Medical students and physicians' knowledge and perceptions about euthanasia

Conocimiento y percepción de la eutanasia en estudiantes y profesionales de medicina

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Abstract

Summary. Euthanasia is considered the act of finishing the life of a patient, previously requested by this one to end the suffering or the pain of any terminal sickness with no perspective of cure.
Objective. Evaluate the knowledge and perceptions about euthanasia in medical students and physicians, demonstrating the knowledge and classifying the perception about euthanasia in medical students and physicians.
Methodology. This is a clinical-epidemiologic, mixed cross-sectional observational study with non-probabilistic sampling by convenience in medical students and physicians from a hospital in Venezuela.
Results. The sample studied had a distribution according to the level of instruction of: 64.85% students, 19.33% medical residents and 15.82% physicians. They showed a middle level of knowledge distributed in: 84.4% physicians, 77.3% medical residents and 80.5% students (p 0.051). According to the level of knowledge and support to euthanasia, 76.18% have a middle level of knowledge (p 0.0002).
Conclusion. Results showed that a middle level of knowledge about euthanasia exists, particularly in the students' population. Euthanasia was not perceived in a negative way, showing a high significance in attention to the ethical implications that surround this concept.

Key words: bioethics, right to die, euthanasia, attitude to death.

Introduction

Euthanasia has been and is a controversial topic in society, mainly among health professionals. Among the definitions of the term, the most basic conceptualizes it as the act of ending the patient's life at the express request of the patient to end the suffering proper to some disease with no prospect of cure.[1, 2] Distinguishing itself from assisted suicide, where the doctor limits himself to pro-

viding the person with the means to commit suicide, but does not perform the action that causes death.[3]

There are other approaches to death in terminally ill patients, such as dysthanasia, which is defined as the artificial extension of the biological life of a patient with irreversible or terminal illness through medical technology.[4] As in a counterpart, there is orthothanasia, which is considered as good death, in the sense of death at the appropriate biological moment, which is inferred as a correct action before death by caregivers of terminally ill patients, cases mainly observed in palliative medicine.[4] Taking into account that the two aforementioned currents focus on preserving life.

Currently, a high scientific productivity on euthanasia can be seen, because it is a controversial topic worldwide. This concept tends to be divided into active and passive; the first being the action that a doctor performs to cause the death of a patient, without pain and at his request, which is legal in the Netherlands, Belgium, Luxembourg and Colombia. While the passive is when treatment is stopped or withdrawn with the consequent death of the patient, allowed with various regulations in Canada, Spain, England, India, among others, this being a practice widely used in intensive medicine worldwide.[5]

Euthanasia has been practiced since the beginning of medicine and has generated current discussions until today mainly condemned by many religions.[6] From the perspective of bioethics there are confrontations, as on one hand, everyone has the right to decide the treatment to be received or omitted, which is considered the principle of autonomy. On the other hand, when attempting against life, the principle of non-maleficence[7] and the supremacy of the right to life are violated, ratified in the Universal Declaration of Human Rights by the United Nations (UNO).[8]

In this strict sense, it is convenient to highlight the Venezuelan Code of Medical Deontology approved in 2004, in its fifth chapter, the following articles:[9]

Article 79.- The fundamental objectives in the treatment of a terminally ill patient are the relief of suffering, promoting the greatest possible comfort, facilitating contact with loved ones, receiving spiritual help from the minister or priest of their religion if they have it, and if he wishes, and finally, help him face death with dignity.

Article 82.- The terminally ill patient must not be subjected to the application of life support measures derived from technology, which will only serve to prolong the agony and not to preserve life.

Paragraph One. Dysthanasia: is the use of therapeutic life support measures that lead to postpone death, in an artificial way. It is equivalent to therapeutic cruelty, therapeutic obstinacy or hyperterapeutic.

Paragraph Two. In that critically ill patient whose evaluation by consensus of treating physicians is considered terminally ill, the conduct will be governed by the provisions of this article.

Article 84.- It is the physician's fundamental obligation to alleviate human suffering. It cannot, under any circumstances, deliberately provoke the death of the patient even when he or his relatives request it, nor must he collaborate or assist the patient's suicide by instructing him and / or procuring a drug in a lethal dose.

