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# Medical Faculty Students' Views on Euthanasia: Does It Change With Medical Education?

#### **ABSTRACT**

Objective: Euthanasia is the decision to terminate the lives of patients who do not improve with medical treatment at their explicit request. This study was carried out to determine the opinions of medical students regarding euthanasia and to evaluate the effect of medical education on this issue.

Methods: This cross-sectional study was conducted among first and sixth-year students of the Gaziantep University School of Medicine during the 2018-2019 academic years.

Results: Of the 242 students who participated in the study, 54.1% (131) were first-year and 45.9% (111) were sixth-year students. Overall, 39.7% of the first-year students and 31.5% of the sixth-year students supported active euthanasia. The percentage of students who were against passive euthanasia and physician-assisted suicide (PAS) was 63.4% and 53.4% for first-year students and 49.5% and 54.1% for sixth-year students, respectively.

Conclusion: Approximately half of the first and the sixth-year students were opposed to active euthanasia, passive euthanasia, and PAS, and there was no significant difference between these two groups of students in their being against euthanasia. However, there were significant differences between these two groups with respect to their reasons against euthanasia.

Keywords: Euthanasia, medical students, medical education

# Introduction

Medical science has been developing for centuries on the foundation of disease prevention and life protection. However, deterioration of the quality of life because of aging, diseases, accidents, and cancers has resulted in some people viewing death as a salvation, thus raising a debate about euthanasia.

The debate regarding euthanasia dates back to ancient Greek and Roman cultures. In ancient Greece, the view that it was degrading to see aristocrats in an old or sick body resulted in the practice of euthanasia. Hippocrates' statement - 'I will give no deadly medicine to any one if asked, nor suggest any such counsel' - demonstrates that Hippocrates himself was also against the practice of euthanasia.2

The word euthanasia, derived from the Greek word 'eu-thanatos' meaning 'good death', is regarded as that which accelerates the death of a person who is suffering from extreme pain as a result of disease or illness.3 Euthanasia and physician-assisted suicide (PAS) can be defined as different forms of doctor-assisted death. 4 Euthanasia, in a broader sense, is defined as the administration of a medication, such as a sedative or neuromuscular relaxant, by a person, usually a physician, 'to intentionally end a patient's life with the mentally competent patient's explicit request'. In active euthanasia, the physician has an active role in ending the patient's life; in contrast, in passive euthanasia, the role of the physician is limited to suspending treatment or stopping extraordinary measures to prevent the prolongation of life.<sup>6</sup> PAS is defined as a doctor intentionally helping a person commit suicide by providing drugs for



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self-administration at that person's competent request.<sup>7</sup> Euthanasia and PAS are not legal in many countries, including Turkey,<sup>8</sup> whereas in some countries (Netherlands, Belgium, Switzerland, Colombia, Luxembourg, Canada, and five U.S. states), they are considered legal.<sup>9</sup>

There are two important views in favor of euthanasia; the first is that it ends unbearable pain, and the second is that it supports the autonomy and wishes of the patient. The main purpose of euthanasia and PAS is not death but to end pain and suffering. In cases where suitable treatment for the patients' suffering is not available, euthanasia is presented as an alternative to palliative care.

The World Health Organization defines palliative care as an approach that improves the quality of life through the treatment of physical, psychosocial, and spiritual problems. This approach values life and sees death as a normal process and does not intend to either accelerate or delay death.<sup>12</sup> Individuals' requests for euthanasia and PAS can be altered by providing comprehensive palliative care.<sup>1</sup>

The first golden rule adopted by the medical profession is 'Primum non nocere', meaning 'Above all, do no harm', which stipulates not to endanger life or health. Medical education is given and doctors are trained to that end.<sup>13</sup> It is clear that if diseases and health problems that were incurable in the past have become curable today, better outcomes may be possible in the future. This study was carried out to determine the opinions and attitudes of the first- and sixth-year medical students toward euthanasia and to evaluate the effect of medical education on this issue.

# Methods

This cross-sectional study was conducted among first- and sixth-year students at the of Gaziantep University School of Medicine during the 2018-2019 academic years. Approval from the Ethics Committee of the of Gaziantep University School of Medicine and the Deanship of the School of Medicine was obtained before under-taking the study (Approval Date: December 19, 2018; Approval Number: 19.12.2018/ 310). At the time of the study, a total of 332 students, of whom 203 were first-year students and 129 were sixth-year students, were enrolled at the medical college. All the first-grade and sixth-grade students were informed about the study. The students who agreed to participate in the study were asked to complete questionnaires handed out by the researcher. A total of 242 students, of whom 131 (50 male, 81 female) were first-year students, and 111 (52 male, 59 female) were the sixth-year students, were included in this study.

