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Original article

Death by request in Switzerland: Posttraumatic stress disorder and complicated grief after witnessing assisted suicide

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ABSTRACT

Background: Despite continuing political, legal and moral debate on the subject, assisted suicide is permitted in only a few countries worldwide. However, few studies have examined the impact that witnessing assisted suicide has on the mental health of family members or close friends.
Methods: A cross-sectional survey of 85 family members or close friends who were present at an assisted suicide was conducted in December 2007. Full or partial Post-Traumatic Distress Disorder (PTSD; Impact of Event Scale–Revised), depression and anxiety symptoms (Brief Symptom Inventory) and complicated grief (Inventory of Complicated Grief) were assessed at 14 to 24 months post-loss.
Results: Of the 85 participants, 13% met the criteria for full PTSD (cut-off $\geq$ 35), 6.5% met the criteria for subthreshold PTSD (cut-off $\geq$ 25), and 4.9% met the criteria for complicated grief. The prevalence of depression was 16%; the prevalence of anxiety was 6%.
Conclusion: A higher prevalence of PTSD and depression was found in the present sample than has been reported for the Swiss population in general. However, the prevalence of complicated grief in the sample was comparable to that reported for the general Swiss population. Therefore, although there seemed to be no complications in the grief process, about 20% of respondents experienced full or subthreshold PTSD related to the loss of a close person through assisted suicide.

1. Introduction

Assisted suicide and euthanasia for terminally ill patients are punishable by law almost everywhere except Switzerland, the Netherlands, Belgium and the U.S. states of Oregon and Washington. Assisted suicide is generally defined as the prescribing or supplying of drugs with the explicit intention of enabling the patient to end his or her own life. In euthanasia, in contrast, it is the physician who administers the lethal drug. In the Netherlands and Belgium, physician-assisted euthanasia is legally permitted, meaning that physicians are allowed to administer drugs to end a patient's life at his or her request. In Switzerland, in contrast, euthanasia is punishable by imprisonment (Article 114 of the Swiss penal code). It is only in the absence of self-serving motives that assisting another person's suicide is permissible. Physicians in Switzerland are therefore allowed to prescribe or supply a lethal dose of barbiturates with the explicit intention of enabling a patient they have examined to end his or her own life. However, most assisted suicides in Switzerland are conducted with the assistance of non-profit organisations [23]. These right-to-die organisations offer personal guidance to members suffering diseases with "poor outcome" or experiencing "unbearable suffering" who wish to die.

The two largest right-to-die organisations in Switzerland are Exit Deutsche Schweiz and Dignitas. Membership of Exit Deutsche Schweiz is available only for people living in Switzerland, whereas Dignitas is also open to people from abroad. Exit Deutsche Schweiz has about 50000 members, and between 100 and 150 people die each year with the organisation's assistance. In comparison, Dignitas has about 6000 members, most of whom live abroad. A member who decides to die must first undergo a medical examination. The physician then prescribes a lethal dose of barbiturates, and the drugs are stored at the Exit headquarters until the day of use. Usually, the suicide takes place at the patient's home. On the day the member decides to die, an Exit volunteer collects the medication and takes it to the patient's home. There, he or she hands the patient the fluid to swallow. If the patient is incapable of swallowing the barbiturate, it can be self-administered by gastrostomy or intravenously [4]. After the patient has died, the Exit volunteer notifies the police. All assisted suicides are reported to the authorities. Deaths through assisted suicide are recorded as unnatural deaths and investigated by the Institute of Legal Medicine.

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Bosshard et al. evaluated 748 cases of suicide assisted by Exit Deutsche Schweiz between 1990 and 2000 [5]. These assisted suicides amounted to 0.1% of total deaths and 4.8% of total suicides in Switzerland. The mean age at death was 72 years in women and 73 years in men. Most of the deceased suffered from cancer, followed by neurological diseases, cardiovascular/respiratory disease and HIV/AIDS. Assisted suicide was more often facilitated in urbanized and predominantly protestant parts of Switzerland. The annual number of deaths assisted by Exit tripled during the study period.

Scientific research and political discussion has focused on the ethical and legal implications of intentionally ending a person's life. By contrast, there has been very little research into the psychological impact of witnessing the assisted suicide of a family member or friend. The DSM-IV defines an event as traumatic if it includes the experience of or confrontation with actual or threatened death [7], as is the case for relatives and friends who witness an assisted suicide. The attendant police investigations and legal proceedings may further increase the psychological stress to which these bereaved individuals are exposed. Assisted suicide can be considered an unnatural death, and unnatural death has shown to be a risk factor for bereaved family members to develop PTSD and depression [9]. Moreover, bereaved relatives and friends may experience ambivalent feelings about the decision process and way the loved one chose to die.

