

Knowledge about Euthanasia in University Students in Two Institutions of Higher Education in Colombia

Conocimientos acerca de la eutanasia en estudiantes universitarios en dos instituciones de educación superior en Colombia

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ABSTRACT

Introduction: Euthanasia was decriminalized in Colombia in 2014 as a measure that broadens the right to make decisions related to a dignified death. Currently, euthanasia continues to be a controversial topic that generates diverse opinions and positions. **Objective:** Explore the knowledge of the definitions and know the opinions that university students have regarding euthanasia. **Methods:** Cross-sectional study with data obtained through an electronic survey on euthanasia in volunteer university students from Pontificia Universidad Javeriana in Bogotá and Universidad del Cauca in Popayán. The questionnaire contained questions on general participant information, knowledge about

euthanasia and opinions based on hypothetical cases. **Results:** 758 students participated, 60% of them female, with a mean age of 22 years. 53% of students identified the appropriate definition of euthanasia, 77% would consider applying for euthanasia in hypothetical cases of end-stage disease. A significant proportion confused the definition of euthanasia with that of palliative care. **Conclusions:** A lack of knowledge regarding the definition of euthanasia proposed by the World Health Organization was observed and although euthanasia was accepted by most of the study population, our results indicate the need to open spaces for information and dialogue on the subject.

Keywords

euthanasia; health knowledge; students; palliative care; right to die.

RESUMEN

Introducción: La eutanasia fue despenalizada en Colombia en 2014 como una medida que amplía el derecho para la toma de decisiones en el marco de una muerte digna. En la actualidad, la eutanasia continúa siendo un tema de gran desconocimiento por parte de la población general, con la consecuente diversidad de opiniones y posturas. **Objetivo:** Explorar el conocimiento de las definiciones y conocer las posturas que tienen estudiantes universitarios sobre la eutanasia. **Métodos:** Estudio observacional de corte transversal con datos obtenidos por medio de una encuesta virtual voluntaria sobre eutanasia en estudiantes de la Pontificia Universidad Javeriana de Bogotá y de la Universidad del Cauca en Popayán. El cuestionario utilizado incluyó datos generales, definición de eutanasia y casos hipotéticos relacionados. **Resultados:** Participaron 758 estudiantes. Un 60 % de sexo femenino y con media de edad de 22 años. El 53 % de los estudiantes identificó la definición apropiada de eutanasia, y el 77 % consideraría la posibilidad de recurrir a ella en un caso hipotético de padecer una enfermedad en fase avanzada. Una proporción importante confundió la definición de eutanasia con la de cuidados paliativos. **Conclusiones:** Existe un alto grado de desconocimiento de la definición de eutanasia propuesta por la Organización Mundial de la Salud, a pesar de su aceptación por la población estudiada; los resultados indican la necesidad de abrir espacios de información y diálogo sobre el tema.

Palabras clave

eutanasia; conocimiento en salud; estudiantes; cuidado paliativo; derecho a morir.

Introduction

Demographic changes and increased life expectancy have led to an aging population and an increase in chronic conditions with multimorbidity. Many of these patients will require careful health care at the end of their lives to help them face advanced disease states and the

end of life with dignity and as little suffering as possible (1, 2).

Within the framework of respect for patient autonomy and the patient’s right to make decisions, the use and regulation of euthanasia has been discussed in recent years. By definition, euthanasia is an active intervention that directly causes the death of a patient. In other words, it is a voluntary act that is deliberately aimed at ending the life of a sick person both by action and omission (3).

Etymologically, euthanasia means “good death” (4). The Royal Spanish Academy defines it as “deliberate intervention to end the life of a patient with no prospect of cure” (5). Other sources define it as the “voluntary and painless termination of a person’s life, who suffers from a terminal illness that causes great physical suffering, becoming – from their point of view – a better alternative than life” (6). The World Health Organization, for its part, defines euthanasia as “the action of a physician who deliberately causes the death of a patient” (7).