The response rate was 78.9%. Verbal consent was obtained from the students. First-year students completed the questionnaires in their classrooms, and sixth-year students completed the questionnaires in the departments in which they worked. The questionnaire, which

# **MAIN POINTS**

- This study explored medical students' views of euthanasia and whether they changed during medical education.
- About half of the first year students and six year students were found to be against active euthanasia, passive euthanasia, PAS and there was no significant difference between the first-year and sixth-year students.
- A significant difference was found between the views of the firstand sixth-year students in the arguments against euthanasia.

was prepared by the researcher following a review of the literature, consisted of three parts comprising 11 questions.<sup>6,14-18</sup>

In the first part of the questionnaire, information was given about the research. Active euthanasia, passive euthanasia, and PAS were defined, and the students were queried about their demographic information. Active euthanasia, passive euthanasia, and PAS were defined as follows: Active euthanasia: administration of a lethal drug by a doctor to a patient, who wants to die because of their unbearable and incurable pain, to relieve them of their pain. Passive euthanasia: withdrawal of treatment that keeps the patient alive and withholding intervention. PAS: a physician provides the means (such as a lethal drug prescription) for a patient to end his/her own life.

In the second part of the questionnaire, an example of a patient in the terminal stage suffering from unbearable pain and wanting to die was given, and the students were asked to answer questions about active euthanasia, passive euthanasia and PAS (assuming that there were no legal obstacles). The last part of the questionnaire contained questions about the impact of religious beliefs on euthanasia and the practice of euthanasia.

### **Statistical Analysis**

The data was analyzed by the Statistical Package for the Social Sciences version 23.0 (IBM Corp.; Armonk, NY, USA) and a chi-square test was used. The statistical significance limit was accepted as P < .05.

## Results

Of the 242 students who participated in the study, 102 (42.1%) were male, 140 (57.9%) were female, 131 (54.1%) were first-year, and 111 (45.9%) were sixth-year students. The ages of the students were between 18 and 40 years; the mean age of the first-year students was 19.3 (SD = 1.22) years, and the mean age of the sixth-year students was 25 (SD = 2.06) years.

In the study, questions were asked after giving an example of a patient in the terminal stage suffering from unbearable pain, who cannot be cured by treatment and who asks for help from his doctor to die (assuming that there were no legal obstacles); 59 (45%) of the first-year students and 51 (45.9%) of the sixth-year students stated that they did not think active euthanasia was appropriate (Table 1).

Overall, 63.4% (83) of the first-year students and 49.5% (55) of the sixth-year students were found to be against passive euthanasia, defined as the withdrawal of treatment required for the survival of the patient and withholding intervention. A total of 53.4% of first-year students and 54.1% of sixth-year students were found to be against PAS. As shown in Table 1, there was no statistically significant difference in the opinions of the students regarding active euthanasia, passive euthanasia, and PAS practice by their years (P = .243, P = .056, P = .471 respectively). In addition, there was no statistically significant difference between male and female students in terms of attitudes toward active euthanasia, passive euthanasia, and PAS. Overall, 41.7% of the students answered 'yes', 35.5% answered 'no', and 22.7% answered 'partially' to the question whether or not religious beliefs had an impact on their attitude toward euthanasia.

The view that euthanasia was not ethically appropriate was stated as the most important reason for being against the practice by 22.1%

Table 1. Medical Faculty Students' Views on Euthanasia and Physician-Assisted Suicide

A patient thought to be in the terminal stage (the last stage of life) suffering from unbearable ache and pain, who cannot be cured by treatment asks their doctor to help them die. Answer the possible scenarios assuming there were no legal obstacles.

		Year (Class)		
		First	Sixth	P
Active euthanasia				0.243
If the patient stated that their pain and suffering has become unbearable and insistently	Yes, n (%)	52 (39.7)	35 (31.5)	
demanded that their life be ended painlessly by an injection to be administered by a	No, n (%)	59 (45.0)	51 (45.9)	
healthcare professional, would it be appropriate to fulfill their request?	Undecided, n (%)	20 (15.3)	25 (22.5)	
Passive euthanasia				0.056
Would it be appropriate if the treatments required for the patient's survival were withdrawn	Yes, n (%)	33 (25.2)	33 (29.7)	
and no intervention was made?	No, n (%)	83 (63.4)	55 (49.5)	
	Undecided, n (%)	15 (11.5)	23 (20.7)	
Physician-assisted suicide				0.471
Would it be appropriate to fulfill their request if they asked for information and drugs to end	Yes, n (%)	35 (26.7)	35 (31.5)	
their life themselves, stating that their pain and suffering has become unbearable?	No, n (%)	70 (53.4)	60 (54.1)	
	Undecided, n (%)	26 (19.8)	16 (14.4)	