However, bereavement after assisted suicide may differ from bereavement after suicide in several respects. The death may not be unexpected, and the bereaved person may have the opportunity to say goodbye to the dying person [19]. The quality of death is predictable and its time is predetermined. Nevertheless, images and intrusions relating to the dying itself may cause stress-related symptoms. To our knowledge, only one study in this field has been published. Carried out in the Netherlands, it examined the psychological impact of euthanasia on bereaved family and friends [19]. This cross-sectional study assessed the grief reactions and PTSD symptoms of 189 bereaved family members and friends of terminally ill cancer patients who died by euthanasia. This group was compared with a group of 316 bereaved family members of cancer patients who died naturally. The results showed that the percentage of bereaved family and friends who fulfilled the criteria for complicated grief (CG) in the euthanasia group (2.1%) was significantly lower than in the other group (5.7%). Euthanasia was still associated with less severe symptoms and reactions after adjustment for educational level. However, adjustment for the possibility of "saying goodbye" to the deceased considerably weakened the association between cause of death and grief symptoms or PTSD reactions. One explanation for these results may be that accompanying a protracted natural death from cancer can be very stressful and that images of loved ones dying in agony can haunt bereavement. Other studies with family members of patients who died in intensive care have also found high levels of PTSD and CG [1,2,18]. Anderson et al. [1] found that 46% of the next of kin of patients who died in intensive care fulfilled the criteria for CG six months after the death, as measured by the Inventory of Complicated Grief [16]. A study evaluating the prevalence of psychiatric illness in the next of kin of patients who died in the intensive care unit found similar results: 5% suffered CG and 22% subthreshold CG 8 months after the death, as measured by the Inventory of Complicated Grief–Revised [18].

Despite the ongoing debate on the legal aspects of assisted suicide, there has been very little research into its psychological impact. Does assisted suicide have the same psychological impact on bereaved family members and friends as reported for euthanasia in the Dutch study? Based on the findings of Swarte et al., we hypothesized that a Swiss sample of bereaved family members and friends who had lost a significant person through assisted suicide would be at a similar risk of developing CG.

2. Subjects and methods

In November 2007, we conducted a cross-sectional study with the right-to-die organisation Exit Deutsche Schweiz. Exit's records of all deaths by assisted suicide include information on those present at the death. We identified 146 people who had died with the support of the organisation between October 2005 and September 2006. Of this group, 21 had died with no family members or friends as witness. In 14 cases, the addresses of the witnesses were not recorded. A total of 229 relatives and friends were recorded as being present at the death of the remaining 111 deceased persons. We attempted to contact these witnesses by mail, asking them to complete and return an anonymous written questionnaire. The study was conducted following the ethical standards of the German and Swiss psychological associations. Formal approval of the project was not necessary as strict standards of voluntariness, confidentiality and respondent protection were observed. Correct mailing addresses were available for only 167 witnesses. Of the 167 immediate family members (partner, parent, child, or sibling) and friends who were eligible for the study, 4 refused to participate, 78 did not respond, and 85 (51%) returned the questionnaire.

3. Measurement of outcomes

Beside demographic items, the questionnaire contained standard self-report measures to assess the prevalence of symptoms of PTSD, CG, depression, anxiety and general well-being in respondents. The demographic variables assessed included respondents' age, sex, educational level, marital status and employment status. Further, we assessed variables regarding the deceased person (e.g., time since death, age at death, duration of disease, medical diagnosis and duration of membership of Exit Deutsche Schweiz).

Symptoms of PTSD were evaluated using the Impact of Event Scale–Revised (IES-R [22]; German translation [13]). This 22-item measure specifically assessed the extent to which respondents were distressed by witnessing the death of their loved one and related symptoms of intrusion, avoidance and arousal experienced in the past week on a 4-point Likert scale (0, 1, 3, 5). Internal consistency in our sample was $\alpha = 0.85$ for Intrusion, $\alpha = 0.81$ for Avoidance and $\alpha = 0.87$ for Hyperarousal. Neal et al. found that a cut-off score of 35 on the IES (which combines the Avoidance and Intrusion subscales) had the highest predictive value for PTSD [14]. The German version of the IES-R has satisfactory psychometric characteristics.

CG was measured with the Inventory of Complicated Grief-SF (ICG) [15]. The original ICG comprises 34 items. Our short version (Forstmeier and Maercker [8]) included only items assessing the refined consensus criteria [15,17]: one on the triggering event (death of a significant other; criteria A1), four on separation distress (criterion A2), eight on traumatic distress (criterion B), one on duration of more than 6 months (criterion C), and one on disturbance causing clinically significant impairment (criterion D). A reduced 4-point response scale (1 = no/never to 4 = always) was applied. Internal consistency in this sample was $\alpha = 0.81$ for the Separation Distress subscale and $\alpha = 0.82$ for the Traumatic Distress subscale. Based on Prigerson et al. [17], we diagnosed CG if scores on at least three of the four symptoms of Separation Distress were greater than or equal to 3 and scores on at least four of the eight symptoms of Traumatic Distress were greater than or equal to 3.

The short form of the SCL-90 (Brief Symptom Inventory [BSI] [6]) was used to assess symptoms of depression and anxiety. Its subscales are considered to be valid tools for screening depression and anxiety. Each BSI subscale lists six symptoms. The Anxiety subscale includes symptoms such as nervousness and feeling