ORIGINAL ARTICLE



ASSOCIATION OF ATTITUDES TOWARDS EUTHANASIA WITH RELIGIOSITY, EMOTIONAL EMPATHY AND EXPOSURE TO THE TERMINALLY ILL

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ABSTRACT

OBJECTIVES:

To analyze the association of attitudes of medical students towards euthanasia with religiosity, emotional empathy and exposure to the terminally ill.

BACKGROUND:

In recent years, there has been a persistent complicated argument over moral issues associated with Euthanasia. The difficulty is caused due to the role played by the medical practitioners when it comes to mercy killing. Euthanasia is termed active when a person is killed intentionally by performing an action such as by giving a lethal dose of injection and termed passive when intentionally causing death by removal of necessary life support.

DESIGN:

CROSS-SECTIONAL STUDY

PLACE AND DURATION OF STUDY:

This cross sectional study was undertaken at CMH Lahore medical and dental college from January 1st to February 1st, 2015.

SUBJECTS AND METHODS:

Medical students enrolled in first to fourth year of MBBS were included in this study through convenience sampling. The self-administered questionnaire consisted of three sections: demographics form, Euthanasia Attitude Scale, Multidimensional emotional empathy scale and OrthodoxyScale of Funk's Survey of Attitudes toward Religion and Philosophy of Life. Data were analyzed in SPSS v. 20.

RESULTS:

Multiple linear regression revealed that attitudes towards euthanasia are significantly associated with religiosity, year of study and exposure to critically ill patients (P < .05). While, emotional empathy was an insignificant predictor of EAS (P > .05)

CONCLUSION:

Attitudes towards euthanasia are significantly associated with religiosity, year of study and exposure to critically ill patients. It is a need of the hour to educate the general community as well as the medical fraternity regarding bioethical aspects of Euthanasia.

KEYWORDS:

Euthan asia, Attitudes, Legalization

INTRODUCTION:

Euthanasia is a very burning issue in medical ethics, public and legislative discussions. According to Borry et al's analysis on empirical researches published in bioethical journals (2006), euthanasia has been the most active area of research in contemporary bioethics. Euthanasia is termed active when a person is killed intentionally by performing an action such as by giving a lethal dose of injection and termed passive when intentionally causing death by removal of necessary life support.

In recent years, there has been a persistent complicated argument over moral issues associated with Euthanasia. The difficulty is caused due to the role played by the medical practitioners when it comes to mercy killing. Whether it's a physician or a patient, a medical student, a supporter or a nonsupporter of euthanasia, each believes that the medical practitioners or surgeons or the physicians are ethically responsible to keep their patients alive according to the historic ethical standards. A number of studies conducted globally reveal that attitudes towards euthanasia vary with sociocultural environment, religious beliefs, professions, age, liberty of one's views and it changes with time.3 According to Schioldborg P. et al,in comparison of age, youngsters are more positive towards euthanasia than elderly.4 In contrast of profession, general public & lawyers are in favor of euthanasia than medical fraternity.5 Very few personal wishes for euthanasia and a positive attitude was shown by critically ill patients. In a study conducted in four cities of Pakistan, assessing attitudes towards active form of euthanasia revealed that three quarter of the total student participants were against its legalization in Pakistan concerning its misuse by physicians and only a small percentage of respondents cited religious beliefs as a reason for their negative attitudes.7

According to Muslim Doctrine, sanctity of human life is very important and suicide is considered a "mortal sin", because it is objectively wrong, a sign of disappointment towards God and a threat to moral values. Based on rulings and Fatwas issued by various Muslim Scholars, active form of euthanasia is absolutely prohibited in the Sharia Law, however when medical treatment including artificial respirators are proven useless then it is futile to exert heroic efforts to keep the patient alive. However, psychological, social and spiritual support should be extended to the sufferer.

Status of euthanasia is being subjected to philosophical debate around the world. There is a proposal that the peak may shift from euthanasia to murder, and that by legalizing euthanasia, the poor, rejected and disabled will be highly affected. It may induce the insurance companies to end the lives of their customers in order to save money. These arguments are reinforced by the findings from a population based survey conducted in Belgium in 2007 which reported that 66 out of 142 patients were euthanized without an explicit request citing various reasons such as comatose state of the patient, dementia, best interest of the patient, insufferable pain, wish of the family, low quality of life and loss of dignity.

The debate on euthanasia arises more painful concerns relating to:

- -Would it ever be right to end the life of a patient who has been diagnosed with a mortal disease and is a subject to severe pain and suffering?
- -Under what terms and conditions can euthanasia be legitimate, if ever it will be!

