

## Knowledge and attitude regarding Euthanasia among medical students in the public and private medical schools of Karachi

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### Abstract

**Objective:** To assess the awareness about and perception of euthanasia among medical students of Karachi.

**Method:** The cross-sectional study was conducted from December 2011 to March 2012 among students of private-sector and one public-sector medical college in Karachi. Data was analysed using SPSS version 17, and associations were worked out using chi-square test.

**Results:** Out of the 493 students, 226 (46%) were from the matriculation system and 194 (39%) from the Cambridge system, while the remaining 15% were from the American High School. The male-female ratio was 1:3. There were 284 (58%) students from the private medical college. Majority of the private medical school students (n=284; 99.6%) knew about euthanasia, compared to the public-sector facility where only 161 (77%) knew of it. Of the total, 405 (82%) students agreed that it is physician-assisted suicide; 255 (52%) agreed to the idea of palliative care, claiming it was sufficient to maintain life; 226 (54%) disagreed that a doctor should not be allowed to administer a lethal dose while only 162 (33%) agreed to the idea of it; 285 (58%) disagreed that a law regarding the practice of euthanasia should not be introduced, whereas 134 (27%) agreed to it; 70 (14%) agreed to the practice of euthanasia, while 311 (63%) disagreed, mostly for religious reasons.

**Conclusion:** The awareness of euthanasia was high, but a very small proportion of students approved of it. There is need to include palliative care and euthanasia in the Behavioural Science module in the under-graduation programme of both public and private medical schools.

**Keywords:** Awareness, Euthanasia, Medical students, Karachi. (JPMA 63: 295; 2013)

### Introduction

Euthanasia also known as mercy killing or physician-assisted suicide, is a contentious issue in the world of medicine.<sup>1,2</sup> The online Medline Plus dictionary defines euthanasia as "the act or practice of killing or permitting the death of hopelessly sick or injured individuals (as persons or domestic animals) in a relatively painless way for reasons of mercy."<sup>3</sup> Euthanasia itself has a further division of being active or passive. Active implies that the physician administers drugs that will end the life of the patient. Whereas, passive euthanasia is when medical procedures are denied to the patient, which indirectly leads to the death of the patient.<sup>1</sup> The acceptance of euthanasia is increasing worldwide, in countries such as United States,<sup>4</sup> Australia,<sup>5</sup> and India.<sup>6</sup> However when we look at the Islamic countries, they are still reluctant to the idea,<sup>7,8</sup> arguing that it is contrary to Islamic teachings.<sup>1</sup>

Now the dilemma for physicians is that they are supposed to provide comfort and relieve any suffering to

the patient. However, under the Hippocratic Oath, euthanasia is forbidden. It argues that a physician's objective is saving a life, not ending it.<sup>2</sup> This issue was not brought into light until the early 1980s, when for the first time the issue of euthanasia was raised by Richard Selzer in his short story 'Mercy'. The author narrated the story of a patient with pancreatic cancer. Inevitably the physician, with the consultation of the attendant in the story made a crucial choice of ending the life of the patient with an injection of morphine.<sup>9</sup> From that time till now this controversial issue has created doubt in the minds of physicians' worldwide.<sup>10</sup>

Some attempts have been made at addressing this issue in Pakistan. However, the practice of euthanasia remains under a cloud.<sup>11-14</sup> This is mainly due to the extensive religious influences. The study was planned to assess the views of future doctors on this controversial issue and their attitudes towards euthanasia.

### Subjects and Methods

The cross-sectional study was conducted from December 2011 to March 2012 and comprised medical students at Ziauddin University from the private sector and the Dow University from the public sector.

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The actual sample size was 384 students, which was calculated by using the standard formula for calculating sample size on the basis of prevalence.

$$N = \frac{(Z)^2 \times P \times (1-P)}{d^2}$$

Prevalence was taken at 50% because no relevant data was available. The bond of error was taken at 5% with 95% confidence interval. The sample size was inflated to 500 to exclude non-response and poorly-filled questionnaires.

To obtain identical number of students from private and public medical institution, the sample was divided equally between the two. The sample was selected through convenience sampling technique as students attending the first session of the day were given the questionnaire to be filled. Since the strength of students in Dow University was less due to upcoming semester exams, the required number of students for the sample was not achieved.