Table 2. Views of Medical Faculty	/ Students on Practicin	g or Not Practicing Euthanasia

		n (%)
Reasons for not practicing euthanasia	It devalues human life	53 (21.9)
	Religious beliefs/conscientiously	60 (24.8)
	Inappropriate/ethically inappropriate risk of abuse	47 (19.4)
	Pain and suffering may be relieved by proper and effective palliative care	14 (5.8)
	Students who did not answer	68 (28.1)
Reasons for practicing euthanasia	Individuals must have a right to die with dignity	36 (14.9)
	It ends unbearable pain	77 (31.8)
	The patients are a burden on their family, caretakers, and the state	5 (2.1)
	The patients have a poor quality of life and their condition is incurable	21 (8.7)
	Students who did not answer	103 (42.6)

of the first-year students and 27.9% of the sixth-year students. Of the first-year students, 19.1% did not approve of euthanasia because of the risk of devaluation of human life, and 26.7 % did not approve because of the risk of abuse. These percentages were found to be 25.2% and 10.8%, respectively, for the sixth-year students. A significant difference was found between the views of the first- and sixth-year students in the arguments against euthanasia (P = .034). A total of 27.5% of the first-year students and 28.8% of the sixth-year students did not answer this question. Overall, 34.4% of the first-year and 28.8% of the sixth-year students stated that it was acceptable to put an end to unbearable pain, and 12.2% of the first-year and 18.0% of the sixth-year students stated that the patients had a right to die with dignity. A total of 45% of the first-year students and 39.6% of the sixth-year students did not answer the question about the reasons for practicing euthanasia. There was no significant difference between the views of the first- and the sixth-year students in the arguments supporting euthanasia (P = .282). Table 2 shows the reasons that students stated against and in favor of euthanasia.

A total of 42.6% of the participants (42.7% of the first-year and 42.3% of the sixth-year students) did not think legalization of euthanasia was appropriate, and 24% were undecided. Overall, 42.6% of the students stated that they could not practice euthanasia when they become physicians even if it was legalized, whereas 24.4% were undecided. There was no significant difference between the first- and the sixth-year students in favor of euthanasia legalization and the practice of euthanasia when legal.

# Discussion

Different results were obtained regarding euthanasia and PAS in the studies conducted among physicians, nurses, medical students, nursing students, and students in other departments. In a study conducted in South India, 46.8% of the physicians supported euthanasia, and 41% believed that it should be legalized.<sup>19</sup> In a study conducted in Greece, it was found that 59% of the doctors and 64% of the nurses working in the intensive care unit supported the legalization of active euthanasia.<sup>20</sup> In a study conducted in Iran, it was reported that the attitudes of 34.2% of the nursing students toward euthanasia were negative.<sup>21</sup> In another study conducted in Germany, 19.2% of medical students considered euthanasia as ethically appropriate, whereas 56.9% were against it.14 In studies conducted in Turkey among students studying in various branches of health, the percentage of the students who were against euthanasia was reported to range from 35% to 55.9%.<sup>22,23</sup> In another study conducted among healthcare professionals, 33.6% of the participants were reported to support euthanasia.8 It was found in this study that 36% of the students supported active euthanasia and 45.5% were against it. The results of this study are consistent with those of other studies.

In a study conducted in Mexico, it was reported that 44.4% of the medical students supported active euthanasia and 52.1% supported passive euthanasia.<sup>6</sup> In this study, it was found that students supported active euthanasia (36%) over passive euthanasia (27.3%). Additionally, in this study, a significant difference was found between

the reasons stated by the first-year and sixth-year students against euthanasia. In opposing euthanasia, the primary reason (26.7%) for the first-year students was the risk of abuse, but for the sixth-year students, the primary reason (27.9%) was not being ethically appropriate. This may indicate that student attitudes toward patients may change with years of medical education and clinical experience.

In a study conducted in Norway, it was reported that 31% of the medical school students thought that PAS should be allowed in case of terminal diseases.<sup>24</sup> In a study conducted among psychiatrists in Egypt, it was reported that the majority of physicians (75%) were against PAS and believed that it could be abused.<sup>25</sup> In this study, 53.7% of the students were against PAS. The different results in the studies may be a result of legal practices, values, or the manner in which the surveys were conducted in each country.