The discussion about euthanasia, its legislation and its morality, is a constant and present topic of all time, only it is avoided or simply prohibited,[10] and even ignored. However, it is a highly debated topic in the media and by the general population, there seems to be a lack of clarity in the concepts and definitions used in the euthanasia social debate, which leads to discussions on the subject which are often confusing.

In Spain in 2015, a qualitative investigation was carried out in groups of physicians who care for terminally ill patients, mainly seeking the correct definition of euthanasia, showing the lack of consensus regarding this concept. In the same year in Peru, they carried out an investigation in internal doctors and residents of a hospital, finding that 61% of the inmates presented a good level

of knowledge about euthanasia and 88% had a negative attitude towards this practice.[11]

In Germany in 2016, it was shown that 19% of medical students from a university considered euthanasia as ethically permissible and showed interest in looking into ethical elements in the career.[12] In 2018, a bibliometric study was carried out which yielded a high scientific production on euthanasia, which denotes the great study on this topic; however, the worldwide bases on the topic have not been established.

To understand existing thinking about euthanasia, you must understand the concepts of knowledge and perception. Currently, there is no universal agreement regarding true knowledge about something, so knowing can be defined as the process of deciphering through the intellectual abilities, nature, characteristics and relationships of things. Knowledge can vary, from the scientific to the empirical; this is subordinated to the degree of the links that are established between the elements that make up the knowledge process.[13]

In contrast to what was previously expressed, perception is traditionally defined as a cognitive process originating from consciousness that lies in the recognition, interpretation and significance for the construction of judgments around the sensations acquired in the physical and social environment, intervening assimilation processes such as learning, and psychic ones such as memory and symbolization.[14] Mainly, perception requires the reception of information from the environment, aware that it is used to make abstractions.[15]

Estimating the knowledge of medical students and professionals regarding euthanasia, prior to investigating the perception that such different populations may have, is not something that has been done previously, however, there are studies related to the search for what people think about euthanasia, not withstanding, there are few the jobs that combine the opinions of medical students and professionals. Precisely for all the above, the objective

was to evaluate the knowledge and perception about euthanasia in medical students and professionals at the Central Hospital of Maracay, describing the sociodemographic characteristics, demonstrating the knowledge and classifying the perception of euthanasia in the students and medical professionals.

1. Materials and methods

A clinical-epidemiological study, observational, qualitative-quantitative, cross-sectional and with non-probability sampling for convenience was carried out in medical students and professionals at the Central Hospital of Maracay during the months of May to August 2019.

Three hundred sixty nine students from fourth to sixth year of the medical degree from the universities integrated to the Central Hospital of Maracay and 200 medical professionals from the same were included, who agreed to participate in the study. Those who decided not to participate in the investigation and those who reported not having knowledge about euthanasia were not included in the investigation.

Prior to the implementation of the study, approval was obtained from the management of the Central Hospital of Maracay. By abiding the ethical standards contained in the Code of Ethics for Life of the Ministry of Popular Power for Science, Technology and Intermediate Industries of the Bolivarian Republic of Venezuela. This in accordance with the ethical principles of non-maleficence, beneficence, autonomy and precaution, stated in the Declaration of Helsinki, the informed consent to participate in the research was requested from the participants.

For the implementation of this work, a data collection instrument was prepared that consisted of three parts and 29 closed questions, which was validated by expert judgment. It was applied under the survey technique, finding sociodemographic data in the

first part and consisting of 5 questions on age, sex, educational level, religion and marital status. The second part consists of 10 questions, which include all the basic notions to consider if the participants have general knowledge about everything related to euthanasia. The third part is made up of 14 questions that inquire about the perception or opinion of the participants in different situations or issues related to euthanasia. Subsequently, we proceeded to categorize in degrees of knowledge according to correct answers, which according to the median and the 25th and 75th percentile, was established that those with a score between 0 to 3 have a low degree of knowledge, from 4 to 7 a medium grade and from 8 to 10 a high grade.

Among the limitations observed in the research, the lack of time by medical professionals to fill out an instrument through a survey and the absence of common recreation areas within the Central Hospital of Maracay were taken into account.

The presentation of the data was made through tables. From descriptive statistics, frequency distributions were used for the qualitative and average variables, standard deviation and median for the quantitative variables; Association tables were constructed for analytical statistics using the Chi-Square test, with a significance level of $p \leq 0.05$. To carry out these analyzes, the Epi Info 7.2 program was used, emptying the previously tabulated data into an Excel spreadsheet.

