

Evaluation of Knowledge and Attitudes toward Euthanasia between Physicians and Caregivers

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Objective: This study aimed to estimate the knowledge of the legal regulation of euthanasia and painless death among terminally ill patients, their caregivers, and attending physicians.

Methods: The study was conducted using an analytical survey design and evaluated by a questionnaire of the target sample group. **Results:** According to the patient's age group, those under 49 were most likely to support euthanasia at 93.1%, and those over 50 were 73.3%. Furthermore, 87.5% of those who said they had financial problems, 91.7% of those who said they had long queues at the hospital, difficulty in getting medical care, 66.7% of those who said they were bedridden or had a lot of pain, and 100% of those who said they would have mental depression or other problems were in favor of euthanasia. In the physicians, 96.6% of the doctors who participated in the study said they knew about euthanasia, 100% of those who believed that euthanasia was ethical and knew the types of euthanasia, and 95% of those who thought that there were ethical differences in the types of euthanasia, supported euthanasia. **Conclusion:** Our study demonstrated that caregivers generally support the legalization of euthanasia. 70.8% of those who said that euthanasia could be performed by medical indications, 79.2% of those who said that it could be performed at the request of the patient, 54.2% of those who said that it could be performed at the request of the family of a patient without legal capacity, and 35.4% of those who said that it could be performed at the request of a treating physician tended to support euthanasia.

Keywords: Active Euthanasia, Human Rights, End-Of-Life Care, Assisted Suicide, Right to Die

Introduction

Health has been a significant field of interest for societies throughout time, as health refers to people's overall well-being and welfare, which directly relates to their level of happiness and satisfaction [1]. As a normal response to this fact, sciences concerning human health and curation, be it physical or psychological, have evolved, branched, and expanded at a significant pace [2]. What concerns humanity regarding this evolution is the number of newly discovered measures taken as

a facing strategy and their types. Over time, people started to develop the idea of ending suffering no matter what the cost might be, and as a result, the concept of Euthanasia evolved [3].

Define Euthanasia; it is the act of ending an individual's life by a doctor who has legal consent to undertake such an act and is requested to do so by the person whose life was completed in the most painless way possible. The term Euthanasia came originally from the Greek words EU, which means good, and

THANATOS, which implies death; combined, they mean excellent death [4]. Euthanasia was first practiced in ancient Greece and Rome, where people had no significant reaction towards Euthanasia, infanticide, and suicide [5]. Life was not such a critical issue to these two societies, and pagans performed many life-ending operations, such as abortion and mercy killing. During antiquity, the choice for life termination was entirely facilitated by physicians complying with their patient's requests and handing them life-ending substances. Netherlands, Belgium, Luxembourg, Colombia, and Canada have legally accepted euthanasia presently [6]

A few studies characterized the 7 patients who were granted legalized assistance in death in Australia and 43 cases of legalized physician-assisted suicide in the region [7-9]. Also, some of the studies showed attitudes and practices regarding euthanasia in those persons who were diagnosed with cancer, human immunodeficiency virus (HIV) infection, and amyotrophic lateral sclerosis. These studies demonstrated that more than 70% of euthanasia and physician-assisted suicide cases involve cancer patients. Blendon et al. show that 60.2% of terminally ill patients supported permitting euthanasia in the abstract situation [9]. Emanuel et al. noted that of the patients who survived and were reinterviewed, 54.8% supported euthanasia for terminally ill patients experiencing unremitting pain. In comparison, 32.7% supported euthanasia for terminally ill patients without pain who felt they were a burden [8].

Historically, Samuel Williams, a non-physician, proposed the use of morphine to end a patient's life in 1870. Hippocrates – who is given the name The Father of Medicine- had an opposing opinion to this activity; he made an oath that prohibits anyone who makes it from giving a lethal dose of substance to anyone, even if with a request [10]. However, his oath was not followed by many physicians during that time. Euthanasia is a complex concept that includes ethical, medical, jurisprudential, religious, and customary norms as a multifaceted form of social relations. There are no provisions prohibiting euthanasia in the health law and other medical-legal acts of Mongolia, and the right to refuse treatment is openly regulated. Still, from the point of view of the criminal law of Mongolia, euthanasia is prohibited by criminal law. Mongolia, by Order No. 406 of the Ministry of Health dated September 04, 2019, includes the right of the client to refuse treatment and services [11]. Our research's basis was assessing the knowledge of legal regulation among patients, their caregivers, doctors, and students.