Religion, beliefs, and cultural background are factors that have an important impact on attitudes toward euthanasia.26 In a study conducted in Sudan, it was reported that the majority of the students (76.6%) were against euthanasia, and the reasons were religious beliefs, the thought that euthanasia was not ethical, and the fear that it might be abused.<sup>27</sup> In a UK study, it was found that most of the physicians were opposed to euthanasia and that religious beliefs had an impact on the negative attitude toward euthanasia.28 Gutierrez Castillo and Gutierrez Castillo<sup>6</sup> found in their study that the people who were less religious and spiritual accepted euthanasia more easily. In this study, 41.7% of the students answered 'yes', 35.5% answered 'no', and 22.7% answered 'partially' to the question whether or not religious beliefs had an impact on their attitude toward euthanasia. Turkey is a secular, democratic country with a majority Muslim population. Religious knowledge, religious practices, and lifestyles may vary from person to person.

Presently, although the practice of euthanasia is legal in some countries, it is a crime in most countries including Turkey.<sup>8</sup> In a study conducted in Sweden, although 52% of the medical students stated a negative opinion about the legalization of euthanasia, 13% stated that they were undecided.<sup>17</sup> In a study conducted in Poland, 47.1% of the students stated that they were against the legalization of euthanasia, whereas 29.6% stated that they supported the practice.<sup>18</sup> In this study, 42.6% of the participants did not think that legalization of euthanasia was appropriate, and the same percentage of students stated that they could not practice euthanasia if it were legal.

The effect of gender on the attitude toward euthanasia has been analyzed in some studies. In one study, it was found that male students showed a more positive attitude toward euthanasia than female students.<sup>29</sup> In a study conducted among Finnish physicians, it was found that male physicians supported euthanasia more than female physicians.<sup>30</sup> Similarly, in this study, it was found that male students (38.3%) were more supportive of active euthanasia than female students (26.6%), although there was no statistically significant difference.

The effect of clinical experience and education on the attitude toward euthanasia has been shown in some studies. In a study conducted in Pakistan, it was revealed that medical students supported euthanasia to a lesser degree than other students.<sup>31</sup> In another study, it was reported that the number of people who supported euthanasia decreased relative to the number of years of medical educa-

tion.<sup>32</sup> Ozkara et al<sup>16</sup> reported in their study that the views, regarding euthanasia, of the students of health sciences changed after they completed their education. In a study conducted after compulsory palliative medicine courses in two universities in Poland, 51.5% of medical students stated that they could not practice euthanasia and 36.7% stated that they were unsure. In addition, it was determined that palliative medicine courses had little effect on the outlook of the students concerning euthanasia.18 In this study, no significant difference was found between the first-year and the sixth-year students about conducting active euthanasia, passive euthanasia, and PAS for a terminally ill patient who wanted to die. However, there were differences between the first-year and the sixth-year students regarding the reasons for not practicing euthanasia. In the medical colleges in Turkey, exposure to patients begins in the fourth year and gradually increases in the following years. Although the years of medical education do not change personal beliefs and character traits, it is believed that clinical experiences may change the approach to the

This study has some limitations. In the study, questions were asked after giving an example of a patient in the terminal phase who was conscious and suffering from unbearable pain and who wished to die. Therefore, the results of this study rely solely on opinions relating to conscious patients and do not include unconscious patients or patients with psychiatric disorders. The participants were not asked about their knowledge of euthanasia, and the questionnaire was kept short. In addition, medical education varies between universities. The fact that the study was conducted only in one university is a limitation of this study.

In conclusion, approximately half the first-year and sixth-year students were opposed to active euthanasia, passive euthanasia, and PAS, and there was no significant difference between the first-year and sixth-year students. However, the reasons for not practicing euthanasia were found to be different between the first-year and sixth-year students. In countries where euthanasia and PAS are prohibited, palliative care should be the first option. The principles of 'above all, do no harm' and 'protection of life' that are the foundation of the medical profession should be instilled in the students during their education, and courses should be given on palliative medicine and end-of-life ethical principles.

Ethics Committee Approval: Ethics committee approval was received for this study from the Ethics Committee of Gaziantep University School of Medicine (Approval Date: December 19, 2018; Approval Number: 19.12.2018/310).

Informed Consent: Verbal consent was obtained from the individuals who participated in this study.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The author has no conflict of interest to declare.

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