Currently, several countries such as Netherlands, Belgium, Luxembourg and state of Washington, Oregon and Montana have legalized a form of euthanasia. In all these areas, special procedures were set up to avoid the abuse of legal status of euthanasia such as voluntary, written consent from the patient, reporting to authorities and second opinion from consultants such as psychiatrists for assessing the mental status of candidate but these safeguards are often ignored.¹⁰

The paucity of knowledge on attitude towards euthanasia, its legislation & its correlates in Pakistan warranted this study which has be designed with three aims: 1) to analyze association of demographics of medical students with attitude towards euthanasia 2) to analyze association of emotional empathy of medical students with attitude towards euthanasia 3) to analyze association of attitude towards euthanasia with religiosity of medical students

METHODOLOGY:

This cross sectional study was undertaken at CMH Lahore medical and dental college from January 1st to February 1st, 2015. Students from 1st year MBBS to 4th Year MBBS were included in this study and students from final year MBBS were excluded because their annual examination were scheduled during this period. The questionnaire consisted of three sections. The first section consisted of demographics section and several dichotomous (yes/no) questions assessing exposure to critically ill and rotation in palliative care/critical care departments. The second section consisted of euthanasia attitude scale (EAS). This scale enlists several scenarios regarding legal and ethical issues of both active and passive euthanasia with 4 point likert scale responses ranging from strongly agree to strongly disagree. This scale was standardized in American population and has excellent psychometric properties. 11It has also been used in various studies including predominantly Muslim countries such as Iran¹² and Hong Kong¹³ and South Africa.¹⁴ The EAS yields a total score ranging between 30 and 120, with scores ranging from 75 to 120 indicating positive attitude towards euthanasia and scores below 75 as indicate negative attitudes towards it.

Multidimensional emotional empathy scale devised by Caruso and Mayer was used to assess levels of emotional empathy in these students. This scale has been validated in American adults and adolescents and reports excellent psychometric properties (alpha reliability = 0.88). ¹⁵It assesses various facets of emotional empathy; "Suffering, Positive Sharing, Responsive Crying, Emotional Attention, Feel for Others, and Emotional Contagion". However, for purpose of analysis, a global score was used.

Religious orthodoxy of medical students was assessed with the OrthodoxyScale of Funk's Survey of Attitudes toward Religion and Philosophy of Life. This scale records responses on a 5 point Likert scale and yields a mean score showing the respondents' acceptance of religious teachings.

Sample size for analyzing associations of demographics, emotional empathy and funks orthodoxy scale with scores on Euthanasia Attitude Scale (EAS) was calculated using a computer software. The parameters used for calculating sample size for multiple linear regression were: 19 number of predictors, power (0.95), alpha error probability of 0.05 and an anticipated effect size of 0.15. Minimum sample size required was 172.

A total of 225 questionnaires were circulated among the students to ensure a good response percentage. Responding to this questionnaire tool approximately 15-20 minutes.

Data were analyzed in SPSS v. 20. Frequencies of categorical variables and mean scores on EAS, Multidimensional emotional empathy scale and Orthodoxy scale were recorded.

Point biserial correlation and multiple linear regression were employed to analyze association of variables with scores on Euthanasia attitude scale. Mean scores on orthodoxy scale were dichotomized as low (lower two quartiles) and high (upper two quartiles).

Normality of the data was assessed through histogram and Durbin Watson test, case wise diagnostics were run to ensure that all the assumptions for linear regression were met.

RESULTS:

Total response percentage was 190/225 (84.44%). There were 48 (25.26%) male and 142 (74.74%) females and most of the students belonged to 3rd year (76, 40%) followed by 2nd year (45, 23.68%), 1st year (45, 23.68%) and 4th year (24, 12.64%). Only 81 (42.63%) respondents had ever read articles or book chapters on euthanasia. A small percentage of students (53, 27.9%) had a relative or friend with a terminal illness and 101 (53.2%) had cared for terminally ill patients. Some students (24, 12.63%) were of the opinion that euthanasia is permitted in Islam and 53 (27.89%) were of the opinion euthanasia should be practiced in Pakistan.

According to Euthanasia attitude scale, 78 (41.05%) of the students had favorable attitudes towards euthanasia while others were against it. Point biserial correlation revealed that students who had rotated in a critical/palliative care department were more in favor of euthanasia. (r=-.149, P < .05). According to multiple linear regression, favorable attitudes towards euthanasia were associated with increasing professional year, decreasing scores on orthodoxy scale and positive answer to the question "is euthanasia permitted in your religion?" Detailed results are given in Table 1.

