Suicide and assisted suicide are not criminal acts in Germany. However, attempting suicide may create a legal duty for physicians to try to save a patient’s life. This study presents data on medical students’ legal knowledge and ethical views regarding physician assisted suicide (PAS). The majority of 85 respondents held PAS to be illegal. More than a third of the students viewed PAS in certain situations to be ethically acceptable whereas a smaller proportion thought that it should be legal. Compared with German physicians the medical students taking part in this study were less opposed to PAS. The majority perceived the undergraduate training concerning ethical aspect of assisted death as deficient.
Ethical and legal aspects of physician assisted suicide (PAS) are frequently discussed issues among ethicists, lawyers, health care professionals, and the public. With assisted suicide, physicians may either help or fail to prevent a patient completing a course of action that results in his or her own death. It has been suggested that there is a practically as well as morally significant difference between PAS and euthanasia, which is the deliberate act with the primary intention of ending another’s life (British Medical Association, 2004). The ethical arguments in favor of PAS are frequently based on the principle of autonomy and the right to self-determination in combination with the principle of beneficence. Patients should be allowed to determine the way they die. Physicians may, as part of their respect for the principle of beneficence, assist their patients who wish to commit suicide in the case of a serious illness without prospect for recovery. Following this line of argument physicians may (and in some cases may be more obliged to) assist their competent patients with suicide in the case of an intractable terminal illness (Battin, 1998; Kamm, 1998; Rhodes, 1998). Opponents frequently base their arguments on the idea of killing as an intrinsic evil and refer to the danger of a slippery slope. Following this line of argument, life is sacred and therefore should not be taken in any event. The acceptance of PAS even in defined situations would lead to the unwarranted taking of life and there would be no effective barriers against this abuse (Childress, 1998; Wolf, 1998).

With respect to the role of physicians in assisted suicide there is a debate whether doctors compared with other citizens have special privileges or obligations concerning the issue of assisted death. It has been argued that doctors should perform this task because they are experienced with the ending of life and are trusted to handle morally critical life and death decisions (Rhodes, 1998). However, empirical data indicate that family members, members of right-to-die-societies, or religious representatives are other candidates considered to be appropriate to provide help when a severely suffering patient asks to die (Hurst & Mauron, 2003).

The jurisdictions vary in their legal frameworks for PAS. In the Netherlands, Belgium, and the U.S. state of Oregon, physicians may assist patients lawfully with suicide if patients fulfill certain criteria, for example, suffering from an intractable disease without any prospect of cure (Vollmann & Herrmann, 2002). In England, Wales, and Northern Ireland, suicide is not an offence, however,
assisting suicide is a crime (British Medical Association, 2004). In Switzerland the penal code considers assisting suicide a crime only if the motive is selfish (Hurst & Mauron, 2003). The recently published draft of a guideline of the Swiss Academy of Medical Sciences (2004) “Care of Patients in the Terminal Phase of Life” views assisted suicide as not being part of a doctor’s task. However, patient’s wishes should be taken into account, which in some situations may mean that as a result of a doctor’s personal decision she or he may assist a dying patient to commit suicide.

In Germany, suicide and the assistance of suicide are not criminal acts. However, there is a legal duty for doctors to assist in the case of accidents or other situations in which patients are in need of professional health care. In the absence of contrary evidence, attempting suicide is seen as an accident creating a legal duty for physicians to try to save the life of a patient (Vollmann, 2000). From this it follows that PAS theoretically is a legal option for German physicians but in practice they risk prosecution because it may be argued that in a specific situation there was a duty to save the life of a patient. In its “Guidelines on Physician Aid in Dying” the German Medical Association (1998) rejects PAS as unethical. The ethical and legal debate about PAS and other end-of-life decisions in Germany has been influenced by the historical experiences during the Nazi regime. Between the years 1939 and 1945 more than 200,000 people with mental disorders and disabilities were killed involuntary under the label of “Euthanasie” (Faulstich, 2000). This has led to a taboo with respect to the debate about end-of-life decisions in Germany. In present debates the historical experiences are often cited against practices of assisted death (Leven, 1998). The term euthanasia used in the international discussion about end-of-life decisions is rejected by a majority of German physicians (Kirschner & Elkeles, 1998).

Empirical studies conducted in various countries indicate that the members of the medical profession are divided regarding their moral judgments about PAS (Dickinson, Lancaster, Clark, Ahmedzai, & Noble, 2002; Emanuel, 2002; Vollmann, 2002). So far there are only few studies about the views and attitudes of medical students toward PAS (Caralis & Hammond, 1992; Fekete, Osvath, & Jegesy, 2002; Mangus, Dipiero, & Hawkins, 1999; Muller, Onwuteaka-Philipsen, Kriegsmann, & van der Wal, 1996;
Ramirez Rivera, Rodriguez, & Otero Igaravidez, 2000; Warner et al., 2001). However, there are several reasons warranting research in this field. First, tomorrow’s doctors will determine clinical practice in times of an increasing lack of consensus regarding the morality of PAS and other end-of-life decisions. Second, the high prevalence of incurable diseases, the increasing demand to respect patients’ right to self-determination and the need to allocate scarce resources will challenge future physicians to bring forward substantial and valid ethical arguments in support of their views and practice regarding end-of-life decisions. Finally, the exploration of attitudes, views, and knowledge of medical students on this subject provides an empirical basis for the planning of curricula concerning legal, ethical, and medical aspects at the end-of-life (Warner et al., 2001).