Data was collected through a validated self-administered, structured questionnaire that was developed in English and was a combination of questionnaires used by David Clark et al in a study done on United Kingdom geriatricians published in 2001,<sup>15</sup> and Ferraz Gonçalves in a study done

on Portuguese oncologists published in 2010.<sup>16</sup>

The questionnaire was modified consequently and comprised questions pertaining to students' year of study, gender, previous schooling, religious views and knowledge and perception regarding euthanasia. Prior to administration, the questionnaire was pilot-tested on 10 Fourth Year students and changes were made according to the feedback received.

The students were briefed about the research before administering the questionnaire and verbal consent was obtained.

Data was entered into SPSS version 17. Before analysis, data was cleaned for possible data entry errors. Frequencies and percentages were worked out for categorical variables. Association between religious views, type of medical school and previous schooling was done with knowledge and perception regarding euthanasia by the application of chi-square test. P value less than 0.05 was taken as significant.

## Results

A total of 493 students participated in the survey. Of them, 284 (58%) were from the private university, while 209 (42%) were from the public-sector university. Students from First Year to Final Year were included from

Table-1: Comparison of responses between public and private universities regarding perception of euthanasia.

		Private		Public		P-Value
		n (284)	%	n (209)	%	
Have you ever heard of the term euthanasia?	Yes	283	99.6	161	77.0	0.000
	No	1	.4	48	23.0	
What do you understand by the term "euthanasia"?	Physician assisted suicide	254	89.4	151	72.2	0.000
	Homicide	18	6.3	18	8.6	
	Don't know	12	4.2	40	19.1	
Do you think terminally ill patients should have the option to request a lethal dose at a time of their choosing?	Agree	120	42.3	44	21.1	0.000
	Disagree	128	45.1	127	60.8	
	Don't know	36	12.7	38	18.2	
Should a doctor be allowed to give a lethal dose to a hopelessly ill patient, with their consent?	Agree	117	41.2	45	21.5	0.000
	Disagree	137	48.2	129	61.7	
	Don't know	30	10.6	35	16.7	
Should euthanasia be allowed for those who cannot afford treatment?	Agree	26	9.2	15	7.2	.025
	Disagree	240	84.5	166	79.4	
	Don't know	18	6.3	28	13.4	
Should a law be introduced to allow a hopelessly ill patient to obtain assistance from a doctor to commit suicide?	Agree	104	36.6	30	14.4	0.000
	Disagree	143	50.4	142	67.9	
	Don't know	37	13.0	37	17.7	
If legislation allowed the practice of euthanasia, would you practice it?	Agree	57	20.1	13	6.2	0.000
	Disagree	158	55.6	153	73.2	
	Don't know	69	24.3	43	20.6	

Table-2: Comparison of responses on the basis of MBBS year.

		1st	2nd	3rd	4th	5th	P-Value
		%	%	%	%	%	
Have you ever heard of the term euthanasia?	Yes	73.5	91.8	90.9	97.5	94.1	0.000
	No	26.5	8.2	9.1	2.5	5.9	
What do you understand by the term "euthanasia"?	Physician assisted suicide	69.4	76.5	82.8	90.0	90.2	0.001
	Homicide	9.2	9.4	8.1	5.6	3.9	
	Don't know	21.4	14.1	9.1	4.4	5.9	
Do you think terminally ill patients should have the option to request a lethal dose at a time of their choosing?	Agree	34.7	37.6	33.3	26.9	43.1	0.002
	Disagree	39.8	52.9	47.5	62.5	47.1	
	Don't know	25.5	9.4	19.2	10.6	9.8	
Should a doctor be allowed to give a lethal dose to a hopelessly ill patient, with their consent?	Agree	30.6	37.6	31.3	28.1	47.1	0.018
	Disagree	48.0	50.6	52.5	63.1	45.1	
	Don't know	32.3	15.4	24.6	21.5	6.2	
Should euthanasia be allowed for those who cannot afford treatment?	Agree	7.1	11.8	9.1	6.3	9.8	0.046
	Disagree	74.5	80.0	81.8	87.5	86.3	
	Don't know	18.4	8.2	9.1	6.3	3.9	
Should a law be introduced to allow a hopelessly ill patient to obtain assistance from a doctor to commit suicide?	Agree	21.4	34.1	28.3	22.5	39.2	0.072
	Disagree	56.1	55.3	55.6	64.4	49.0	
	Don't know	22.4	10.6	16.2	13.1	11.8	
If legislation allowed the practice of euthanasia, would you practice it?	Agree	11.2	16.5	21.1	15.0	17.6	0.163
	Disagree	58.2	63.5	64.6	68.8	51.0	
	Don't know	30.6	20.0	23.2	16.3	31.4	

both the universities in the sample, but majority of the students 160 (32.5%) were from the Fourth Year. The male-female ratio was 1:3.

