



A study to assess the knowledge and attitude on euthanasia among health care professionals

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Abstract

Background of the study: The knowledge and attitudes towards euthanasia among health care professionals will contribute to the core understanding on all the aspects of euthanasia which will ultimately contribute to the comprehensiveness in caring the chronically ill patients.

Aim: The main objective of the study was to assess the knowledge and attitude on euthanasia among health care professional.

Methods: A descriptive design with survey approach was used to assess the knowledge and attitude on euthanasia among health care professionals. Study was conducted at Theerthanker Mahaveer Hospital & Research Centre. 100 health care professionals were selected as a sample by Non-probability purposive sampling technique. The tools used to collect the data were Socio-demographic Performa, Structured knowledge questionnaire to assess the knowledge on euthanasia and Five point Likert attitude scale to assess the attitudes towards euthanasia. The method adopted to collect the data was self administered knowledge questionnaire and 5 point attitude scale.

Results: The collected data was analyzed through descriptive and inferential Statistics which revealed that the majority of respondents 57 (57%) were having adequate knowledge, 22 (22%) were having inadequate knowledge and 21 (21 %) were having moderately adequate knowledge on Euthanasia. Similarly majority of respondents 59 (59 %) were having Favourable attitude, 33 (33 %) were having moderately favourable attitude and only 8 (8%) of the respondents were having favourable attitude on Euthanasia. The correlation coefficient value is +0.150, which is shows that there is moderately positive correlation which indicates; when knowledge level of Health care professionals increases the attitude also becomes favorable on Euthanasia. The association between knowledge and attitude with selected demographic variables of Health care professionals using chi-square test revealed that there is a statistical significance between Knowledge score & the response to the Question: Have you heard about Euthanasia? However there was no statistical significant association was found between the knowledge score and other demographic variables of Health care professionals at 0.05 level of significance. Similarly there is a significant association found between the attitude score and Educational qualification of Health care professionals at 0.05 level of significance and no statistical association was found with other demographic variables.

Conclusion: The health care professionals having adequate knowledge and favourable attitude towards euthanasia but the unique influence of law and ethics have hindered them to practice euthanasia. There is broad scope of acceptance of euthanasia by the health care professionals but there is a need for research in larger scale.

Keywords: knowledge, attitude, euthanasia, health care professionals

1. Introduction

Human life and his death is the system of happening around him in other words live activities recorded by a individuals life in context to his environment. The context of life is living and acting to reach the destiny. Everybody have their own destiny while living but at the time of death the individual desires to live so destiny of everyone is to live or stay alive. But in some circumstances it overrides the fact that we desire to live and leads to accepting death and not desiring. So now it is a hotspot for discussion of euthanasia where every individual with the chronic illness, non-restorable functional loss like paralysis, coma, cancer, Aids, Hepatitis-B and other medical conditions or diseases will allow the individual to choose death or not as well as it is a myth for the medical professionals and the law makers ^[1].

The British House of Laws select committee on medical ethics defines euthanasia as "a deliberate intervention

undertaken with the express intention of ending a life, to relieve intractable suffering". In the nether lands, euthanasia means the doctor "terminating life based on the request of the patient, voluntary, non-voluntary, or involuntary are the types of euthanasia followed whereas in some countries voluntary euthanasia is but in U.S. states Non-voluntary euthanasia is illegal and considered murder As for good health other terms like positive health, optimum health and wellness are used for a good death the term Euthanasia was coined which is basically originated from Greek language meaning "well" or "good" "death" which refers to the practice of intentionally ending a life in order to relieve pain and suffering ^[2].

The word "euthanasia" was used by Francis Bacon in the 17th century in a medical field, to refer to an easy, painless, happy death, during which it was a "physician's responsibility to remove the 'physical sufferings' of the body." An "outward euthanasia"—the word "outward" is to differentiate from a

spiritual concept—the euthanasia "which regards the preparation of the soul said by Bacon^[3].