2. Results

Three hundred sixty nine medical students and 200 medical professionals were included in the study, the age range in which most respondents concentrated was 20 to 25 years with 63.09%, 335 participants were female, while 234 were male. The student population was 64.85%, while residents 19.33% and specialists 15.82%. The Catholic Christian religion predominated with 60.81% follo-

wed by the Evangelical Christian religion with 18.45%. The 85.59% of the participants were single. The 80.49% have a medium degree of knowledge regarding euthanasia (Table 1).

Regarding perception, 38.14% disagree considering euthanasia as homicide, 37.26% totally disagree seeing euthanasia as sin,

Table 1. Distribution of medical students and professionals according to general characteristics and degree of knowledge.

Variable		n	%	IC 95%
Age				
	21 to 30 years of age	473	83.13	79.83 – 85.98
	31 to 40 years of age	62	10.90	8.59 – 13.72
	41 to 50 years of age	13	2.28	1.34 – 3.87
	51 to 60 years of age	18	3.16	2.01 – 4.94
	61 or more years	3	0.53	0.18 – 1.54
Sex				
	Female	335	58.88	54.79 – 62.85
	Male	234	41.12	37.15 – 45.21
Level of education				
	Specialists	90	15.82	13.05 – 19.04
	Residents	110	19.33	60.84 – 68.66
	Students	369	64.85	16.30 – 22.78
Religion				
	Christian	346	60.81	56.74 – 64.73
	Evangelical Christian	105	18.45	15.48 – 21.85
	Atheist	57	10.02	7.81 – 12.76
	Agnostic	39	6.85	5.05 – 9.23
	Deist	10	1.76	0.96 – 3.20
	Adventist	8	1.41	0.71 – 2.75
	Jehovah's Witnesses	3	0.53	0.18 – 1.54
	Jewish	1	0.18	0.03 – 0.99
Civil status				
	Single	487	85.59	82.46 – 88.24
	Married	57	10.02	7.81 – 12.76
	Consensual union	21	3.69	2.43 – 5.58
	Separated	3	0.53	0.18 – 1.54
	Widow/widower	1	0.18	0.03 – 0.99
Degree of knowledge of euthanasia				
	High	70	12.30	9.85 – 15.26
	Medium	458	80.49	77.04 – 83.54
	Low	41	7.21	5.36 – 9.63

39.54% totally disagree perceiving euthanasia as an immoral act, while 36.81% consider euthanasia as a dignified death. 37.96% of the participants accept euthanasia in patients in critical situations, while 45.34% totally disagree regarding the application of measures that directly cause death regardless of the ailment. 38.14% disagree regarding perceiving euthanasia as devaluation of the medical profession. 30.58% of the participants agree to preserve life to its natural end, but 42.00% consider that suffering is important

Table 2. Perception of medical students and professionals in different contexts related to euthanasia.

Variable	Totally indisagreement n (%)	In disagreement n (%)	Undecided/ Doubtful n (%)	Agree n (%)	Totally agree n (%)
Euthanasia as «homicide»	192(33.74)	217(38.14)	115(20.21)	26(4.57)	19(3.34)
Euthanasia as «sin»	212(37.26)	152 (26.71)	109(19.16)	76(13.36)	20(3.51)
Euthanasia as «immoral»	225(39.54)	185(32.51)	111(19.51)	30(5.27)	18(3.16)
Euthanasia as «dignified death»	52(9.20)	73(12.92)	130(23.01)	208(36.81)	102(18.05)
Acceptance of euthanasia in patients in critical situations	37(6.50)	46(8.08)	97(17.05)	216(37.96)	173(30.40)
Application of measures that cause death regardless of the condition	258(45.34)	196(34.45)	62(10.90)	36(6.33)	17(2.99)
Euthanasia as a devaluation of the medical profession	179(31.46)	217(38.14)	100(17.57)	44(7.73)	29(5.10)
Preserve life to its natural end	47(8.26)	89(15.64)	157(27.59)	174(30.58)	102(17.93)
Suffering as an important factor in euthanasia	53(9.31)	33(5.80)	52(9.14)	239(42.00)	192(33.74)
Preference to die instead of living without adequate quality of life	54(9.49)	91(15.99)	151(26.54)	200(35.15)	73(12.83)

Table 3. Relationship between the level of knowledge and the degree of instruction.