Since no such study has been conducted before, we intend to conduct this study because there has yet to be any comprehensive medical and legal survey to determine the knowledge and attitudes of physicians and caregivers of patients about the legal environment. Furthermore, palliative care has been developed in Mongolia for 20 years, which can relieve pain and other issues, making patients and their families not seek decline treatment [11]. On the other hand, developing a democratic society raises the issue of human rights at a time when human rights issues are on the rise. This study aimed to estimate the knowledge of the legal regulation of euthanasia and painless death among terminally ill patients, their caregivers, and attending physicians.

Materials and Methods

Study design and data collection

This is a descriptive cross-sectional study on the estimation of knowledge and attitudes regarding euthanasia among physicians and caregivers in Mongolia. The study was based on voluntary data from 120 caregivers and 47 physicians using standard questionnaires. The target group of the study was selected from surveillance doctors of the Intensive Care, Surgery, and Palliative Care Units of the National Cancer Center, National Trauma and Orthopedic Research Center, First Central Hospital of Mongolia, Second Central Hospital of Mongolia, Third Central Hospital of Mongolia, Central Hospital of Military and the doctors from National Center for infectious diseases Green Home Hospice, Brilliant Hospice, and Naidvar Hospice.

Statistical Analysis

Statistical analysis was performed using SPSS 25.0 (IBM Corporation, Armonk, NY, USA). A p-value of < 0.05 was regarded as significant, and all statistical tests were two-sided. Categorical variables were expressed using frequencies and percentages. Fisher's exact test was used to determine the differences between the categorical responses of the doctors and caregivers.

Ethical Statement

Bioethical permission for research is given by the protocol of the Biomedical Ethics Committee of Mongolian National University of Medical Sciences, June 14, 2019 (Number of ethics permission: 14/6/2019. 2019/3-07).

Results

Results of the questionnaire from the caregivers and patients

Out of the 75 individuals who participated in this study, 89.5% in the 30-39 age group and 88.2% in the 40-49 age group supported euthanasia. In the 30-49 age group, the tendency to support euthanasia was the highest, which was 88.8%. Gender proportion was equal in this group. The closer the person, wife, husband, son, daughter, sister, or brother,

caring for the patient is, the more likely to support euthanasia. And the average is 83.7%. As household income increases, the tendency to support euthanasia also increases. 100% of those who answered that they face financial difficulties, there are long queues at the hospital, it is difficult to get medical care, and other challenges, and 75% of those said that it is difficult to care for them and that the conditions of care are poor, supported euthanasia (Table 1).

Table 1. Socia-demographic characteristics of the caregivers

Indicator	Total	Supported		Prohibited		P value
	n	n (%)	95% CI.	n (%)	95% CI.	
Age						
<49	52	44 (84.6)	73.1 - 92.4	8 (15.4)	7.6 - 26.9	0.350
>50	24	18 (75.0)	55.5 - 88.8	6 (25.0)	11.2 - 44.5	
Gender						
Male	22	18 (81.8)	62.4 - 93.5	4 (18.2)	6.5 - 37.6	0.973
Female	54	44 (81.5)	69.6 - 90.1	10 (18.5)	9.9 - 30.4	
Religion						
Buddhism	57	48 (84.2)	73.2 - 91.9	9 (15.8)	8.1 - 26.8	0.320
Other	19	14 (73.7)	51.6 - 89.2	5 (26.3)	10.8 - 48.4	
Caregivers						
Husband/ wife	25	22 (88.0)	71.3 - 96.5	3 (12.0)	3.5 - 28.7	0.366
Others	51	40 (78.4)	65.8 - 88.0	11 (21.6)	12.0 - 34.2	
Income						
<1'000'000₮	43	34 (79.1)	65.3 - 89.1	9 (20.9)	10.9 - 34.7	0.566
>1'000'001₮	33	28 (84.8)	69.9 - 94.0	5 (15.2)	6.0 - 30.1	
Total	76	62 (81.6)	71.8 - 89.0	14 (18.4)	11.0 - 28.2	

