The Acute Emotional Impact Scale (AEIS; Kleespies, Penk, & Forsyth, 1993) measures emotional responses of professionals during the month following a patient suicide. It consists of 14 items such as shock, shame or anger, originally rated on a 7-point scale, adapted in the present study to 5 points ranging from 1 (*no impact*) to 5 (*very strong impact*). In the absence of a clinical threshold or any other reference point in the literature, we defined the cut-off according to a statistical criterion (i.e., the overall mean ± 1 SD). Cronbach's alpha in this study was 0.84.

The Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997; French version by Brunet, St-Hilaire, Jehel, & King, 2003) measures the traumatic impact on professionals during the month following a patient suicide. It comprises 22 items in three subscales indexing symptoms of intrusion (dreams and thoughts about the event), avoidance (efforts to avoid feelings, situations and ideas referring to the event) and hyperarousal (feeling watchful and being on guard). Respondents report their experience for each item on a 5-point scale, ranging from 0 (*not at all*) to 4 (*extremely*). In order to identify professionals with PTSD (posttraumatic stress disorder) symptoms, we used a 25 cut-off in IES-R total score (Asukai et al., 2002; Takahashi et al., 2011). In the present sample, internal consistency was high for subscales (intrusion, $\alpha = 0.86$; avoidance and hyperarousal, $\alpha = 0.82$) and the total score ($\alpha = 0.91$). The psychometric properties, including the internal consistency and dimensionality of the IES-R in this sample were reported in more detail in Heeb, Gutjahr, Gulfi, and Castelli Dransart (2011).

RESULTS

During the first month following the patient suicide, respondents generally reported a low emotional response on the AEIS ($M = 2.08$, $SD = 0.59$). However,

TABLE 1
Ordinary Least Squares Regression Analysis of the Total Score on the Acute Emotional Impact Scale

Variable	B	SE	t	p
Gender (men) ^a				
Women	.141	.075	1.891	.060
Age (≥ 50 years) ^a				
≤ 29 years	-.069	.143	-0.486	.628
30 to 39 years	.187	.089	2.100	.037
40 to 49 years	.035	.083	0.420	.675
Type of vocation (nurse) ^a				
Psychiatrist	-.003	.103	-0.026	.979
Social worker	-.102	.089	-1.144	.254
Professional in educational psychology	-.027	.116	-0.235	.815
Having seen or discovered the body of the deceased patient ^b : yes	.116	.066	1.763	.079
Feeling emotionally close to the patient ^b : yes	.379	.071	5.352	.000
Having received professional counseling in the aftermath ^b : no	-.417	.157	-2.664	.008
Having received sufficient support to cope with the patient suicide ^b : no	.182	.083	2.184	.030
Last contact with the patient: very recent (within the 24 hours preceding the suicide) ^a				
More than 24 hours before	.103	.088	1.169	.244
Number of patient suicides experienced ^c	-.039	.078	-0.501	.617
Being in contact with the patient at the time of death ^b : yes	.075	.077	0.972	.332
Location of suicide (at home) ^a				
Institution or neighbourhood	.125	.091	1.368	.172
Responsibility for the patient ^b : yes	.206	.074	2.790	.006
Constant	1.863	.355	5.245	.000

Notes: $R^2 = 0.27$.

^aReference category.

^bDummy variable.

^cContinuous variable.

3 out of 14 reactions were markedly higher (moderate): shock ($M = 3.26$, $SD = 1.10$), helplessness ($M = 3.04$, $SD = 1.24$), and sadness ($M = 2.92$, $SD = 1.10$). Others, namely shame ($M = 1.27$, $SD = 0.68$), relief ($M = 1.30$, $SD = 0.70$), fear ($M = 1.47$, $SD = 0.90$), and self-blame ($M = 1.50$, $SD = 0.82$) were very low. In all, 15.5% ($n = 40$) of the respondents were above the cut-off. Multiple regressions indicated that feeling emotionally close to the patient, feeling responsible for the patient's care, receiving insufficient support, being 30–39 years old, and receiving professional counseling significantly predicted emotional response (higher scores). None of the following significantly predicted emotional response: the type of vocation, the patient's characteristics, the number of suicides experienced, or the time elapsed since suicide (see Table 1).

On traumatic impact (IES-R) from the most recent patient suicide, respondents generally reported a low impact (IES-R total score: $M = 12.12$, $SD = 10.66$,

range = 0–88). Respondents scored highest on the Intrusion subscale ($M = 6.88$, $SD = 5.38$, range = 0–32; Avoidance subscale: $M = 3.76$, $SD = 4.50$, range = 0–24; Hyperarousal subscale: $M = 1.48$, $SD = 2.73$, range = 0–32). About one in ten respondents (12%, $n = 31$) had a score above the clinical cut-off (≥ 25). Respondents who felt emotionally close to their patient or received insufficient support after the suicide reported significantly higher overall traumatic impact than others. Intrusion and hyperarousal symptoms were significantly lower for those who reported lack of professional counseling in the aftermath of the event. Avoidance was higher for respondents aged 30–39 and for those working within medical or social services or care homes for the elderly. Hyperarousal was higher for professionals who felt responsible for the deceased. Intrusion was higher for those who saw or discovered the deceased's body (see Table 2). Patient's characteristics, professionals' gender, as well as the time of the last

