Attitude of the Nursing and Midwifery Students of Mazandaran University of Medical Sciences towards Euthanasia

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Abstract

Background: Euthanasia has been the most controversial topic for more than 3,000 years and is among important issues in medical ethics in today’s world, having something to do with the value system of human life.

Objectives: The aim of this study was conducted in Nasibeh Nursing and Midwifery Faculty of the city of Sari in 2016 to investigate attitudes of the senior students of nursing and midwifery towards euthanasia.

Methods: This descriptive study involved 200 senior college nursing and midwifery students (119 nursing and 81 midwifery students) of Nasibeh Nursing and Midwifery Faculty in the city of Sari, who participated on census sampling. The attitude of nurses and midwives was investigated through the Euthanasia Attitude Scale (EAS). To analyze the data, the distribution values, mean and SD were gained through descriptive statistics. To assess significant relationship between attitude to euthanasia and the integrated variables and the classified variables, Pearson linear correlation and Chi Square tests were used, respectively. Significant difference was considered with the P value less than 0.05.

Results: Mean total score of attitudes towards euthanasia was 58.43±12.80 and on the whole, 19.5% of the students had negative attitude, 69.5% had neutral attitude and 11% had positive attitude towards euthanasia. There was no significant relationship between the scores of the nursing and midwifery students’ attitude towards euthanasia and only the gender variable had significant relationship with scores of different classes of attitude towards euthanasia (p<0.05). Compared to the female students, male students were more positive towards euthanasia. Furthermore, reversed significant relationship was observed between age and the score of attitudes towards euthanasia (p<0.05).

Conclusion: There are many factors that can affect attitude of individuals on euthanasia. Results of presence student showed that though majority of the participants were neutral towards euthanasia, such factors as age and sex of individuals were among variables related to attitude towards euthanasia.

Keywords: attitude, euthanasia, nurses, midwives

Introduction

Advances in medical technology has not only resulted in considerable success in prolongation of man’s life but has also caused complicated social and moral issues concerning restricted medical interventions [1]. It’s important for people where and how to die and the most important issue in that respect is euthanasia [2]. Euthanasia is a Greek work: eu means good death and thana means easy death. In Persian it is known with
such words: Sweet death, mercy killing, killing patient with mercy, medical decisions concerning the end of life, quick death, good death and green death [3-5]. Euthanasia is purposeful life termination of the incurable patients [6]. It is classified into active, passive, voluntary, non-voluntary and involuntary euthanasia. Active euthanasia means a positive act out of mercy and kindness to end useless pain and suffering and meaningless existence. Passive euthanasia means cutting or not using necessary extraordinary measures for life preservation and prolongation. Voluntary euthanasia is when euthanasia is with the consent and request of the person concerned and non-voluntary euthanasia is without consent of the available individuals and involuntary euthanasia is when euthanasia is against the will and request of the individual [3,5].

Euthanasia is illegal in many countries and a few countries and provinces worldwide consider it as legal. Presently, Switzerland, Belgium, Luxemburg and the Netherland are the only countries whose law permit euthanasia [7-9]. Euthanasia covers many medical, moral, legal, personal, socio-cultural, humanity and religious issues [7,10]. The point which is growingly getting clear is that the attitude towards euthanasia is influenced by a number of the socio-psychological factors so much so that age, the American and African races and related religions are interested in having negative attitude towards euthanasia. Level of education and the socio-economic standings are proved to have positive relation with the kind of attitude towards euthanasia in general [1,9,11]. As for gender, different results have been reported but in general women are getting to show less welcome to euthanasia [1,12].

Nurses are one of the most important health and medication service groups, whose viewpoints on euthanasia is important [13,14]. Nurses have complicated role in serving the incurable patients and controlling their feelings on euthanasia. The factors which cause complications are as follows: Personal and ethical confrontations, hopelessness and fear [15]. Cultural and religious grounds are also important factors in shaping attitudes towards euthanasia [16,17]. A study in 2019 on stances of different religions towards euthanasia showed that patient’s consent and permission and/or presence of suffering and illness provide no legal or religious justification for others or the patient herself/himself to end his/her life and what has been forbidden by God will not be legitimate or Halal (religious allowed) on the patient’s consent. All the oriental or western religions oppose such justifications as sanctification of man’s life by active euthanasia and accept inactive euthanasia under special conditions [4].