Fisher's exact test

100% of those who had a poor prognosis, incurable disease, and who had heard about euthanasia before, 93% of 57 people who said euthanasia was ethically compatible, and 47.4% of 19 people who were not compatible supported euthanasia. 84.2% of Buddhists, 100% of Shamanists and Christians, and 64.3% of non-religious people supported euthanasia. 100% of caregivers who had considered euthanasia for the patients and who requested euthanasia supported euthanasia.

In contrast, 62 people who answered that there is a need for the legal regulation of euthanasia in Mongolia supported 100%

of euthanasia. As the cost of post-diagnosis treatment increases, so does support for euthanasia. According to the patients' age group, those under 49 were most likely to support euthanasia at 93.1%, and those over 50 were 73.3%. There was no difference in support for euthanasia by gender. 91.9% of people with primary and secondary education and 71.4% with special secondary and higher education supported it. 87.5% of those who said they had financial problems, 91.7% of those who said they had long queues at the hospital, difficulty in getting medical care, 66.7% of those who said they were bedridden or had a lot of pain, and

100% of those who said they would have mental depression or other problems were in favor of euthanasia. 100% of people said that they would not recover from their disease, 85.7% of people had lost their hope of recovery, 96.2% of people who had heard about euthanasia in the past supported euthanasia, 88% of 92 people said that euthanasia was ethically agreeable,

and 42.3% of 26 people who said that it was not agreeable supported euthanasia. 3 out of 4 people asked the doctor for euthanasia /75%/, one person thought about euthanasia /100%/, and 2 people turned to their caregivers for euthanasia /100%/ supported euthanasia. 98.9% of 90 people supported euthanasia (Table 2).

Table 2. Attitude of caregivers regarding euthanasia

Indicator	Total	Supported		Prohibited		P value
	n	n (%)	95% CI	n (%)	95% CI	
Request of euthanasia						
No	114	89 (78.1)	69.8 - 84.9	25 (21.9)	15.1 - 30.2	0.884
Yes	4	3 (75.0)	28.4 - 97.2	1 (25.0)	2.8 - 71.6	
Decent knowledge of euthanasia						
No	119	93 (78.2)	70.1 - 84.8	26 (21.8)	15.2 - 29.9	0.597
Yes	1	1 (100.0)		0 (0.0)		
Discussion on euthanasia with caregiver						
No	118	92 (78.0)	69.9 - 84.7	26 (22.0)	15.3 - 30.1	0.453
Yes	2	2 (100.0)		0 (0.0)		
Need of euthanasia legal regulation						
No	30	5 (16.7)	6.7 - 32.7	25 (83.3)	67.3 - 93.3	0.0001
Yes	90	89 (98.9)	94.9 - 99.9	1 (1.1)	0.1 - 5.1	
Total	120	94 (78.3)	70.3 - 85.0	26 (21.7)	15.0 - 29.7	

Fisher's exact test

There was no difference in support for euthanasia in terms of expenditure on care since the initial diagnosis.

Results of questionnaire from medical doctors

Considering doctors by age and years of service, 70.8% of the research group were aged 25-34, and 81.8% had worked for more than 2 years. The support for euthanasia is at the same level regardless of age, gender, and years of service. In this study group, no differences were observed in favor of euthanasia by

religion. 96.6% of the doctors who participated in the study said they knew about euthanasia, 100% of those who believed that euthanasia was ethical and knew the types of euthanasia, and 95% of those who thought that there were ethical differences in the types of euthanasia supported euthanasia. According to the results of palliative care physicians, 45.8% supported euthanasia, 23% concluded that it was a way to reduce pain and suffering, and 56.2% did not know the legal regulation of euthanasia (Table 3).