Ruling C-239 of 1997 of the Constitutional Court exhorted the Congress of the Republic to issue, as soon as possible, and in accordance with constitutional principles and considerations of humanity, the regulation on the subject of dignified death, and thus laid the foundations for work to begin on said regulation (8). Euthanasia was decriminalized in Colombia in 2014, through Ruling T-970, which established the right to a dignified death, that is, the patient’s autonomy in the decision at the end of life. The Ministry of Health and Social Protection was ordered to issue a guideline that allows the creation of an Interdisciplinary Scientific Committee in the institutions providing health services to fulfill the functions indicated in the Ruling and the creation of a medical protocol regarding the procedures to guarantee the right to die with dignity (9). Finally, the Ministry of Health and Social Protection issued Resolution 1216 of 2015, which complies with Ruling T-970, in order to regulate the guidelines set forth in said Ruling (10).

The possibility of accessing euthanasia broadens the right to make decisions within

the framework of a dignified death, it respects the autonomy of patients over the process of their death, and limits the participation of third parties, and this is one of the dimensions of the fundamental right to die with dignity (11). However, there are a series of dilemmas and a general lack of knowledge on the part of the public about euthanasia, which has made it easier for the country's population to form different concepts and positions on the subject, its application and current legislation.

The objective of this study was to explore the knowledge that university students have about euthanasia and their positions on the subject in hypothetical cases at the Pontificia Universidad Javeriana de Bogotá (PUJ) and at the Universidad del Cauca in Popayán (UC).

Materials and methods

Observational cross-sectional study conducted through a voluntary and anonymous online survey. At PUJ, the population were students over 16 years of age, belonging to the faculties of Medicine, Legal Sciences, Engineering and Architecture-Design. At UC, the students were from any of the nine faculties and enrolled in undergraduate and graduate programs.

The survey was designed using Google Forms (see appendix at the end of the article) based on two studies with similar characteristics and was adapted to the objectives of this study (2,12). It consisted of an initial consent for participation, and was divided into three sections: general respondent data, knowledge about euthanasia, and hypothetical questions about specific situations regarding whether participants would agree to a request for euthanasia or not (after providing the correct definition). The three hypothetical cases used (each with a *Yes*, *No* and *Does not know* answer option) were: (i) If you were terminally ill and the doctors assured you that there was nothing that could be done, you were in a lot of pain and were no longer able to perform basic activities such as eating or going to the bathroom on your own, would you agree to euthanasia?; (ii) if

your mother, at the age of 80, had an incurable terminal illness and were suffering, and decided to request euthanasia from her doctor, would you agree with and support her decision? If an 8-year-old child had a terminal illness that prevented him from doing normal things for his age, such as playing or running, was in a lot of pain, and wanted to end his life, would you agree to use euthanasia?, and (iii) at the end of the survey, participants answered a question about their opinion on making it mandatory for physicians to perform euthanasia. (Would you agree that the country's legislation should oblige all physicians to perform euthanasia, even against their will, without the possibility of abstaining, as part of the fulfillment of their work and duty to the patient?).

At PUJ, the survey link was shared through social networks (WhatsApp), while at UC it was sent through institutional mailings to all undergraduate and graduate students of the institution in April and November 2019, respectively. Convenience sampling was applied, and all subjects who voluntarily accepted participation and completed the entire survey were included. All participants participated anonymously, and access to the questionnaire was limited to one time per participant.

Measures of central tendency and standard deviations were used to summarize the numerical variables. Categorical variables were presented as simple frequencies and percentages. The answers selected for euthanasia knowledge and hypothetical questions were presented in figures and tables. The statistical package R, version 3.6.3 (13) was used for the overall analysis.

Results

A total of 758 students from both institutions participated. Of these, 232 (31%) belonged to PUJ and 526 (69%) to UC. The distribution by age, sex and faculties or programs is presented in Table 1.

Table 1
Distribution of age, sex, and faculties of surveyed students by university (n = 758)

Characteristic	PUJ (n = 232)	UC (n = 526)	Total
Sex			
Female	128 (55 %)	328 (62 %)	456 (60 %)
Male	104 (45 %)	195 (38 %)	299 (40 %)
Age			
Mean (SD)	19.6 ± 1.9 years	23 ± 5.6 years	X = 22 ± 5 years
Median [IQR]	19 IQR: 18-21	22 IQR: 19-25	Me = 21; IQR: 19-24
Faculty	Medicine = 72 (31 %) Law = 59 (25 %) Architecture and Design = 51 (22 %) Engineering = 50 (22 %)	Health = 148 (28.1%)* Law = 85 (16.2%)* Natural Sciences = 73 (13.9%)* Electronic Engineering = 52 (9.9%)* Civil Engineering = 49 (9.3 %) Human Sciences = 47 (8.9%)* Accounting = 44 (8.4%)* Agricultural Sciences = 15 (2.9 %) Art = 12 (2.3 %) Other = 1 (0.2 %)	Not applicable