The findings of studies in Belgium and Australia showed that majority of nurses there agree on legalization of euthanasia [18,19]. Such Asian countries as Japan and Malaysia, however, showed more negative attitude of nurses towards euthanasia: A review study showed that 49% of nurses had positive while 40% negative attitude towards it [20,21]. Sporadic studies have been done in Iran with different results. Mohammadi (2016) and Sanaizadeh (2019) showed that about 70 percent of students agreed with euthanasia [22,23], while results of certain other studies proved negative perception of students towards the issue [24-26] or their more neutral stance on it [27,28].

Limited number of such studies have been done in Iran, most of them dealing with the legal and ethical aspects of the issue [4,29-32], despite the fact that insight and awareness of the medical training and medication staff on euthanasia is of special importance. Regarding contradictory results of such studies done in Iran and in view of the existence of a gap in such studies in Mazandaran Province, this research is going to focus on the viewpoints of the senior nursing and midwifery students of Mazandaran University of Medical Sciences to euthanasia and related factors.

Methods
This study is descriptive-analytical in nature, conducted in Nasibeh Nursing and Midwifery Hospital in the city of Sari between November and December 2015 on the permission of the Ethics Committee of Mazandaran University of Medical Sciences. Regarding limited population under study, the sampling was done on census method, covering all intern students of nursing and midwifery.

The criteria for the participants were their being senior nursing and midwifery student and their consent to participate. The criteria for drop out was non-completion of the questionnaire and their
decision not to continue cooperation. To fill up the questionnaires, names of the students and the location they underwent practical term of study were obtained from the Education Department. After fully briefing them on goals of the study, getting informed consent from the participants and assuring them of confidentiality of their information, the questionnaires were put at their disposal. In this study, 212 people initially participated and 12 questionnaires were discarded for missing data. Participation in this study was fully voluntary and the results had no negative effect for the students.

To collect data, the demographic information and the Euthanasia Attitude Scale (EAS) were used. The scale included 20 question items that quarried attitudes towards euthanasia. The 20 questions fell within four categories, including the categories of “Ethical Consideration,” (questions 1-11) “Practical Consideration,” (questions 12-14) “Treasuring Life,” (questions 15-18) and “Naturalistic Beliefs” (questions 19 and 20). The responses given to the items are classified on five-point Likert-type of `Strongly disagree' (score 1) to `Strongly agree' (score 5) and the total scores given to responses to the questions vary between 10 and 100. The scale scoring procedure is as follows: The items are initially aligned and the reverse items receive score 1 for responses of `Strongly agree' and score 5 for `Strongly disagree.' After alignment of the reverse items with other items, the scores given to each of the four categories of the scale are estimated by obtaining the mean of the general score of the whole sub-scale items of the dimension (Total scores of each category or general score divided by number of the questions of that category or whole). Based on the range of the total score which is 1 to 5, score 3 is taken as the cutoff point and hence the obtained score 3 is regarded as neutrality of opinion on euthanasia. The below 3 scores are regarded as negative attitude and the scores above 3 are taken as positive attitude towards euthanasia.

Babaei et al. (2011) had checked validity and reliability of the Farsi copy of the instrument, whose translation and re-translation were then standardized. Finally, using Cronbach’s alpha formula of the instrument was proved to be 88% and internal consistency 56% [33].

For analysis of the data, descriptive statistics (mean, standard deviation and percentage) and Pearson’s linear correlation and Chi Square tests were used at less than 0.05 significant level in SPSS 18 software.

Results

A total of 119 nursing students and 81 midwifery students, falling within the age range of 21-45 and total mean of 23.79±4.08, took part in this study. Given that all midwifery students are female, thus, in general, 72% of participants were female and 28% were male; furthermore, 32% of the participants were married and 68% were single. Table 1 shows the demographic features of the midwifery and nursing groups of participants.