Table 3. Knowledge of physicians regarding euthanasia

Indicator	Total		Supported		Prohibited		P value
	n	n (%)	95%	n (%)	95% CI		
Knowledge of euthanasia							
Good	20	20 (100.0)		0 (0.0)			0.130
Poor	28	24 (85.7)	69.5 – 95.0	4 (14.3)	5.0 - 30.5		
Terminally ill can stress families financially							
No	21	17 (81.0)	60.8 - 93.2	4 (19.0)	6.8 - 39.2		0.031
Yes	27	27 (100.0)		0 (0.0)			
Total	48	44 (91.7)	81.4 - 97.1	4 (8.3)	2.9 - 18.6		

Fisher’s exact test

40% of doctors say that patients suffer a lot because there is no hope of recovery. 89.5% of doctors believed that there is a need for the legal regulation of euthanasia for patients in the terminal stage of the disease. Still, they do not know about the order of the Minister of Health No. 446 of November 25, 2013—100% of those who responded that patients were financially challenged supported euthanasia. Euthanasia was suggested by 29.2% of physicians, 37.5% of caregivers, and 4.1% of children. 79.2% of euthanasia patients were diagnosed with cancer. When asked whether the doctor performed euthanasia according to the patient's request, 2 cases were euthanized, 8

had heard of euthanasia, 30 doctors had never heard of it, and 8 doctors answered that they did not know. 81.3% of doctors believed that euthanasia could be used for patients with terminal cancer. 70.8% of those who said that euthanasia could be performed by medical indications, 79.2% of those who said that it could be performed at the request of the patient, 54.2% of those who said that it could be performed at the request of the family of a patient without legal capacity, and 35.4% of those who said that it could be performed at the request of a treating physician tended to support euthanasia. The positive aspects of the participants are presented in Figure 1.

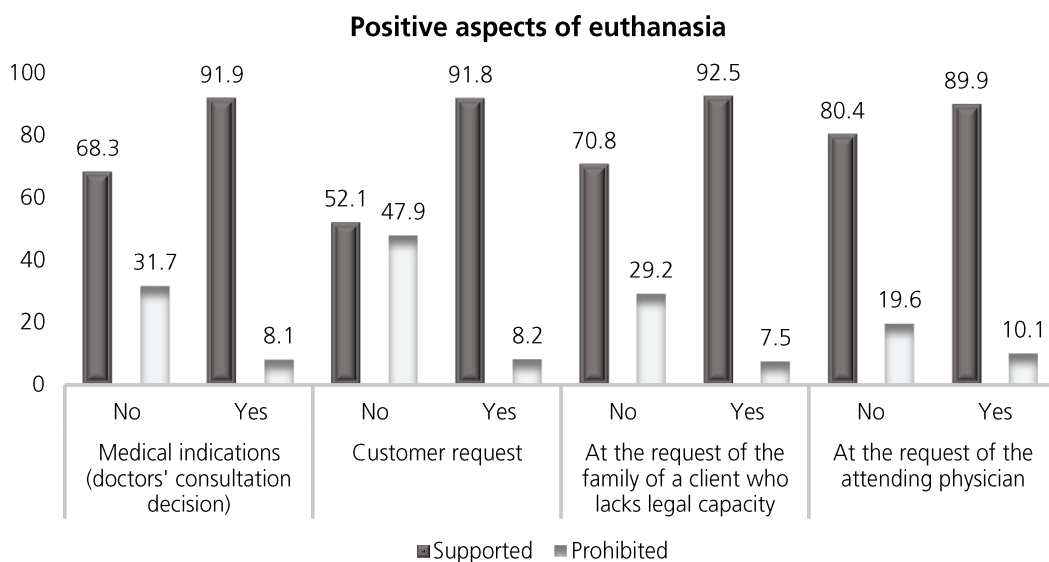


Figure 1. Positive aspects of euthanasia

91.9% of those who said that euthanasia could be performed by medical indications, 91.8% of those who said that it could be performed at the request of the patient, 92.5% of those who said that it could be performed at the request of the family of a patient without legal capacity, and 89.9% of those who said that it could be performed at the request of a treating physician tended to support euthanasia.