In recent years the approach to define euthanasia as the "painless inducement of a quick death". It is been described that the approach has deliberately failed to define euthanasia as it has left behind many possible ways that fulfill the requirements of the definition but cannot be seen as euthanasia. Specifically it includes the situations where a person kills painlessly another person without any personal gain in other way deaths caused by accident are quick and painless but they are not intentional. Dictionary of Oxford has defined euthanasia as "the painless killing of a patient suffering from an incurable and painful disease or in an irreversible coma", and this approach is seen as "a mode or act of inducing or permitting death painlessly as a relief from suffering^[2]"

A survey result of physicians belonging to United States among more than 10,000 approximately 16% of the physicians may consider life-sustaining therapy to be slowed because of the demands by the family. Whereas 55% of physicians will not, and the remaining 29%, may depend accordingly to the situations. This study also revealed that 46% of physicians agree to the statement that physician-assisted suicide should be allowed in few cases the rest 41% do not agree^[4].

In the Netherlands, after about 30 years of public debate euthanasia and physician-assisted suicide formally legalized in 2001. Since 1980s the Royal Dutch Medical Association and the country's judicial system the systems and instructions to controlling the euthanasia has been developed and adopted. After opposition Belgium has legalized the euthanasia in 2002 after being discussed in public about 3 years which included government commissions. In 2009 Luxembourg legalized euthanasia and physician-assisted suicide. Euthanasia is illegal by a person committing suicide with assistance until the assistant has no selfish motives as well as do not gain anything personally by the death^[5].

The Supreme Court of India on 7 March 2011 based on the case of Aruna Shanbaug legalized passive euthanasia by means of the withdrawal of life support to patients in a permanent vegetative state. The judgment for Aruna Shanbau being in vegetative state for 37 years at King Edward Memorial Hospital. She was working as a nurse in KEM Hospital at Mumbai on 27 November 1973 Sohanlal Walmiki a sweeper attacked and she was strangled with a chain leading to deprivation of oxygen had resulted in vegetative state ever. KEM hospital has treated and was kept alive by feeding tube. Pinki Virani a social activist filed a petition on behalf of Aruna, her friend in the Supreme Court arguing for the existence of Aruna in violation of the right to live in dignity. The court had rejected the request to discontinue Aruna's life support, but broad guidelines for legalizing passive euthanasia in India was issued for any such case. The high court firmly rejected active euthanasia by means of lethal injection^[6].

1.1 Need for the study

In America the total percentage of medical practitioners who supports Euthanasia is 54%, public who support euthanasia for the terminally ill or on life support is 86%. Average percent of terminally ill patients who die in pain is 55%, Total number who supported Euthanasia 42%.

In October 22nd 2015, 1001 Americans asked "Generally speaking, do you support or oppose legalizing euthanasia in the U.S.?" The among all 37% of them were disagreeing euthanasia 22% of them were unsure about euthanasia, 28% of them were strongly supporting for euthanasia, Total number who were moderately Supporting for euthanasia is 28%. 14% of them were moderately opposing for euthanasia. 23% of them were strongly opposing for euthanasia. 47% of democrats supports for euthanasia. 51% of Republicans opposes euthanasia^[7].

On July 11, 2012 A meta-analysis study on the practice of euthanasia and end-of-life practices in Netherlands Published by The Lancet which has stated that during 2010 by the comparison of previous studies from 1990 to 2005. The study revealed that in 2010 23% of all euthanasia deaths were not reported whereas the euthanasia deaths reported in 2010 were 3136 against the actual 3859 deaths and the deaths due to assisted suicide were 192. In 2011 alone 4770 assisted deaths occurred in Netherlands. It is important to realize that the number of reported euthanasia deaths in the Netherlands which has been increasing year by year as like 19% in 2010 and 13% in 2009^[8].

The decision on 7 March 2011 by the Supreme Court after the committee recommendations. The court rejected the request to discontinue Aruna's life support but issued a set of broad guidelines legalizing passive euthanasia in India⁶. The government has stated several drafts of Bills which is ready to frame a statutory law on passive euthanasia, the act of withdrawing medical treatment for causing death of a terminally-ill patient deliberately. The MHFW on January 28, 2016 in the Supreme Court filed affidavit which clarifies the stand of Government considering euthanasia as an act of mercy. The Ministry has clearly stated documents to the Supreme Court that the expert panel formed has made the necessary changes and accepted the structuring of legislation on passive euthanasia based on the debates in the past from July 2014 to June 2015.