Variable	Degree of instruction: Specialist (n = 90) n (%)	Resident (n = 110) n (%)	Student (n = 369) n (%)	P
Degree of knowledge of euthanasia				
High	6(6.7)	21(19.1)	43(11.7)	
Medium	76(84.4)	85(77.3)	297(80.5)	0.051
Low	8(8.9)	4(3.6)	29(7.9)	

Table 4. Relationship between the degree of knowledge and the ethical consideration of the euthanasia.

Variable	Ethical consideration of the euthanasia: Yes (n = 366) n (%)	No (n = 110) n (%)	Not know (n = 93) n (%)	P
Degree of knowledge of the euthanasia				
High	52(14.21)	12(10.91)	6(6.45)	
Medium	280(76.50)	98(89.09)	7(7.53)	0.0029
Low	34(9.29)	–	80(86.02)	

Table 5. Relationship between general characteristics and support for euthanasia.

Variable		Support for euthanasia: No (n = 101) n (%)	Not know (n = 85) n (%)	Yes (n = 382) n (%)	P
Sex	Female	60(59.41)	61(70.93)	214(56.02)	0.03
	Male	41(40.59)	25(29.07)	168(43.98)	
Degree of education					
	Specialists	11(10.89)	9(10.47)	70(18.32)	
	Residents	33(32.67)	16(18.60)	61(15.97)	0.0013
	Students	57(56.44)	61(70.93)	251(65.71)	
Contact with terminal ill patients					
	Yes	78(77.23)	56(65.12)	317(82.98)	0.0009
	No	23(22.77)	30(34.88)	65(17.02)	
Degree of education					
	High	14(13.86)	3(3.49)	53(13.87)	
	Medium	87(86.14)	80(93.02)	291(76.18)	0.0002
	Low	0(0.00)	3(3.49)	38(9.95)	

for the decision making to perform euthanasia. 35.15% agree to die, instead of living without an adequate quality of life (Table 2).

It was observed that according to the degree of instruction, the majority presented a medium level of knowledge (specialists 84.4%, residents 77.3% and students 80.5%), p 0.051 (Table 3). The affirmative answers regarding the participants who consider euthanasia ethical, presented mostly high (14.21%) and medium (76.50%) levels of knowledge about it, p 0.0029 (Table 4).

It should be noted that among those who answered affirmatively in support of euthanasia, it was represented by sex in 56.02% female (p 0.03), in this same group it was observed that according to the degree of instruction of medical students they represent 65.71%, specialists occupied 18.32% and residents 15.97% (p 0.0013). Of the participants who affirmatively support euthanasia, 82.98% have been in contact with terminally ill patients (p 0.0009), while according to the degrees of knowledge and support for euthanasia, 13.87% they have a high degree of knowledge and 76.18% have a medium degree of knowledge (p 0.0002) (Table 5).

3. Discussion

The sample collected was made up of a third of professionals and two thirds of medical students, which shows a more heterogeneous study, in contrast to an investigation whose population was clearly made up of medical students such as Ríos González *et al.,* in 2018 that was applied to medical students from Latin America.[16] In the present study, more than three quarters of the participants, had an average degree of knowledge about euthanasia, not taking into account their level of education, which, is of concern because at present with the technological boom the general population acquires greater knowledge about euthanasia and the different terms related to it.[17] We can infer that if the medical professional population, does not improve their level of knowledge, there will be no

adequate communication or understanding with the general population.

In a study carried out in Mexico of medical students in 2006, they found that 79% were against euthanasia in patients in irreversible coma, and in another question, 56% considered that euthanasia would cause a devaluation of the medical profession.[18] From the results found in the present work, it was demonstrated that a third part totally agrees with the acceptance of euthanasia in patients in critical situations, a third simply agrees. Approximately two thirds of the sample strongly disagrees about euthanasia as a devaluation of the medical profession.

In 2009, in a study in Brazil, 30 specialist doctors were questioned, of which only 63.3% knew the definition of euthanasia, which allows us to understand that the level of education is not conclusive to determine the knowledge on this topic.[19] Minimum are the differences in responses between students and medical professionals in this study, obtaining results of over three quarters in the three groups studied.