The client's family approached the doctor one time with a request for euthanasia, but the doctors received 18 requests from the family members.

89.1% of the doctors and family members who participated in the research said they had heard or heard about euthanasia before, 94.3% of those who believed that euthanasia is ethical, and 96.5% of those who believed that euthanasia should be regulated by law supported euthanasia (Table 4).

Table 4. Comparing the knowledge and attitudes of doctors and caregivers about euthanasia

Indicator	Caregivers		P value	Doctor		P value
	Supported n (%)	95% CL		Supported n (%)	95% CL	
Knowledge of euthanasia			0.2			
No	51 (78.5)	67.4 - 87.1		16 (84.2)	63.6 - 95.3	0.286
Yes	11 (100.0)			28 (96.6)	85.0 - 99.6	
Ethical attitude of euthanasia			0.0001			
Compatible	53 (93.0)	84.2 - 97.6		35 (97.2)	87.7 - 99.7	0.043
Not compatible	9 (47.4)	26.6 - 68.8		9 (75.0)	47.1 - 92.4	
Need for medical regulation			0.0001			
No	0 (0.0)			2 (50.0)	12.3 - 87.7	0.03
Yes	62 (100.0)			42 (95.5)	86.2 - 99.0	
Interested in euthanasia						
No	62 (81.6)	71.8 - 89.0		31 (91.2)	78.3 - 97.5	1
Yes	0 (0.0)			13 (92.9)	71.2 - 99.2	

P value for Fisher's exact test

Discussion

There are no provisions prohibiting euthanasia in the Health Law of Mongolia and other medical laws, and even though the right to refuse treatment is openly regulated, euthanasia has been banned from the point of view of criminal law. For example, suppose a doctor performs euthanasia with the consent of a client or his close relatives, according to Article 10.1 of the 2015 Criminal Law of Mongolia. In that case, he is considered to have committed a crime and will be sentenced to 8-15 years. Moreover, in the 2010 unified interpretation of the Supreme Court, the fact that the victim's life was killed with the consent of the victim is reflected in this article.

In the case of making significant legal arrangements for euthanasia, it will be necessary to make necessary changes to

the material laws, the Health Law, and the Criminal Law in force in Mongolia today or to issue an explanation from the Supreme Court.

Cases of euthanasia are rarely made public and are often hidden and confidential. The results of this type of research and cases are not recorded because the doctor who performed the euthanasia at the request of the client or his legal representative keeps the information.

We conducted the present study to evaluate the knowledge and attitudes of caregivers and physicians about euthanasia. Improving the legal framework for euthanasia is essential to ensure human rights and freedoms in Mongolia. Research on the legal regulation of euthanasia should not be limited

to an attempt to determine the legal basis. Still, it should be conducted in a comparative study of euthanasia, criminal law, medical law, and the relationship between medicine and ethics. A few studies characterized the 7 patients who were granted legalized assistance in death in Australia and 43 cases of legalized physician-assisted suicide in the region [7,9]. Also, some of the studies showed attitudes and practices regarding euthanasia in those persons who were diagnosed with cancer, human immunodeficiency virus (HIV) infection, and amyotrophic lateral sclerosis. These studies demonstrated that more than 70% of euthanasia and physician-assisted suicide cases involve cancer patients. Blendon et al. show that 60.2% of terminally ill patients supported permitting euthanasia in the abstract situation [9]. Emanuel et al. noted that of the patients who survived and were reinterviewed, 54.8% supported euthanasia for terminally ill patients experiencing unremitting pain. In comparison, 32.7% supported euthanasia for terminally ill patients without pain who felt they were a burden [8]. In addition, at a time when the world's medical law and criminal law attend to a humanitarian approach and the process of legalizing euthanasia is gaining momentum, a unique study of this topic is a matter of urgency [13-18]. The practical significance of the research was to clarify the legal which conducted to euthanasia the current and to conclude one conception and harmonize the application of the law, to protect the interests of terminally ill patients, and to clarify the legal environment for doctors and medical professionals in Mongolia.