In this study we present results of the first study about the views of German medical students concerning ethical and legal aspects of PAS. Based on the findings of earlier conducted studies we explored religion, gender, and previous experiences of the students regarding the care of dying people regarding their potential influence on the students’ views on PAS. The results of this survey are compared with international studies and will be also discussed in light of the current German debate on end-of-life decision making.

**Methods**

All fifth-year medical students at the Charité, University Medicine Berlin are required to take part in a course on breaking bad news as part of their rotation in General Practice. From October 2002 until February 2003 a survey concerning end-of-life decision took place within this course. The questionnaire was randomly distributed to half of the 204 medical students. A cover letter informed the students about the purpose of the study and asked them to answer the questionnaire anonymously. Questionnaires of those students willing to participate were collected by the course tutors. The questionnaire was developed by three of the authors (Jan Schildmann, Jochen Vollmann, and Eva Herrmann) based on a review of international studies on the views of physicians and medical students regarding medically assisted death (Caralis & Hammond, 1992; Emanuel, 2002; Fekete et al., 2002; Mangus
et al., 1999; Vollmann & Herrmann, 2002; Warner et al., 2001; Weber, Stiehl, Reiter, & Rittner, 2001). The students’ knowledge about the legal basis of PAS was assessed by fixed-response items with three response options (a copy of the questionnaire can be obtained from the authors). The participants were also asked to indicate their view on ethical aspects of PAS by means of 5-point rating scales (with answer categories: totally agree, agree, undecided, disagree, totally disagree). Subgroups concerning the participants’ view on PAS and on suicide were built by merging the two affirming categories of our 5-point rating scales (totally agree, agree) on the one hand and the two disagreeing categories (disagree, totally disagree) on the other. Data analyses were undertaken by generating frequencies for all variables. Differences between the merged subgroups were identified in selected cross-tabulations using Pearson’s $\chi^2$ test. All analyses were performed on unweighted data with SPSS version 11.0.1.

**Results**

From the sample of 102 medical students, 85 filled in a questionnaire (83.3% response rate). 51 of them (60.0%) were female, 32 (37.6%) male. The gender of 2 students (2.4%) is unknown. The mean age was 25.5 years. Twenty five medical students taking part in this study (29.4%) were Protestants, 11 (12.9%) Roman-Catholics, 6 (7.1%) Muslims, and 3 (3.5%) professed other religions. Thirty six students (42.2%) did not belong to any congre-gation or church, 4 (4.7%) did not answer the question.

Forty participants in this study (47.1%) had already experienced a situation in which they had accompanied a dying person. Forty two (49.4%) had no such experience. Three medical students (3.5%) did not answer the question. Fourteen medical students (16.5%) reported that they had been asked at least once by a patient about assisted death, and 70 participants (82.4%) indicated no such experiences. Seventy six medical students (89.4%) believed that PAS in terms of prescribing the necessary medication was illegal in Germany, and 2 (2.4%) thought it was legal. Six (8.3%) participants of the study were undecided. Twenty two respondents (25.9%) agreed with the statement that “prescribing drugs for the purpose of patient’s suicide is never ethically justified”, 30 were undecided (35.3%), and 32 (37.6%) medical students disagreed.
Twenty five participants (29.4%) agreed that “there are situations where prescribing drugs for the purpose of patient’s suicide should be legal”, 31 (36.5%) were undecided, and 28 (32.9%) medical students disagreed. Twenty one respondents (24.7%) indicated that they would prescribe medication to assist suicide, whereas 32 (37.6%) would not. Thirty one (36.4%) were undecided and 1 student did not answer the question. Forty eight (56.5%) medical students taking part in the study agreed with the statement that “suicide sometimes may be a rational decision” and 23 (27.1%) could imagine situations in which they would consider PAS for themselves. Fourteen (16.5%) participants did not view suicide as a rational decision, and 18 (21.2%) were undecided.

Students who had cared for the dying were more decisive with respect to whether or not they would be willing to participate in PAS, \( p = 0.042; \text{standardized residuals} (sr) = 1.5; \text{degrees of freedom} (df) = 2 \). However, there was significant correlation with either support or opposition of PAS. The subgroup of students who agreed with the statement that suicide may be a rational act indicated significantly more often that they may be willing to participate in PAS than those who did not view suicide to be rational \( (p = 0.009; sr = 1.4; df = 4) \). The former group also considered PAS significantly more often as an option for themselves \( (p < 0.001; sr = 2.1; df = 4) \). We found no significant correlation between gender, religion, and age of the participants of this study and their views on ethical and legal aspects of PAS.