To assess the attitude of students regarding euthanasia, several demographic variables were selected to find association with their knowledge, attitude and perception. Regarding primary education, 226 (46%) were from the matriculation system, 194 (39%) from the Cambridge system, and the rest were from high schools and hybrid systems. Regarding religious views, only 83 (17%) said they were 'very religious.'

When asked about the knowledge of euthanasia, the majority of the private university students 282 (99.6%) knew about it compared to the public-sector university where only 161 (77%) knew of it (p <0.001) (Table-1). Similar results were observed when primary education was associated with the knowledge of euthanasia; 100% students from high school and Cambridge system knew about euthanasia, compared to 79% (n=179) from the matriculation system (p <0.001).

On the subject of euthanasia, 405 (82%) students said it is a physician assisted suicide. Significant association was observed with increasing level of medical education and correct definition (p <0.001) (Table-2).

In response to a query asking if palliative care was

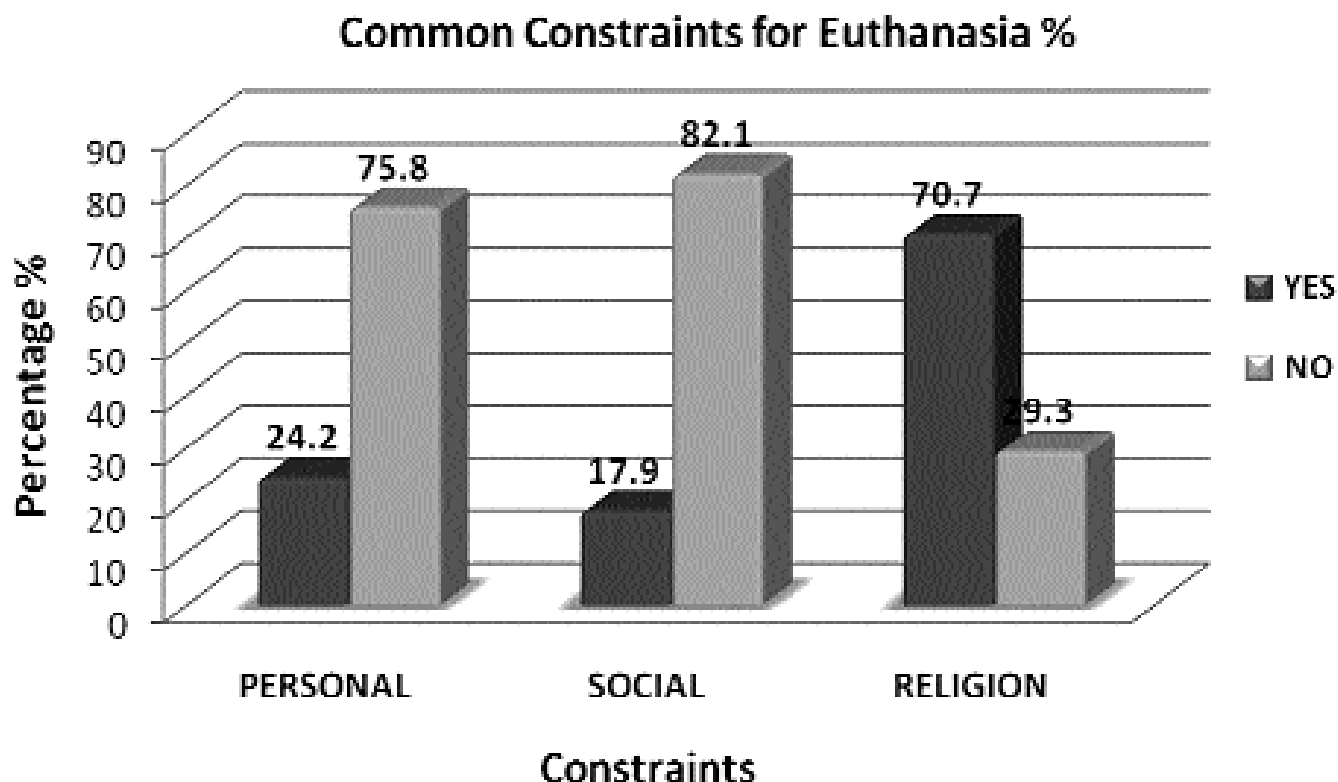
sufficient or should a patient be allowed to choose a lethal dose to end the suffering, 255 (52%) students disagreed. Significant association was observed between religious views and ending the patient's life (p <0.020).