Since February 2014 Constitution Bench of the Supreme Court with Health Ministry has seeked suggestions the Ministry of Law and Justice on the rightness of structuring the law for euthanasia. The Health Ministry said it was "prudent to stay its hands". The affidavit explained how the Government have contemplated euthanasia as an act of progressive medical science that will rehabilitate and treat patients. The doctors or physicians should accept the patient's wish to ovescome suffering seeking by wish to death and stated that "Death may be a fleeting desire arising out of transient depression"

The Supreme Court has framed the best possible guidelines permitting the passive euthanasia in the case of bed-ridden former Mumbai nurse Aruna Shanbaug who was taken care by the staff of KEM Hospital until her natural death occurred.

The Supreme Court guidelines led to on passive euthanasia in 2012. In the same consideration the specific Treatment for patients with terminal illness The Protection of Patients and Medical Practitioners Bill was discussed by law commission and the ministry has obtained the final draft of the Bill on first week of April 2014 and have started to look for the betterment of the law in the future^[9].

In 2013 Mr. Dennis Kumar, a porter belonging to

Kanyakumari district requested the collector of the district to grant permission for euthanasia for his infant son who had unknown disorder from birth as he had a feeling that euthanasia can only relieve both his son and him from the struggle but the court had rejected the plea similarly in 2008 Mr. Jeet Narayan of Mirzapur in Uttar Pradesh requested for euthanasia for his four sons who were paralyzed below the neck and bed ridden. The plea was written to President Pratibha Patil who rejected his plea and in the same year Dilip Machua, Jharkhand who was paralyzed following an accident pleaded for mercy killing which was rejected but Machua died later⁹. Similarly Acid attack victim Sonali Mukherjee has appealed to the Indian government for medical support or to be mercifully killed because she has hardly received any help - nine years after she was attacked ^[10]. Such crime against women has also influenced the victims to decide on death as the freedom for from their sufferings.

In a recent study among the 120 nurses in Flanders who have cared for the patients who received life-ending drugs without any concerned request. The Nurses being performing the euthanasia was found to be 12% of the cases whereas 45% of the cases without any consent. The physicians were absent in most of the cases. Factors that are associated with nurse being administering the life-ending drugs are nurse being a male and the patient aged over 80 years. The involvement of nurses major reason for concern in all the jurisdictions except Switzerland where the it is performed only by physicians ^[5].

The above facts and studies created an insight in the investigators mind that the knowledge and attitudes towards euthanasia among health care professionals will contribute to the core understanding on all the aspects of euthanasia which will ultimately contribute to the comprehensiveness in caring the chronically ill patients.

2. Materials and Methods

2.1 Research approach

In the present study a survey approach was used to assess the knowledge and attitude on euthanasia among health care professionals.

2.2 Research design

Descriptive design was adopted for the present study.

2.3 Setting of the study

The present study was conducted in Teerthanker Mahaveer hospital and Research Center at Moradabad.

2.4 Variables

2.4.1 Study variables

The study variables are knowledge and attitude on euthanasia among health care professionals.

2.4.2 Extraneous variables

In the present study the extraneous variables include age, sex, educational qualification, Experience of health care professionals, & response to the question; How did you come to Know about Euthanasia?

2.5 Population

The population of the present study comprises of all the health

care professionals working in Teerthankar Mahaveer Hospital & Research Center, Moradabad.

2.6 Sample

The sample of the present study includes health care professionals who fulfill the inclusion criteria.

2.7 Sample size

The sample size of the present study is N = 100.

2.8 Sampling technique

In the present study Non-probability purposive sampling technique was adopted to select the sample.

2.9 Criteria for selecting the sample

2.9.1 Inclusion criteria

1. Health care professionals working in the selected hospital.
2. Health care professionals who are present at the time of data collection.

2.9.2 Exclusion criteria

1. Health care professionals who are not willing to participate in the study.

2.10 Variables

1. Dependent variable

Knowledge and attitude on euthanasia among Health care professional.

2. Extraneous variable

Age, sex, educational qualification, sources of information, is the extraneous variables in this study.