The EAS mean score of the participants was 58.43±12.80. On the whole, majority of the studies in this study had neutral stance on euthanasia. There was no significant difference (p=0.8) between the scores received from the perception of the nursing and midwifery students towards euthanasia and there was no significant relationship between the marital status of participants and their score of perception to euthanasia (p=0.7).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Nurse</th>
<th>Midwife</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>56(% 47/1)</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>63(% 52/9)</td>
<td>81(%100)</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>32(%26/9)</td>
<td>32(%39/5)</td>
</tr>
<tr>
<td>Single</td>
<td>87(%73/1)</td>
<td>49(%60/5)</td>
</tr>
<tr>
<td><strong>Mean Score of Euthanasia</strong></td>
<td>58/10±12/79</td>
<td>58/91±12/87</td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>22/78±2/35</td>
<td>25/26±5/44</td>
</tr>
</tbody>
</table>

Table 2 shows relationship between the demographic variables and the classes of attitude towards euthanasia. The variable of gender had significant relation with euthanasia (p= 0.047) to
the extent that compared to the female students, the male students were more positive towards euthanasia. The results of the coefficient of correlation between age and total score of euthanasia showed that there is significant reverse relationship between age and total score of euthanasia (p=0.02) to the extent that for each point of increase in age of the participants the total score of euthanasia will be decreased.

**Table 2: Relationship among Demographic Variables with Euthanasia Attitudinal Classes**

<table>
<thead>
<tr>
<th>Dependent Variable (Euthanasia Orientation)</th>
<th>Independent Variable</th>
<th>Unfavorable (Negative) Attitude Group</th>
<th>Moderate (Neutral) Attitude Group</th>
<th>Favorable (Positive) Attitude Group</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Sex</td>
<td>(%19/6)11</td>
<td>(%60/7)34</td>
<td>(%19/6)11</td>
<td>0/04</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>(%19/4)28</td>
<td>(%72/9)105</td>
<td>(%7/6)11</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>Marital Status</td>
<td>(%21/9)14</td>
<td>(%65/6)42</td>
<td>(%12/5)8</td>
<td>0/71</td>
</tr>
<tr>
<td>Single</td>
<td></td>
<td>(%18/4)25</td>
<td>(%71/3)97</td>
<td>(%10/3)4</td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>Education Major</td>
<td>(%20/2)24</td>
<td>(%68/1)81</td>
<td>(%11/8)14</td>
<td>0/85</td>
</tr>
<tr>
<td>Midwife</td>
<td></td>
<td>(%18/5)15</td>
<td>(%71/6)58</td>
<td>(%69/9)8</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows the frequency of the responses given by the participants to each item in the Euthanasia Attitude Scale (EAS) questionnaire. Since the questionnaires with missing data were discarded from this study, all the comment bearing items were registered. 19.5% of the students had negative attitude, 69.5% had neutral attitude and 11% had positive attitude. The percentages showed that majority of the students held neutral stances on the issue.