In the study by Emmanuel EJ, Fairclough DL, and Passik SD, 43 cases of legally assisted euthanasia were performed, whereas in our study, family requests for euthanasia were made to physicians 18 times.

According to the research conducted by Blendon RJ, Szalay US, and Knox RA, 60.2% of terminally ill patients supported euthanasia, while our study showed that 88% of terminally ill patients supported euthanasia.

As a result of the research conducted by Emanuel EJ, Fairclough DL, and Emanuel LL, 54.8% supported euthanasia for terminally ill patients experiencing unremitting pain. In comparison, 32.7% supported euthanasia for terminally ill patients without pain who felt they were a burden. According to the results of our research, 100% of people with a lot of pain and who said that their prognosis would not be cured and 85.7% of people who said that they have little pain and hope for recovery were in favor of euthanasia.

According to our previous survey conducted in 2014, 72% of the doctors who participated in the survey were ethical, and 28% were unethical. Still, according to the results of our current survey, 96.6% of all doctors said that they know about euthanasia and euthanasia is ethical. 100% of those who believed that and knew the types of euthanasia, and 95% of those who thought that there were ethical differences in the types of euthanasia supported euthanasia.

One of the main problems of medical law in today's society is the state of euthanasia, the trends in other countries of the world, and the demand and requirement for legal regulation in this regard in Mongolia is very important. Euthanasia is a complex concept that includes ethical, medical, jurisprudential, religious, and customary norms as a multifaceted form of social relations. It was also determined that euthanasia is interpreted from both positive and negative points of view as a branch of science. Perhaps for this reason, the world has not been able to reach a single solution.

Previously, in Mongolia, in 2004, a team of researchers, Khamar D et al., in a single-theme work entitled "Bio-Medical Ethical Issues in Mongolia," raised the issue of euthanasia from the point of view of the health sector, including Bio-Medical ethics and reached certain results [19-20]. Based on the fact that 329 (75.6%) of the respondents agreed to continue living as a human right, it is reasonable to assume that there is a right to die along with the right to live [21-24]. 84 (19.9%) of the respondents agreed that it would be done for ethical reasons, while 187 (43%) answered that there was no legal reason. It is an attitude that acknowledges the act. In total, 271 (62.33%) accepted "active or passive euthanasia" in some way. 287 (66%) respondents answered it is a matter of concern. From 2009 to 2014 years, the team of researchers Minjuur et al. studied the euthanasia issue from the point of view of jurisprudence, including medical law and the status of euthanasia in Mongolia [26]. The team of researchers found that euthanasia is permitted to some extent from a medical-legal point of view. In other words, it was found that passive euthanasia is approved by the Law on Health and the order of the Minister of Health, among other legal acts. However, active euthanasia is prohibited by the interpretation of the Supreme Court of the Criminal Code of Mongolia. According to the results of a 2014 survey conducted by a team of researchers among medical professionals and caregivers of terminally ill patients, 96% of all physicians surveyed had heard

of euthanasia, while the rest had never heard of euthanasia, and the understanding of euthanasia was impoverished. 74.5% of the caregivers of seriously ill and terminally ill patients who participated in the study had never heard of euthanasia before, and most of them believed that euthanasia is ethical and needs to be regulated by law.

Conclusion

Our study demonstrated that caregivers generally support the legalization of euthanasia. 70.8% of those who said that euthanasia could be performed by medical indications, 79.2% of those who said that it could be performed at the request of the patient, 54.2% of those who said that it could be performed at the request of the family of a patient without legal capacity, and 35.4% of those who said that it could be performed at the request of a treating physician tended to support euthanasia.

Conflict of Interest

The authors state no conflict of interest.

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