*Faculty of Health Sciences Faculty of Law Political and Social Sciences Faculty of Natural Exact and Educational Sciences Faculty of Electronic Engineering and Telecommunications Faculty of Human and Social Sciences Faculty of Accounting Economics and Administrative Sciences

Of the students surveyed, 98.5% answered that they knew the definition of euthanasia. However, only 53% selected the definition that corresponds to that proposed by the World Health Organization, and no differences were found between the two universities (Table 2). The definition of palliative care and palliative sedation was erroneously selected as euthanasia by 281 respondents (37%). Suicide was not selected frequently (10%).

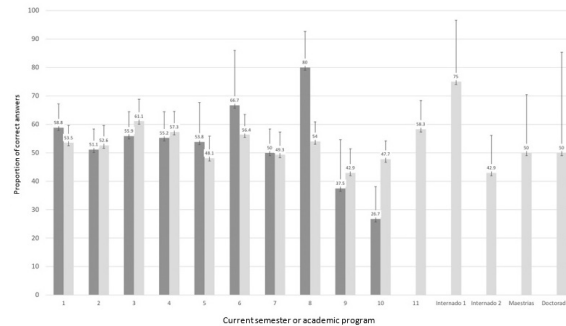
Table 2
Definition related to euthanasia by university respondents

Definition	PUJ (n = 232)	UC (n = 526)	Total (n = 758)
The act of intentionally causing the death of a person who has an incurable disease in order to prevent him/her from suffering.	123 (53%)	278 (53%)	401 (53%)
An act by which a person deliberately causes his or her own death. It is usually the result of despair arising from or attributable to physical or mental illness.	41 (18%)	35 (7%)	76 (10%)
Not to prolong death. And in due course it occurs with all the appropriate medical relief and human comforts possible.	68 (29%)	213 (41%)	281 (37%)

In relation to the Health Sciences programs, the academic semesters that achieved the highest percentage of correct answers at PUJ (80%) and UC (75%) were the eighth and twelfth semesters (medical internship year), respectively. As a curious fact, students from graduate programs

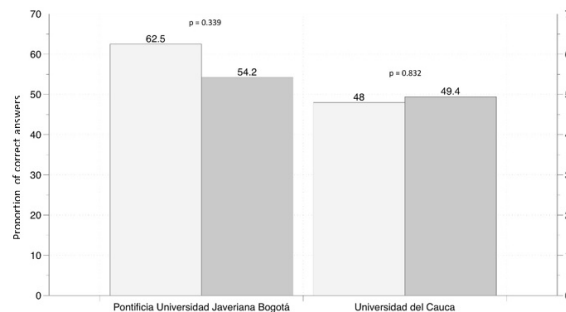
obtained only 50% of correct answers, as shown in Figure 1.

Figure 1.
Proportion of correct answers provided by each semester in the question about the definition of euthanasia by PUJ (dark gray) and UC (light gray) (n = 758)



Forty-eight percent of the respondents belonged to Health Sciences and Law and Political Science programs at the two universities. Figure 2 presents the accuracy in the appropriate definition of euthanasia found in Health Sciences students compared to those of Law and Political Science students, discriminated by university.

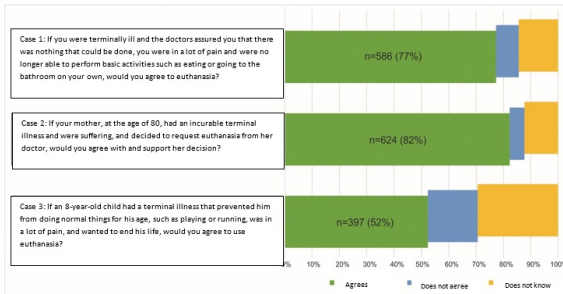
Figure 2.
Proportion of correct answer in the appropriate definition of euthanasia for Health Sciences (light gray) and Law and Political Science (dark gray) programs by university



Regarding hypothetical cases related to euthanasia, 77% of the participants stated that they would opt for it if they were in the terminal phase of an illness; it reached 82% in the case that a close relative were in a similar context. When the terminally ill person is a child, acceptance of euthanasia decreases to 52%, with 20% not

accepting and 30% not considering neither of the two options (Figure 3).