On a 6-point rating scale using very good and insufficient as the two extreme points, 64 (75.3%) respondents perceived the undergraduate medical training as “deficient” or “insufficient”. One student rated the preparation to be “good”, 10 (11.8%) as satisfactory and 8 (9.4%) as sufficient. Two students (2.4%) did not answer the question.

**Conclusion**

This study presents the first data regarding knowledge and views of German medical students on PAS. Almost half of the participants (47.1%) had experienced situations either in private or professional settings in which they had cared for a dying person. This group was less often undecided concerning their views in favor or against PAS. However, there was no significant correlation
between the experiences of participants and their support or opposition to PAS. To our knowledge the influence of personal experiences with the care of the dying on the view and attitude toward PAS had not been investigated in other studies involving medical students. A study about the attitudes of U.S. college-students toward PAS reports that 65.5% of the participants had some interaction with a close personal other who was terminally ill (Weiss, 1996). The authors found no significant correlation between these personal experiences and the attitude of the participants. One explanation for the findings in our study may be that the emotional experiences as well as the process of personal reflection associated with the care of dying people may lead the medical students to a stronger position either for or against PAS.

Eighty nine percentage of the participants assumed that PAS is illegal in Germany. As indicated, German legislation does not prohibit the aiding and abetting of suicide but there is a legal tension because physicians may face prosecution because of a possible duty to try to save the life of a person who has tried to commit suicide. These contradictory legal statements have been criticized by members of the legal profession (Vollmann, 2000). The complex legal situation is unknown to many physicians. Empirical data indicate that even with respect to legally undisputed situations (e.g., the limitation of treatment following the wish of a competent terminally ill patient) the majority of German doctors taking part in a survey do not know that they legally can (and should) limit medical treatment in these situations (Weber et al., 2001).

A third of the participants agreed that there may be situations in which PAS is an ethically acceptable option. Compared with international studies investigating the views of medical students on PAS, there are fewer students in our study who support PAS. Studies conducted in the Netherlands, United States, and Hungary report between 43%–77% students in support of PAS or other practices of assisted death (Fekete et al., 2002; Mangus et al., 1999; Muller et al., 1996). However, the comparison of the data is limited due to differences regarding terminology and research methods. In a study by Warner et al. (2001) in which medical students were asked to judge the moral acceptability of assisted death on the basis of different case vignettes, a majority opposed the various practices of assisted death. The judgments of the students in the study varied considerably depending on the case presented.
In comparison with the data of studies involving German doctors (Csef & Heindl, 1998; Dornberg, 1997; Kirschner & Elkeles, 1998; Müller-Busch, Klaschik, Oduncu, Schindler, & Woskanjan, 2003; Wehkamp, 1998), relatively fewer medical students taking part in our study opposed PAS. Likewise, more medical students were undecided in their moral judgment about assisted death. Possible reasons for the differences between German physicians and medical students may be the effects of a process of socialization physicians undergo during their clinical career. Human life is regarded as an absolute value by many German physicians and a significant proportion rejects the idea that treatment may be withheld or withdrawn even in situations of futile treatment or in accordance with a living will of a patient (Schöne-Seifert & Eickhoff, 1996; Weber et al., 2001). It is possible that physicians during their clinical career adopt more restrictive views concerning end-of-life decisions as part of their professional ethos.

The results may also reflect a difference concerning the influence of the historical events during the Nazi regime for the older and younger generation in Germany. This hypothesis is supported by empirical data that only a minority of the present generation views the historical events as an influential factor for their personal moral views toward assisted death (Schildmann, Herrmann, Burchardi, Schwantes, & Vollmann, 2004).

One limitation of the study is that it had been conducted only at one medical school in Germany. Therefore the results may not be representative for all German medical students. In addition female respondents are slightly overrepresented in the sample of fifth-year medical students. The data in our study indicate no significant differences between the two genders with respect to their views on PAS and the results of existing empirical studies among medical students are heterogeneous regarding a possible correlation between gender and view on PAS (Muller et al., 1996; Fekete et al., 2002; Warner et al., 2001).

A significant proportion of the medical students were uncertain concerning their views on ethical aspects of PAS. This finding may be an artifact of the methodology of this study. In the case of a controversial and complex topic such as PAS some participants may find it difficult to express their view by selecting a given statement. Qualitative studies that allow participants to explain and clarify their views on PAS may be helpful to understand and
further interpret the results. Another possible reason for the great uncertainty among students may be the lack of education in medical ethics at German medical schools. This conclusion seems to be supported by our results indicating that the vast majority of the medical students do not feel sufficiently prepared to confront ethical issues of assisted death. With the beginning of the academic year 2003/2004 courses in history, theory, and ethics of medicine are compulsory for medical students in Germany. The German Academy of Medical Ethics has recently published recommendations with respect to content and aims of courses in medical ethics (Biller-Adorno, Neitzke, Frewer, & Wiesemann, 2003). Given the numerous situations in clinical practice in which physicians need to deal with ethical aspects of end-of-life decisions and the fact that a significant minority of the respondents already have encountered requests of patients for assisted death, the implementation of teaching sessions in ethics may improve the ethical competencies of tomorrow’s doctors.

**References**