2.11 Description of the tool used in the study

The tool was constructed exclusively by the investigator to assess the knowledge and attitude of health care professionals on euthanasia using the following tools: -

Tool – I: Socio-demographic data

Tool -II: Structured knowledge questionnaire

Tool -III: Five point Likert attitude scale

The investigator after an extensive review of literature, discussion with the experts and the investigators personal experience the items related to Socio-demographic data, Structured Knowledge Questionnaire, and Attitude (5 point) scale on on euthanasia was developed. The first draft of the Socio-demographic data, Structured Knowledge Questionnaire and attitude scale consisted of 5, 25 and 16 items was prepared and given to 05 experts from Nursing, and 3 experts from medical background to obtain content validity. Based on the pre testing and suggestions from expert's modifications and rearrangements of few items were done and the final tool was constructed by the investigator which consisted of Socio-demographic data, Structured Knowledge Questionnaire and attitude scale consisted of 5, 20 and 15 items

2.12 Method of data collection

In the present study self-administered knowledge questionnaire and 5 point attitude scale was the method adopted to collect the data.

2.13 Reliability

The pilot study was conducted on 10% of total sample that is 10 health care professionals from Sai hospital, Moradabad. The data collection was done between 3-09-15 to 04-09-15. The reliability of the tool is computed by using split half technique employing Kadar Richardson (KR 20) formula. The reliability value for knowledge and attitude questionnaire based on the analysis was 0.8 and 0.7. So the tool was found to be reliable and the same was used for final study.

2.14 Pilot study

The investigator after obtaining formal Permission from Medical Superintendent, Sai Hospital, Moradabad and conducted pilot study between 3-09-15 to 04-09-15 among 10 subjects selected by non-probability purposive sampling technique. The investigator given self-introduction explained the purpose of the study and the written consent was obtained from the subjects. The data is collected from the sample by using structured tools and descriptive and inferential statistics was used for analysis of data. The reliability value for structured knowledge questionnaire was $r = 0.79$ & for attitude was $r = 0.7$. Hence the tool was found to be feasible for the main study.

2.15 Data collection procedure

The investigator after obtaining formal Permission from Medical Superintendent Theerthanker Mahaveer Hospital & Research Centre, and conducted the data collection of the main study from 20.10.15 to 10.11.15 among 100 subjects who were selected by non-probability purposive sampling technique. Tools were administered to the subjects and collected the data.

2.16 Data analysis method

The collected data was analyzed through descriptive and inferential Statistics.

Descriptive Statistics

Frequency, percentage, mean and standard deviation has been used to describe Demographic variables, level of knowledge and attitude scores.

Inferential Statistics

The Karl Pearson co-efficient correlation for r-value. Chi square test was used to find out the association between knowledge and Attitude score on euthanasia among health care professionals with their selected demographic variable.

3. Results & Discussion

3.1 Results

The data were analyzed according to the objective of the study. The data were, organized and tabulated on the master sheet and interpreted by using descriptive and inferential statistics and was analyzed as per the objectives of the study.

3.2 Objectives of the study

1. To assess the knowledge and attitude on euthanasia among health care professional.
2. To find the correlation between knowledge and attitude on euthanasia among health care professionals.
3. To associate the knowledge on euthanasia among health care professionals with their selected demographic variable.
4. To associate the attitude on euthanasia among health care professionals with their selected demographic variable.

A master sheet was prepared and the scoring is entered for analysis. The data findings have been organized and finalized according to the plan for data analysis and presented under the following sections:

3.3 Section A: Description of demographic variables of Health Care Professionals.

3.4 Section B: Distribution of Knowledge level on Euthanasia among Health Care Professionals.

3.5 Section C: Distribution of Attitude level on Euthanasia among Health care Professionals.

3.6 Section D: Correlation between Knowledge and attitude on Euthanasia among Health care Professionals.

3.7 Section E: Association between knowledge levels on Euthanasia among Health Care Professionals with their selected demographic variables.

3.8 Section F: Association between attitude on Euthanasia among Health Care Professionals with their selected demographic variables.

3.9 Section V: Testing of hypothesis

Hypotheses

- H₁ - There is a significant relationship between knowledge and attitude on Euthanasia among Health care professionals
 H₂ - There is a significant association between knowledge and attitude score with their selected demographic variable.