TABLE 2
Ordinary Least Squares Regression Analysis of the Total Score on the Impact of Event Scale-Revised Intrusion, Avoidance and Hyperarousal Subscales

Variable	Intrusion subscale				Avoidance subscale				Hyperarousal subscale			
	B	SE	t	p	B	SE	t	p	B	SE	t	p
Gender (men) ^a												
Women	.141	.087	1.611	.108	.097	.071	1.364	.174	.007	.059	0.126	.899
Age (≥ 50 years) ^a												
≤ 29 years	-.023	.165	-0.142	.887	.039	.138	0.282	.778	.137	.114	1.196	.233
30 to 39 years	.138	.100	1.380	.169	.257	.082	3.113	.002	.127	.069	1.850	.066
40 to 49 years	.110	.098	1.125	.262	.140	.079	1.779	.076	.033	.067	0.503	.616
Type of vocation (nurse) ^a												
Psychiatrist	.007	.119	0.057	.955	.030	.100	0.300	.764	-.088	.083	-1.067	.287
Social worker	-.014	.107	-0.133	.894	-.014	.089	-0.156	.877	-.092	.074	-1.245	.214
Professional in educational psychology	.263	.146	1.807	.072	.184	.121	1.518	.130	.019	.101	0.192	.848
Type of institution (psychiatric hospital) ^a												
Medical and social home for the elderly	.128	.125	1.025	.306	.211	.102	2.071	.039	.001	.086	0.010	.992
Home for people suffering from mental disorders	-.048	.134	-0.358	.720	-.052	.111	-0.465	.642	.000	.093	-0.001	.999
Home for people suffering from addiction, social services, and prison	-.168	.104	-1.616	.107	.002	.086	0.023	.982	-.068	.071	-0.957	.340
Having seen or discovered the body of the deceased patient ^b : yes	.282	.123	2.298	.022								
Feeling emotionally close to the patient ^b : yes	.479	.080	5.953	.000	.204	.067	3.027	.003	.143	.056	2.555	.011
Having received professional counseling in the aftermath ^b : no	-.369	.178	-2.078	.039	-.191	.148	-1.295	.196	-.432	.122	-3.528	.000
Having received sufficient support to cope with the patient suicide ^b : no	.250	.096	2.619	.009	.171	.080	2.142	.033	.195	.066	2.936	.004
Last contact with the patient: very recent (within the 24 hours preceding the suicide) ^a												
More than 24 hours before	.149	.095	1.559	.120	.125	.076	1.652	.100	.016	.063	0.258	.797
Circumstances of suicide (while in care) ^a :												
During authorized or unauthorized leave	-.157	.112	-1.399	.163					-.135	.076	-1.755	.077
Responsibility for the patient ^b : yes	.122	.083	1.480	.140	.055	.069	0.796	.427	.164	.057	2.857	.005
Constant	1.862	.392	4.752	.000	1.242	.319	3.888	.000	1.718	.266	6.447	.000

Notes: Intrusion subscale: $R^2 = 0.29$; Avoidance subscale: $R^2 = 0.16$; Hyperarousal subscale: $R^2 = 0.18$.

^aReference category.

^bDummy variable.

contact with the deceased, did not significantly influence intrusion, avoidance, or hyperarousal symptoms.

DISCUSSION

In line with previous empirical researches (Hendin, Lipschitz, Maltsberger, Haas, & Wynecoop, 2000; Wurst et al., 2010), present Swiss mental health professionals reported shock, helplessness, and sadness as the highest emotional responses following a patient suicide. Unlike previous research (Kleespies et al., 1993; Thomyangkoon & Leenaars, 2008), present respondents' shame and self-blame were very low.

Intrusion symptoms were higher than avoidance or hyperarousal symptoms. Mean score of the total IES-R (12.12) was comparable to data reported by Japanese nurses exposed to inpatient suicide (Takahashi et al., 2011; mean IES-R total score = 11.4). In both studies, total scores were much lower than the cut-off (≥ 25), unlike most previous researches using IES (Intrusion and Avoidance subscales only) where the total mean score was over the cut-off (> 19) (Jacobson et al., 2004; Kleespies, Smith, & Becker, 1990; McAdams & Foster, 2000).

Findings on both emotional response and traumatic impact in our study suggest that professionals have feelings for the deceased patient and show reactions after his/her death. Nevertheless, those feelings and reactions do not generally or systematically lead to the development of mental health disorders or difficulties, because the majority of respondents reported low emotional response and traumatic impact after a patient suicide. Our findings are in line with some previous studies (Ruskin, Sakinofsky, Bagby, Dickens, & Sousa, 2004; Henry et al., 2004) who found that a majority of professionals were able to cope with such an event, and contradict other studies (Thomyangkoon & Leenaars, 2008; Wurst et al., 2010, 2011; Yousaf et al., 2002) where the majority of respondents showed strong emotional response or traumatic impact in the clinical range. Such discrepancies in the severity of reactions across studies might be explained by the use of different concepts (emotions, stress, trauma, grief) or various methods (instruments and scales applied, time elapsed since suicide) which does not allow for systematic comparison. Finally, statistical analyses varied between studies according to sample sizes, and cultural differences (United States, Canada, Europe, Japan) may also play an important part. Further research needs to examine those aspects and take them into account.