When asked if a hopelessly ill patient, experiencing unbelievable suffering with absolutely no chance of recovering, asks for a lethal dose, should a doctor be allowed to provide it or not, 266 (54%) students disagreed with it, while only 162 (33%) agreed to the idea. Significant difference was observed between genders, where the majority of male students 64 (47.4%) agreed to it, while the majority of the female students 210 (59%) disagreed.

Concerning whether patients who are ill and could maintain an adequate quality of life, but yet have financial and other issues which did not permit so, the majority of the students 406 (82%) disagreed with the practice of euthanasia in this situation.

When asked if a law permitting the practice of euthanasia should be introduced, 285 (58%) students disagreed, while only 134 (27%) agreed. Significant difference was observed with religious views (p <0.008) (Figure).

When asked if students would practise euthanasia in case the law allowed it, only 70 (14%) said they would do so. The majority (n=311; 63%) disagreed, and 112 (23%) were



**Figure:** Common constraints against euthanasia.

confused whether they will practise it or not.

### Discussion

This study suggested that 14.2% of the students were compatible with the idea of euthanasia, whereas 22.7% did not know if they would practise it. The results, however, could not be compared on a national level since no prior such study existed. When comparing these figures on the international level, it was found that in India, 60% agreed with the practice of euthanasia.<sup>6</sup> But these figures decline drastically in other Islamic countries; in Malaysia 52% agree,<sup>8</sup> whereas in Sudan only 21% are in agreement.<sup>2</sup> Since Pakistan is also an Islamic state, the study was able to provide some insight into the awareness about euthanasia, and if the doctors of future would practice euthanasia if it was to be legalised. The population sample included both public and private medical universities in Karachi, but the study may not reflect the response of students in other parts of the country.

The vast religious influence on the country is reason enough that the issue of euthanasia has yet to be addressed with seriousness. All religions preach that life is gifted to us by God, and only He has the right to decide when to end it, and in which way to end it. Hastening to

end one's life or life of another is not permitted. Along with this, our cultural restraints and strong ethical views on end-of-the-life issues have led to the idea of euthanasia being shunned from our society. Some have even regarded the practice of euthanasia as being equivalent of murder.

In medical colleges of Pakistan, exposure to patients begins in the 3rd Year and slowly and gradually increases in the years to follow. Keeping this in mind, it was worth noticing that among the Final Year students, about 50% disagreed to the idea of euthanasia, while the other half was indecisive. This emphasised the fact that as clinical exposure of the students begin, so does their awareness of the fact that some ailments have no cure.<sup>11</sup> These students were able to correlate the suffering of the patient and their family not only on a physical level, but also emotionally and psychologically.<sup>2</sup>

With the progression of time and development of new technologies, a variety of different ailments have also emerged, although treatment and cure is available for majority of these diseases, there are some that have no cure. For such diseases the idea of palliative care has been developing around the world, yet it is almost

unheard of in Pakistan.<sup>11,12</sup> There are some private hospitals that offer this facility, but this luxury is denied to the majority of the Pakistanis.

This study was able to explore the idea of euthanasia and associated with it the idea of palliative care. However, our study only briefly touched the issue and it proves that this subject could be of further interest for fresh studies. In the current study, the number of students taken from the private sector was higher, but since the comparison was done with percentages and not frequencies, the factor had no effect on the results.

The major limitation of this study was that we took a convenience sample from the two medical colleges. This could have led to misrepresentation of the views of the rest of the medical colleges in the city. Hence an emphasis was made to remove this error by taking a larger sample size. It is also worth noting that, Ethics in Behavioural Science module is being conducted in private universities, while the public sector does not have it as part of curriculum. This could have been a bias.

## Conclusion

The awareness of euthanasia was high among the medical students, but only a small proportion of the students were willing to practise it. Palliative care and euthanasia should be a part of Behavioural Science module at the undergraduate level in both public and private medical schools.

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