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ASSOCIATION OFATTITUDESTOWARDSEUTHANASIA WITHRELIGIOSITY*I* EMOTIONALEMPATHY AND EXPOSURE TO THETERMINALLY ILL

# AHMED WAQAS, NOOR FATIMA, HANEEN WAJID LODHI, WAQAR SHAREEF, MAHAM ILAHI

CMH Lahore Medical College

## Corresponding Author Ahmed Waqas

Email: [ahmedwaqas1990@hotmaiI.com](mailto:ahmedwaqas1990@hotmaiI.com)

# 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 apersistent complicated argument over moralissuesassociated with Euthanasia.The difficulty iscaused due to the role played by the medical practitioners when it comes to mercy killing.Euthanasia istermed active when aperson is killed intentionally by performing anaction such asby givinga lethal dose of injection and termed passive when intentionally causing death by removal of necessary lifesupport.

**DESIGN:**

**CROSS-SECTIONALSTUDY**

**PLACE AND DURATION OFSTUDY:**

This cross sectional study was undertaken at CMH Lahore medical and dentalcollegefromJanuary 1sttoFebruary 1st,201S.

# 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 andOrthodoxyScale of Funk's Survey of Attitudestoward Religion and Philosophy of life.Data wereanalyzed in SPSSv. 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 < .OS). While, emotional empathy was an insignificant predictor of EAS(P> .OS)

# CONCLUSION:

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

# KEYWORDS:

Euthanasia,Attitudes,Legalization

# INTRODUCTION:

Euthanasia is avery 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 iskilledintentionally by performing anaction suchasby 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 anon­ supporter of euthanasia, each believes that the medical practitioners or surgeons or the physicians are ethically responsible to keeptheir patients alive according to the historic ethical standards. A number of studies conducted globally reveal that attitudestowards euthanasiavarywith sociocultural environment, religious beliefs,professions, age, liberty of one's views and it changes with time.' According to Schioldborg P. et al,in comparison of age, youngsters are more positive towards euthanasia than elderly.' In contrast of profession, general public & lawyers are in favor of euthanasia than medical fraternity.' Very few personal wishes for euthanasia and a positive attitude was shown by critically ill patients.'ln a study conducted in four citiesof Pakistan,assessing attitudes towards active formof euthanasiarevealedthatthreequarter of thetotaI student participants were against its legalization in Pakistan concerning its misuse by physicians and only a small percentageof respondents cited religiousbeliefs asareason for theirnegative attitudes.'

According to Muslim Doctrine, sanctity of human life is very important andsuicide isconsidered a "mortal sin",because it is objectively wrong,a sign of disappointmenttowardsGodanda threat to moral values.Based on rulings and Fatwas issued by various Muslim Scholars,active formof euthanasia isabsolutely prohibited in the Sharia Law,however whenmedical treatment including artificial respirators areproven uselessthen 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 froma 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,bestinterest of thepatient,insufferable pain,wish of the family,low qualityof lifeandlossof dignity.'

The debate on euthanasia arisesmorepainfulconcernsrelatingto:

-Would it ever be right to end the li'fe of a patient who has been diagnosed with amortal disease and is a subject to severe painandsuffering?

-Under what terms and conditions can euthanasia be legitimate,if everit willbe!

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 oftenignored."

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

2) to analyze association of emotional empathy of medical students withattitudetowards euthanasia 3)to analyze association of attitude towardseuthanasia withreligiosity of medical students

**METHODOLOGY:**

This cross sectional study was undertaken at CMH Lahore medical and dental college from January 1st to February 1st, 201S.Students from1st year MBBS to 4th Year MBBS were included in thisstudy 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."lt has also been used in various studies including predominantly Muslim countries such asIran" and Hong Kong"and South Africa." The EASyieldsa totalscore ranging between 30and 120, withscores 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)."lt 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 scorewasused.

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 scaleand yieldsa mean scoreshowing the respondents' acceptance of religiousteachings.

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 samplesizerequired was172.

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

Data wereanalyzed in SPSS v.20.Frequencies of categoricalvariables andmeanscores on EAS,Multidimensionalemotional empathy scale andOrthodoxy scale wererecorded.

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 forlinear regression weremet.

# 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 3rdyear (76,40%) followed by 2ndyear (45,23.68%), 1st year (45, 23.68%) and 4th year (24, 12.64%). Only 81 (42.63%) respondents hadever read articlesor book chapters on euthanasia. A small percentage of students(53, 27.9%) hada relativeor friendwith a terminal illness and101(53.2%) hadcared 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 shouldbepracticedin 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 rotatedin a critical/palliative care department were more in favor of euthanasia.(r=-.149,P< .OS). According to multiple linearregression, 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 resultsaregivenin Table1.



DISCUSSION:

This paper provides an insight on attitudes of medical students towards euthanasia and its association withemotional empathy and religiosity. According to our analysis, attitudes towards euthanasia varied with increasing year of study, exposure in a palliative care/critical caredepartment andreligiosity of therespondents. This is an important undertaking as effective policies and legislation regarding euthanasiashould addressattitudes, concerns andfears of thegeneral public aswellasthemedical fraternity.

In present study, a high percentage of respondents (41%) were in favorof euthanasia which isincontrast toapreviousstudycarriedout at Ziauddin University and Dow University where only 14.2% students were in favor of euthanasia." Similar figures highlighting negative attitudes towardseuthanasia 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 passiveeuthanasia."

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

Netherlands (6.68%) and the lowest in Malta (2.78 %).3 Pakistan nurtures a very unique socio-cultural environment and ishome 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 whoreported asignificant association of strong religiousbeliefs with opposition to euthanasia." Similarly, Munn (1994) assessing Australian medicalpractitioners' attitudestowardseuthanasia found religious values were a consistent barrier to the practice of euthanasia." Anationwide study conducted in Netherlands reported that respondents with higher education and no religious belief supported thenotion of makingtheirown endof lifedecisions"

In present study, increasing yearofstudy andexposure to apalliative or critical care setting was associated with positiveattitudestowards 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 terminalillnesses.

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,useof 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 foreuthanasia."

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 I:

Results of linear regression model for mean scores on Eurhanasia Attitude Scale (EAS)

|  |  |  |  |
| --- | --- | --- | --- |
| **Predictors** | **B** | **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 |
| **ls euthanasia pem1itted in your religion?** | -7.757 | 2.682 | -.198.. |
| **Multidimensional emotional empathy**  scale | ,002 | .063 | .002 |
| Background (rural/other) | 3.410 | 3.117 | .075 |
| Onhodoxy scale | -7.420 | 1.826 | -.285... |

R'= .224, F= 5.169, P *<* .001

\* **denoles P< .05, \*\* denotes P< .01,** \*\*\* **denorcs P< .001**

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