3.3 Section A: description of demographic variables of health care professionals

Table 1: Frequency and percentage distribution of Demographic variables

S. No	Demographic Variables	f_x	%	
1	Age in Years	20-25	54	54
		26-30	26	26
		31 – 35	12	12
		36 & above	8	8
2	Sex	Male	64	64

		Female	36	36
2	Educational qualification	Diploma	42	42
		Graduate	35	35
		Post Graduate	21	21
		PHD/Doctoral	2	2
4	Experience in Years	0-5	83	83
		06-10	11	11
		11 & above	6	6
5	Have you heard/read about Euthanasia	Yes	85	85
		No	15	15
6	If Yes: How did you come to Know about Euthanasia? Through	Colleague	1	1
		Friends	2	2
		News paper	11	11
		Part of studies	34	34
		Television	37	37

N = 100

Table: 1 revealed that majority of 54 (54%) of Health Care Professionals are aged between 20 – 25 years and 26 (26%) of them aged between 26 – 30 years followed by 12 (12 %) of them between 31-35 years and rest 8 (8%) of them were 36 and above years.

Regarding sex, 64 (64%) of health care professional where Males and the rest 36(36%) were Females.

Regarding educational qualification majority i.e. 42 (42%) of them had Diploma in different disciplines, and 35 (35%) of them where graduates followed by 21(21%) where Post Graduates and the rest 2 (2%) were PhD/Doctoral Degree Holders.

About the Experience of Health Care Professionals majority i.e. 83 (83%) had 0 – 5 years of Experience, 11 (11%) of them had 6 – 10 years whereas 6 (6%) of them had 11 & above Years of Experience.

Among the 100 Health Care professionals 85 (85%) of them heard about Euthanasia out of this majority of them 37 (37%) heard through Television, 34 (34%) through Part of studies, 11 (11%) through News Paper, 2 (2%) by friends 1 (1%) by Colleagues and the rest 15 (15%) of them did not hear about Euthanasia.

3.4 Section B: distribution of knowledge level on among health care professionals

Table 2: Frequency and percentage distribution of Knowledge Level among Health care Professionals

S. No	Knowledge level	Respondents	
		f_x	%
1	Inadequate Knowledge	22	22
2	Moderately adequate Knowledge	21	21
3	Adequate Knowledge	57	57

N=100

The above table depicts that the majority of respondents 57 (57%) were with adequate knowledge, followed by 22 (22%) inadequate knowledge and 21 (21 %) moderately adequate knowledge on Euthanasia.

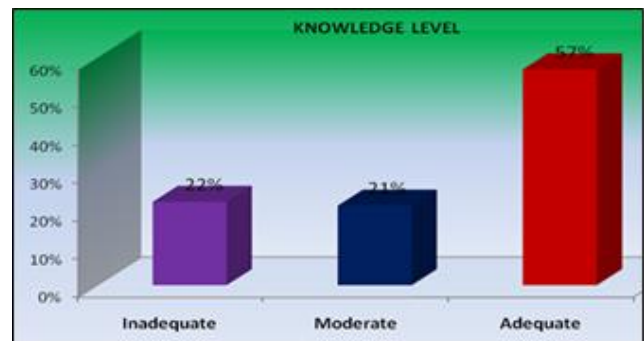


Fig 3: Knowledge level on euthanasia among health care professionals

3.5 Section C: Distribution of attitude scores on euthanasia among health care professionals.

Table 3: Frequency and percentage distribution of attitude scores on Euthanasia among Health Care Professionals. N=100

S. No.	Attitude level	Respondents	
		f_x	%
1	Unfavorable attitude	8	8
2	Moderately favorable attitude	33	33
3	Favorable attitude	59	59

The above table depicts that the majority of respondents 59 (59 %) were having Favorable attitude, 33 (33 %) were having moderately favorable attitude and only 8 (8%) of the respondents were having unfavorable attitude on Euthanasia.