**Table 3: Frequency Percentage of Students’ Attitudes with Respect to EAS Questionnaire Items**

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A person with a terminal illness has the right to decide to die</td>
<td>14</td>
<td>21.5</td>
<td>13.5</td>
<td>32.5</td>
<td>18.5</td>
</tr>
<tr>
<td>2</td>
<td>Inducing death for merciful reason is wrong*</td>
<td>34.5</td>
<td>20.5</td>
<td>22</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>Euthanasia should be accepted in today’s society</td>
<td>16.5</td>
<td>23</td>
<td>21</td>
<td>24.5</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>There are never cases when euthanasia is appropriate*</td>
<td>17</td>
<td>21</td>
<td>21.5</td>
<td>27.5</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>Euthanasia is helpful at the right time and place (under the right circumstances)</td>
<td>12</td>
<td>15.5</td>
<td>20.5</td>
<td>31.5</td>
<td>20.5</td>
</tr>
<tr>
<td>6</td>
<td>Euthanasia is a human act</td>
<td>24</td>
<td>21.5</td>
<td>28</td>
<td>18</td>
<td>8.5</td>
</tr>
<tr>
<td>7</td>
<td>Euthanasia should be against the law*</td>
<td>15.5</td>
<td>15</td>
<td>33.5</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>8</td>
<td>Euthanasia should be used when the person has a terminal illness</td>
<td>15</td>
<td>16</td>
<td>14</td>
<td>39.5</td>
<td>15.5</td>
</tr>
<tr>
<td>9</td>
<td>The taking of human life is wrong no matter what the circumstances*</td>
<td>24</td>
<td>25</td>
<td>24</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>Euthanasia is acceptable in cases when all hope of recovery is gone</td>
<td>15</td>
<td>17</td>
<td>16</td>
<td>26.5</td>
<td>25.5</td>
</tr>
<tr>
<td>11</td>
<td>Euthanasia gives a person a chance to die with dignity</td>
<td>16</td>
<td>26.5</td>
<td>25</td>
<td>18.5</td>
<td>14</td>
</tr>
<tr>
<td>12</td>
<td>Euthanasia is acceptable if the person is old</td>
<td>23.5</td>
<td>36.5</td>
<td>18</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>13</td>
<td>If a terminally ill or injured person is increasing concerned about the burden that his/her deterioration of health has placed on his/her family, I will support his/her request for euthanasia</td>
<td>18.5</td>
<td>21.5</td>
<td>31.5</td>
<td>16.5</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>Euthanasia will lead to abuses*</td>
<td>23</td>
<td>29</td>
<td>24.5</td>
<td>11.5</td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>There are very few cases when euthanasia is acceptable*</td>
<td>14</td>
<td>33.5</td>
<td>21</td>
<td>17</td>
<td>14.5</td>
</tr>
</tbody>
</table>
Euthanasia should be practiced only to eliminate physical pain and not emotional pain

One’s job is to sustain and preserve life, not to end it*

One of the key professional ethics of physicians is to prolong lives, not to end lives

A person should not be kept alive by machine

Natural death is a cure for suffering*

*Reversed Score (ie, 1 = strongly disagree with euthanasia).

**Discussion**

This cross-sectional research had all the nursing and midwifery students within the age range of 21-45 as its participants. The results showed that the older the participants, the more significant their negative attitude towards euthanasia was. Naseh et al. (2018) confirmed findings of this study. The scholars conducted the study in Shahrekord on 143 participants, including 78 interns and 65 specialist physicians. The age range of the students was 24-28 and the mean age of the physicians was 43 [25]. Maleki (2019) had a study on 152 medical students in Mashhad and indicated reverse significant relation between euthanasia and age [10]. Other research, however, did not announce such a relationship between age and euthanasia [14,22,24,26,34, 35]. Taqdosinejad et al. studied physicians and patients and did not observe any significant difference between sex, marital and educational status and age of patients with attitude on euthanasia. Furthermore, no relationship was observed between age, sex, specialization, location of activity and job experience of physicians and their attitude towards conducting euthanasia [36].

Those studies, that reported results similar to this study’s findings, covered the participants whose age range represented early young age. Therefore, difference in results of this study with other studies can be due to difference in the target group under this study and higher mean age of the group as they were employed or educated in general and specialized medicine. It’s worth nothing that participants, falling within low age groups and having less professional experience, had more psychological sensitivities and consequently, had more negative attitude towards euthanasia or shortening life of the incurable patients.

This study showed that gender had significant relationship with euthanasia and statistical analysis showed that compared to the female students, male students were more positive towards the issue. Golestan (2019) reported similar result [34]. The study was done on 188 medical and paramedical students, falling within the age group of 21-25. Moreover, Kachoei et al. had a study on the intern students and those undergoing practical training, showing no significant relationship between the students’ attitude and their age. However, the mean score of the male students’ attitude towards euthanasia was significantly higher than that of the female students [37]. Many studies have not reported significant relationship between euthanasia and gender (10, 22, 24-26, 35).

Many studies proved there was no significant difference between the participating men and women in terms of their number. Men agreed to euthanasia more than women, which seems to be nature due to physiological differences of men and women in estimating the gains and loss of euthanasia. Due to their psychological delicacies and their more detailed attitude to ethics, women generally act more conservatively than men.