However, the low emotional response and traumatic impact in our study may also be explained by taking several specific features of our sample into consideration. Firstly, the majority of our respondents, unlike

those in other studies (Courtenay & Stephens, 2001; Halligan & Corcoran, 2001), reported receiving sufficient support. Secondly, respondents in our study were older (44 on average) and more professionally experienced (16.7 years on average) than those in most previous studies (Courtenay & Stephens, 2001; Dewar, Eagles, Klein, Grey, & Alexander, 2000; Wurst et al., 2010). Thirdly, the majority of our respondents had been faced with several patient suicides, meaning that habituation effect cannot be ruled out. In addition, all respondents worked in institutional settings with a large majority being part of a team, whereas most of the previous studies' samples were heterogeneous (institution/private practice). Further research comparing professionals working in institutional settings versus private practices could ascertain whether institutions might offer protective factors. The Swiss sociocultural context might also play a role: Professionals in our sample reported neither having been particularly blamed by the family of the deceased patient nor having been sued for malpractice. Wurst et al.'s (2010) findings showed that the most distressed professionals were those who feared legal action and the reactions of the patient's relatives. Exposure to public blame and/or legal action may be an important factor in explaining variations in emotional response and traumatic impact after a patient suicide and may be related to cultural and context-sensitive issues. Further research is needed in this regard and should investigate both the cultural and professional context.

Unlike some previous studies, gender (Grad et al., 1997; Henry et al., 2004) and profession (Wurst et al., 2010) did not significantly predict emotional response or global traumatic impact. However, emotional closeness with the patient and perceived responsibility toward the patient had a significant effect on emotional response and global traumatic impact. This can be explained by the fact that respondents were still in contact with the deceased at the time of death, met the patient on a daily basis or several times a week, and felt that their relationship with him/her was intense or even very intense. These findings tend to support previous studies that found that the nature of the professional relationship influenced the kind of reactions (Campbell & Fahy, 2002; Hendin, Haas, Maltsberger, Szanto, & Rabinowicz, 2004; Henry et al., 2003). Therefore, further research should focus on variables related to the relationship with the patient, rather than considering only sociodemographic variables concerning the professionals and their patients.

Finally, our data suggest that a subgroup of professionals developed mental health issues: 15.5% of the sample had scores above the cut-off limit with regard to emotional response and 12% with regard to traumatic impact, positioning them within the clinical range for

emotional disruption and PTSD. For those subgroups, research is needed to further ascertain their characteristics and promote targeted support.

Limitations of this study are the potential biases linked to the reliance on voluntary participation, retrospective data, as well as the investigation of the most recent patient suicide. Firstly, participants took part in the study on a voluntary base; those who declined to participate could not be identified. Nevertheless, with 258 participants faced with a patient's suicide, our study is one of the few (Jacobson et al., 2004; Takahashi et al., 2011) conducted so far with a sample of more than 230 subjects. Secondly, this study is retrospective in nature. As the mean time elapsed since the patient suicide was 3.7 years, memory fluctuations and changes are likely to have occurred over time (recall bias). Weiss and Marmar (1997), who designed and validated the IES-R, reported an average time interval of 3.1 years in their study. Studies (i.e., Lin, Ensle, & Lai, 1997) have shown that recall errors usually tend to underreport rather than overreport and that their influence tends to be greater for chronic and routine changes than for personal and family events. More generally, in research on the aftermath of patient suicide, studies similar to ours with regard to sample size or design have comparable or even greater time intervals (Ruskin et al., 2004; Sanders, Jacobson, & Ting, 2005; Takahashi et al., 2011). Finally, the investigation of the most recent patient suicide, as opposed to the most distressful one or the first experience of patient suicide, may also have influenced the severity of the reactions reported by our respondents. Further research, especially the monitoring of the reactions as they occur and longitudinal studies (both quantitative and qualitative) would enable a more accurate estimation and measurement of the emotional response and the traumatic impact of patient suicide over time.

In conclusion, our findings showed that respondents having received sufficient support reported lower emotional response and traumatic impact. Therefore, some kind of support (venting, exchanging with colleagues and superiors) should be offered to any professional confronted with patient suicide as a mean to mitigate emotional response and traumatic impact.

Respondents who felt emotionally close to and responsible toward their patient reported higher emotional response and traumatic impact than those who did not. Therefore, those professionals should be of particular concern and be offered special support. For professionals who are likely to experience levels of traumatic impact in the clinical range, it would be appropriate to offer specific and targeted support measures such as brief therapy. Professionals' distress might constitute a risk to themselves or to other patients because the vigilance and judgment of those professionals may be altered. The general well-being of

professionals, together with appropriate training and support, are the best guarantee for effective prevention and postvention.

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