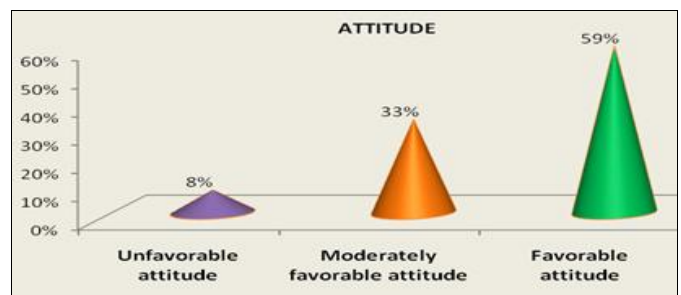


Fig 4: Attitude on euthanasia among health care professionals

3.6 Section D: Correlation between knowledge and attitude on euthanasia among health care professionals.

Table 4: Correlation of knowledge and attitude on Euthanasia among Health Care Professionals. N=100

S. No	Aspects	Respondents			Correlation coefficient (r) Value
		Mean	SD	Mean %	
1	Knowledge	12.07619	3.475	60.38	+0.150
2	Attitude	16.92798	4.1143	22.57	

The above table reveals that the mean percentage of

knowledge is 60.38% with standard deviation of 3.475 whereas the mean percentage of attitude is 22.57% with standard deviation of 4.1143 respectively.

The correlation coefficient value is +0.150, which shows that there is moderately positive correlation which indicates; as knowledge level of health care professionals increases the attitude becomes favorable on Euthanasia.

3.7 Section E: association of knowledge level on euthanasia among health care professionals.

Table 5: Association of Knowledge Level on Euthanasia among Health Care Professionals with their selected Demographic N=100

S. No.	Demographic Variables	Inadequate		Moderate		Adequate		χ^2
		f	%	f	%	f	%	
1	Age of Health care professionals							
	20 to 25 Years	16	16	11	11	27	27	6.76**
	26 to 30 Years	5	5	3	3	18	18	
	31 to 35 Years	1	1	4	4	7	7	
	Above 35 Years	0	0	3	3	5	5	
2	Sex							
	Male	14	14	10	10	40	40	3.39**
	Female	8	8	11	11	17	17	
3	Educational qualification							
	Diploma	6	6	10	10	26	26	12.40**
	Graduate	14	14	8	8	13	13	
	Post Graduate	2	2	3	3	16	16	
	PHD/Doctoral	0	0	0	0	2	2	
4	Experience in years							
	0 – 5	22	22	15	15	46	46	8.02**
	6 – 10	0	0	3	3	8	8	
	Above 10	0	0	3	3	3	3	
5	The Response to the question : Have You Heard about Euthanasia							
	YES	12	12	19	19	54	54	17.69*
	NO	10	10	2	2	3	3	

*Significant
** Non-Significant

The above table depicts that there is a statistical significance between Knowledge score & the response to the Question: Have you heard about Euthanasia. However there was no statistical significant association was found between the

knowledge score and other demographic variables like age, sex, educational qualification & experience of Health care professionals at 0.05 level of significance.

3.8 Section F: Association of attitude on euthanasia among health care professionals with selected demographic variables.

Table 6: Association of Attitude on Euthanasia among Health Care Professionals with their selected Demographic Variables N=100

S. No	Demographic Variables	Unfavourable		Moderately favourable		Favourable		χ^2
		N	%	N	%	N	%	
1	Age of Health care professionals							
2	20 to 25 Years	3	3	21	21	30	30	6.8**
	26 to 30 Years	2	2	7	7	17	17	
	31 to 35 Years	3	3	3	3	6	6	
	Above 35 Years	0	0	2	2	6	6	
2	Sex							
	Male	7	7	17	17	19	19	4.52**
	Female	1	1	16	16	40	40	
3	Educational qualification							
	Diploma	1	1	14	14	27	27	14.87*
	Graduate	2	2	12	12	21	21	
	Post Graduate	5	5	6	6	10	10	
	PHD/Doctoral	0	0	0	0	2	2	

4	Experience in years							
	0 – 5	5	5	29	29	49	46	3.18**
	6 -10	2	2	3	3	6	8	
	Above 10	1	1	1	1	4	3	
5	The Response to the question : Have You Heard about Euthanasia							
	yes	8	8	27	27	50	50	1.68**
	no	0	0	6	6	9	9	

*Significant

** Non-Significant

The above table depicts that based on the chi-square value there is a significant association found between the attitude score and Educational qualification of Health care professionals at 0.05 level of significance and no statistical association with other demographic variables like age, sex, Experience & the response to the question: Have you heard about euthanasia at 0.05 level of significance.