In this study, the mean total score of attitudes towards euthanasia was found to be 58.43±12.80, showing neutral attitude towards euthanasia and no significant relationship was observed in ratio of nurses and midwives to the classified score of attitudes towards euthanasia. Golestan (2019) and Hosseinzadeh (2017) revealed that majority of students had neutral attitude [28,34]. Mohammadi studied 150 and Maleki studied 152 medical students and both showed that majority of the participants had positive attitude. Maleki in his study said nearly half of the students agreed to passive euthanasia, 38% agreed to active and 30%
favored voluntary euthanasia. The results of Mohammadi’s study indicated that more than 70% agreed to the issue [10,22]. Many studies have also reported negative attitude of students to euthanasia [24-26,35]. Kachoie et al. also indicated that 50% of the participant students had negative attitude and 50% showed positive attitude to euthanasia. The highest portion, i.e. 28.6%, of the positive attitudes were towards passive and non-voluntary euthanasia [37]. A study in 2012 on 147 nursing students in Turkey found that 54.1% of the students claimed they were by no means ready to accept euthanasia personally and 45.9% expressed that they might accept it when suffering an incurable disease. Furthermore, 74.1% of the students opposed accepting euthanasia in the case of their friends or relatives under any condition and 25% held that they will accept it if their friends or relatives suffer incurable disease [38].

Literature review shows that medical students were the target group of the majority of the pro-euthanasia studies and compared to the nursing students, they had different educational approaches. Therefore, the points can be effective in difference of results of the studies. Cultural and ideological differences, educational branch of study and job experience, however, can be influential in different results gained from students’ attitude.

Religious beliefs have been among points assessed in many euthanasia studies. A study, conducted in 2009 to explore the attitude of nurses towards euthanasia and their role in its fulfilment, showed that 92% of the 3,321 participant nurses admitted that euthanasia is a breakthrough for patients or the incurable patients with distress and uncontrollable pain. Meanwhile, 57% of the group agreed on giving deadly medicine to the patients, who suffered the most and could not decide. The religious nurses, however, accepted euthanasia less than the non-religious nurses and compared to the male nurses, the female nurses were less interested in euthanasia [18]. Another study in four cities of Pakistan in 2011 asked 836 MSc/MA and higher level students of sciences and arts about their perception on euthanasia and 25.6% of them agreed legalization of euthanasia in Pakistan. The most frequent reason for their agreement on authorizing euthanasia was ending pain and suffering of the patient. Another study in Pakistan studied the attitude of medical students on euthanasia and its relationship with religion and emotional solidarity, showing that 41.05% of the students agreed to euthanasia and the rest opposed it. Attitude to euthanasia had significant relationship with religious beliefs [39]. A study in 2015 on attitude of the students of medical sciences and humanities showed that in general, the all the respondents’ perception on euthanasia was positive on the average. Medical students had more positive attitude towards euthanasia and religion served as an important factor, which significantly influenced attitude towards euthanasia [40]. A study on senior medical students in Sudan showed that 71.8% of them opposed euthanasia and 21.7% agreed to it. The reasons for their negative attitude were religious issues, ethical considerations and fear of abuse. However, the reason for their agreement was intolerable pain and suffering of the patient and respect for his/her dignity and request [41]. Religion could be a reason independent of age, sex and study major of the individuals under study, being a strong and deterrent factor in accepting euthanasia.

Among limitations of this study was failure to study perception of students to euthanasia in proportion to different types of euthanasia. Moreover, this study failed to question the role of factors related to the patient and his/her family like their consent, life quality of the patient, the extent of aggressiveness of the medication, medication cost, economic status and amount of family support for the patient. Therefore, future studies are suggested to consider the points and compare the viewpoints of the university instructors and students.

Different and contradictory attitudes of students, university instructors and the health-medication staff towards euthanasia showed absence of a definite executive directive which has resulted in bewilderment of the group. Therefore, refreshing courses and legal transparency of bylaws and updating statewide instructions and notices will help observation of the human rights of patients and check possible problems caused by such unawareness.
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Conflict of interest
There was no conflict of interest in the present study.

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