Quintana O. in 2003, comments regarding ethical consideration that this, is a topic that faces different entities. The foregone, not only in the field of health, but also in the entire society, which generates discussions and sometimes conflicts within it. Although euthanasia is not currently the epicenter of discussions, eventually it will become so, and the medical community, together with the medical schools, must be prepared to face this question of principles.[20] Thus, in this work it shows a very good response regarding the ethical consideration of euthanasia, appearing in the population with medium levels of knowledge in more than half of those studied, while a low proportion was observed in people with high levels of knowledge.

Of the individuals who supported euthanasia, more than half were women with a statistically significant result, which in contrast to the study carried out by Ramírez Rivera *et al.*, in Puerto Rico, whose majority of participants who were willing to euthanize were

of male gender.[21] According to Bastos Brandalise V. *et al.,* in their study carried out in Brazil, the number of participants who received the request for help from a terminally ill patient to accelerate their death process was 11%, while 89% never received the request. On the other hand, in the same study, 20.3% answered affirmatively, who considered the idea of offering help when faced with the request to end the suffering of a patient by accelerating their death. In the current research it was observed that the influence of contact with a terminally ill patient and its relationship with support for euthanasia, demonstrating a significant influence.[22]

With regard to the legal situation in Venezuela, the 2004 Code of Medical Deontology presents certain deficiencies with respect to the chapter referring to the terminally ill. Proving that this code became more limiting compared to the code of 1985, where the patient implicitly has less freedom to request how he wishes to cope or end his suffering and more limitations to the treating physician.[23]

In the deontological code of 1985, article 75 talks about that not only the patient must be attended by competent professionals with positive attitudes in the application of treatments in the area of incurable patients, but also must not suffer prejudice in relation to death. Meanwhile in the deontological code of 2004, article 80 removes the importance of not being prejudiced in relation to death and incorporates patience and palliative treatments by an interdisciplinary team, maintaining care for the terminally ill until their last instances, noting that the latter refers to what orthothanasia could be.

On the other hand, Article 82, indicates that a terminally ill patient, should not be subjected to the application of life support measures derived from technology, which will only serve to prolong the agony, implicitly referring to dysthanasia. Where they subsequently refer to this, it should be noted that definitions such as orthothanasia and euthanasia are not taken into account, being

part of the context. On the other hand, Article 84 «obliges» the doctor to alleviate human suffering, but at the same time, it cannot deliberately cause the death of the patient even when he or his relatives request it, creating a dilemma among those who really decide and act on the quality of life of the patient.

Conclusions

The results showed that there is knowledge about euthanasia, particularly in the student population, in which the highest percentage was revealed. It is a topic that invited the reflection of the participants while they answered the survey. However, the level of knowledge of the subject of the entire sample is medium, a fact that invites us to delve into this aspect since euthanasia is a possibility within medical therapeutics for which the medical professional must be prepared.

In the physician's academic training, euthanasia is a content of the Bioethics subject. Notwithstanding it is a subject that is limited to the conceptualization of the term and its legal status in the country of study, but it is necessary to delve into it due to It has various implications, for example, philosophical, sociological and of course legal, to mention some areas of knowledge with which it is interrelated.

It is worth noting that euthanasia was not perceived negatively by the sample studied, demonstrating a high significance in attention to the ethical implications that surround this concept both in society and in the medical profession. Previously it was a taboo subject or it was obviated to avoid confronting ethical and moral positions before life, even nowadays it is a subject of knowledge of the general public.

Taking into account the existing legal framework, it seems that there is a probable de-contextualization regarding the subject, because there is no updating of terms referring to life and death,

even though society today (15 years after the last update of the Medical Deontological Code) is another. This could be a consequence of the explosion of technical scientific progress, which has led to the modification of thought regarding death, accepting that it is not alien to life, thus being a subject of social discussion.

In the training of the doctor, the Bioethics Committees of the different universities and hospitals should carry out more frequently, talks or courses on the subject. Thus, as in the Bioethics curricular unit, the issue of euthanasia and its associated terms as they are dysthanasia and orthothanasia, legal modifications are also recommended with respect to the medical deontological codes or any law that deserves it, according to the laws of each country taking into account a section that explicitly typifies the concepts regarding the management of death which are: euthanasia, dysthanasia, orthothanasia and assisted suicide.

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