3.9 Section V: Testing of hypothesis

The hypotheses were tested at 0.05 level of significance.

H₁ -There is a significant relationship between knowledge and attitude on Euthanasia among Health care professionals.

The correlation coefficient value is +0.150, which shows that there is moderately positive correlation which indicates that when knowledge level of health care professionals increases the attitude becomes favorable on Euthanasia. Hence the stated hypothesis H₁ - There is a significant relationship between knowledge and attitude on Euthanasia among Health care professionals is accepted.

So it is evident that if the knowledge of the Health care professionals is improved then it influences the attitude.

H₂ – There is a significant association between knowledge and attitude score with their selected demographic variable.

The analysis was done for association between knowledge and attitude with selected demographic variables of Health care professionals using chi-square test. Which revealed that there is a statistical significance between Knowledge score & the response to the Question: Have you heard about Euthanasia? However there was no statistical significant association was found between the knowledge score and other demographic variables like age, sex, educational qualification & experience of Health care professionals at 0.05 level of significance.

Hence the stated hypothesis H₂ - There is a significant association between knowledge score with selected demographic variables on Euthanasia among Health care professionals is accepted only for the response to the Question: Have you heard about Euthanasia and rejected for rest of the demographic variables and rejected for the rest of the demographic variables.

3.10 Discussion

The first objective was to assess the knowledge and attitude on Euthanasia among Health care professionals.

The majority of respondents 57 (57%) were having adequate knowledge, 22 (22%) were having inadequate knowledge and 21 (21 %) were having moderately adequate knowledge on Euthanasia.

Similarly majority of respondents 59 (59 %) were having Favorable attitude, 33 (33 %) were having moderately

favorable attitude and only 8 (8%) of the respondents were having unfavorable attitude on Euthanasia.

Similarly a study conducted by Ashley Elizabeth Verghese Prince Mathew, Ronald Salins et.,al (2014) showed that, 62.5% of the nursing and LLB students had good knowledge on euthanasia and 65% of the nursing students and 57.5% of the LLB students were favouring euthanasia respectively.

The second objective was to find out the co-relation between knowledge and attitude on Euthanasia among Health care professionals.

The correlation coefficient value is +0.150, which shows that there is moderately positive correlation which indicates that when knowledge level of health care professionals increases the attitude becomes favorable on Euthanasia. Hence the stated hypothesis H₁ - There is a significant relationship between knowledge and attitude on Euthanasia among Health care professionals is accepted.

So it is evident that if the knowledge of the Health care professionals is improved then it influences the attitude.

The third objective was to find out the association between knowledge scores on Euthanasia among Health care professionals with their selected demographic variables.

The analysis was done for association between knowledge and attitude with selected demographic variables of Health care professionals using chi-square test. Which revealed that there is a statistical significance between Knowledge score & the response to the Question: Have you heard about Euthanasia? However there was no statistical significant association was found between the knowledge score and other demographic variables like age, sex, educational qualification & experience of Health care professionals at 0.05 level of significance.

Hence the stated hypothesis H₂ - There is a significant association between knowledge score with selected demographic variables on Euthanasia among Health care professionals is accepted only for the response to the Question: Have you heard about Euthanasia and rejected for rest of the demographic variables and rejected for the rest of the demographic variables.

The fourth objective was to find out the association between the attitude on Euthanasia among Health care professionals with their selected demographic variable.

The analysis with the chi-square value it was revealed that there is a significant association found between the attitude score and Educational qualification of Health care professionals at 0.05 level of significance and no statistical association was found with other demographic variables.

Hence the stated hypothesis H₂- There is a significant

association between attitude score with selected demographic variables on Euthanasia among Health care professionals is accepted only for Educational qualification and rejected for rest of the demographic variables.

4. Conclusions

The major findings of the study majority of 54 (54%) of Health Care Professionals are aged between 20 – 25 years and 26 (26%) of them aged between 26 – 30 years followed by 12 (12 %) of them between 31-35 years and rest 8 (8%) of them were 36 and above years.