DISCUSSION:

This paper provides an insight on attitudes of medical students towards euthanasia and its association with emotional empathy and religiosity. According to our analysis, attitudes towards euthanasia varied with increasing year of study, exposure in a palliative care/critical care department and religiosity of the respondents. This is an important undertaking as effective policies and legislation regarding euthanasia should address attitudes, concerns and fears of the general public as well as the medical fraternity.

In present study, a high percentage of respondents (41%) were in favor of euthanasia which is in contrast to a previous study carried out at Ziauddin University and Dow University where only 14.2% students were in favor of euthanasia. The Similar figures highlighting negative attitudes towards euthanasia have been reported in other Islamic countries such as Sudan and Iran. It is interesting to note that a significant difference in attitudes of general community has been observed towards passive and active euthanasia with former eliciting rather positive attitudes. A multicenter study conducted in Malaysia revealed that more than half of the respondents were in favor of passive euthanasia.

However, in contrast to the Eastern world, a number of studies conducted in more developed countries have reported rather more positive attitudes towards Euthanasia for a number of reasons such as higher education levels and rise in secularism. A cross-country study conducted in 33 European countries revealed a recent increase in euthanasia acceptance with the highest acceptance in

Netherlands (6.68%) and the lowest in Malta (2.78 %).3 Pakistan nurtures a very unique socio-cultural environment and is home to a number of religious sects of Islam whose practitioners, stricken with poverty, low literacy levels, poor socioeconomic conditions and prevalent stigmas and stereotypes can nurture very complex belief systems. According to our analysis, religious orthodoxy was the strongest predictor of negative attitudes of medical students towards euthanasia. This is in consonance with Richardson's study who reported a significant association of strong religious beliefs with opposition to euthanasia. Similarly, Munn (1994) assessing Australian medical practitioners' attitudes towards euthanasia found religious values were a consistent barrier to the practice of euthanasia. A nationwide study conducted in Netherlands reported that respondents with higher education and no religious belief supported the notion of making their own end of life decisions.

In present study, increasing year of study and exposure to a palliative or critical care setting was associated with positive attitudes towards euthanasia. This might be due to the fact that students enrolled in higher clinical years and rotations in critical care settings have a better exposure and understanding of patients suffering from terminal illnesses.

It is also interesting to note that emotional empathy in medical students did not significantly predict any variation in attitudes towards euthanasia. However, empathy is a multidimensional construct. In our opinion, use of psychometric instruments assessing cognitive empathy might have yielded significant results. Our opinion is enforced by Van Tol's study on practice of Euthanasia in Netherlands who has reported that Dutch doctors follow "cognitive routes" such as "imagine self" and "imagine other" in assessing a

candidate for euthanasia.25

Only 41% of the respondents had read any article or book on euthanasia. Therefore, it is a need of the hour to improve the knowledge regarding euthanasia in general community and the medical fraternity as well.

LIMITATIONS:

The cross sectional design of this study limits causal and temporal association between the discussed variables. These questionnaires were self-administered which may contribute to information and recall bias. This study was based on a small sample size in one Pakistani medical school and therefore, its results cannot be generalized to whole medical student population of Pakistan.

CONCLUSION:

Attitudes towards euthanasia are significantly associated with religiosity, year of study and exposure to critically ill patients. It is a need of the hour to educate the general community as well as the medical fraternity regarding bioethical aspects of Euthanasia.

Table 1: Results of linear regression model for mean scores on Euthanasia Attitude Scale (EAS)

Predictors	В	Standard Error of B	Beta
Constant	91.976	11.735	
Gender of respondent	-1.136	2.157	038
Professional Year	1.928	.817	.164*
Have you ever read any article/book chapter on Euthanasia?	-1.783	1.812	068
Do you have a friend or relative as a terminally ill patient?	2.848	1.969	.100
Have you ever cared for the critically ill patient?	1.644	1.772	.063
Have you rotated in palliative care department?	-4.063	2.683	104
Is euthanasia permitted in your religion?	-7.757	2.682	198**
Multidimensional emotional empathy scale	.002	.063	.002
Background (rural/other)	3.410	3.117	.075
Orthodoxy scale	-7.420	1.826	285***

R2= .224, F= 5.169, P < .001

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^{*} denotes P < .05, ** denotes P < .01, *** denotes P < .001

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