Regarding sex, 64 (64%) of health care professional were Males and the rest 36 (36%) were Females.

Regarding educational qualification majority i.e. 42 (42%) of them had Diploma in different disciplines, and 35 (35%) of them were graduates followed by 21 (21%) were Post Graduates and the rest 2 (2%) were PhD/Doctoral Degree Holders.

About the Experience of Health Care Professionals majority i.e. 83 (83%) had 0 – 5 years of Experience, 11 (11%) of them had 6 – 10 years whereas 6 (6%) of them had 11 & above Years of Experience.

Among the 100 Health Care professionals 85 (85%) of them Heard about Euthanasia out of this majority of them 37 (37%) heard through Television, 34 (34%) through Part of studies, 11 (11%) through News Paper, 2 (2%) by friends 1 (1%) by Colleagues and the rest 15 (15%) of them did not hear about Euthanasia.

The majority of respondents 57 (57%) were having adequate knowledge, 22 (22%) were having inadequate knowledge and 21 (21 %) were having Moderately adequate knowledge on Euthanasia.

Similarly majority of respondents 59 (59 %) were having Favorable attitude, 33 (33 %) were having moderately favorable attitude and only 8 (8%) of the respondents were having favorable attitude on Euthanasia.

The mean percentage of knowledge is 60.38% with standard deviation of 3.475 whereas the mean percentage of attitude is 22.57% with standard deviation of 4.1143 respectively.

The correlation coefficient value is +0.150, which shows that there is moderately positive correlation which indicates; when knowledge level of family members is inadequate the attitude also becomes unfavorable on Euthanasia.

The analysis was done for association between knowledge and attitude with selected demographic variables of Health care professionals which revealed that there is a statistical significance between Knowledge score & the response to the Question: Have you heard about Euthanasia. However there was no statistical significant association was found with rest of the demographic variables at 0.05 level of significance.

Similarly there is a significant association found between the attitude score and Educational qualification of Health care professionals at 0.05 level of significance and no statistical association was found with other demographic variables.

4.1 Nursing implications

4.1.1 Nursing education

The nursing students should be made aware of euthanasia and their role in protecting the rights of the clients and their family as well as the law applicable. As they are playing the role of

administering the drugs prescribed by the doctors it's a great deal to understand and know the result of the act of administering the drugs prescribed. So it is necessary to prepare a curriculum to discuss in depth about the euthanasia.

4.1.2 Nursing practice

Nurses are skilled to administer medications in all routes parenteral and others both invasive and Non-invasive. Some of the international research states nurses are instructed to administer lethal medicines for euthanasia. So it is necessary to impart knowledge about laws related to euthanasia and medicines used for the same. It is critical that nurses may end up as victim of committing crime.

Nurses provide expert care throughout life's continuum and at end of life in managing the bio psychosocial and spiritual needs of patients and families both independently and in collaboration with other members of the inter-professional healthcare team While resources do exist to educate and support nurses in this role, there are limited resources to assist nurses in understanding and responding to patient and family questions related to euthanasia and assisted suicide.

4.1.3 Nursing administration

The nurse as an administrator can organize and conduct teaching programs for nurses at the hospital about euthanasia and the situations to be handled effectively in such consequences. The administration can create a guidelines and the process of approaching the law in case of such demands by the client or the family members for euthanasia.

4.1.4 Nursing research

Research provides nurses credibility to influence decision making, policy and protocol formulation regarding euthanasia. There is wide range of research and exploration required in the field of euthanasia. In India since it is not legalized lot more to be done to conclude on euthanasia which is possible only through research.

4.2 Recommendations

1. The study can be replicated on large samples in different settings.
2. A comparative study can be done between Nurses and Doctors.
3. A comparative study can be done between Health care professionals and Non-Health care Professionals.
4. A comparative study can be done between Health care professionals and Law Makers.
5. A study can be done to assess the effectiveness of structured teaching program on Euthanasia for Health care professionals.
6. A study can be done to assess the effectiveness of structured teaching program on Euthanasia for Nurses & Nursing students.

4.3 Limitations

1. The study was limited to the health care professionals of Moradabad.
2. The study was limited to specific dimensions of knowledge and attitude on Euthanasia.

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