Figure 3
Responses to the three hypothetical cases posed by the survey to university students (n = 758)



Responses to the question about making it mandatory for physicians to perform euthanasia varied widely among faculties (Table 3); health sciences faculties were less in favor of making this act mandatory than law faculties.

Table 3
Consolidated responses between the two universities to the question *Would you agree that the country's legislation should oblige all physicians to perform euthanasia even against their will without the possibility of abstaining as part of the fulfillment of their work and duty to the patient*

	Yes, I agree (n = 168; 22 %)	I don't agree (n = 532; 70 %)	Does not know (n = 58; 8 %)
Health faculties*	23 (11%)	185 (84%)	12 (5%)
Faculties of law and political science*	34 (24%)	103 (72%)	7 (4%)
Other faculties*	111 (28%)	244 (62%)	39 (10%)

*Proportion of responses per faculty

Acceptance of euthanasia is higher among those who have had a relative who has suffered from a terminal illness (58%), compared to those who do not share this relationship. On the other hand, according to the level of religiosity, acceptance of euthanasia is perceived to decrease as it increases: for a low level of religiosity, acceptance is 58%; for an intermediate level of religiosity acceptance decreases to 53% and, finally, for a high level of religiosity acceptance of euthanasia reaches the lowest levels (39%).

Discussion

The vast majority of participants in this extensive university survey consider that they know what euthanasia is, but only 53% identified the definition proposed by the World Health Organization. Many confuse its definition with that of palliative care. When analyzing hypothetical cases, the participants present an acceptance of euthanasia greater than 50%, which decreases in students with greater or lesser religiosity and increases when they have had a close relative in end-of-life conditions.

The lack of knowledge about the definition of euthanasia among university students is significant, particularly in Latin America. A study by Ríos et al. (4) in 2017, included 3924 medical students from 17 Latin American countries and found that 53% of students aged 20-24 years were unaware of the existence of euthanasia. However, studies carried out in other latitudes, such as that of Yildirim (14), in 2019, in 300 nursing students at a university in Turkey found that 98% of respondents were aware of euthanasia and 88% had received related information at university.

The issue of euthanasia in Latin America does not follow a defined scheme, since the legal and moral nuances in each country make its prohibition evident. Colombia's situation is exceptional, given that it has a regulatory framework that includes euthanasia as part of the right to participate in decision-making. In light of these results, the need to create spaces for information and discussion among university students and the population in general is evident.

In our study, we found that a significant proportion of participants confused the definition of euthanasia with that of palliative care. It is possible that this confusion is related to one of the "popular" names given to euthanasia, such as *dignified death*. A dignified death can be perceived in many ways, and perhaps this euphemism for euthanasia has led many people to confuse euthanasia with specific acts of palliative care at the end of life. However, confusion has also been encountered with other terms: in a study conducted in Ecuador in 2017, which included

188 participants among resident physicians and specialists, Berrezueta Pesantez and Saquipay Zhagui (15) found that 24% of respondents considered assisted suicide and euthanasia to be similar concepts. Another study conducted in Peru in 2015 included interns and residents from 5 institutions, and more than 68% of participants got the definition of palliative sedation, palliative care, and physician-assisted suicide correct. It is noteworthy that the vast majority of respondents in this study had received bioethics-related teaching (16).

The degree of acceptance of euthanasia in our study was higher compared to others, such as the one conducted by Gutiérrez Castillo and Gutiérrez Castillo (17), where acceptance was 44% among medical students; meanwhile, the results presented by Anneser et al. (18) show an acceptance rate among fourth-year medical students of only 19%. In our study, acceptance varies considerably depending on the different cases: 77% of the participants would agree with euthanasia on themselves in case of suffering from a terminal illness with no treatment options. This percentage rose to 82% for a very old woman and dropped to 52% in case of a terminally ill child. In our opinion, this may be due to different positions based on culture, religiosity and an individual moral perspective. There is little acceptance of death as part of existence and as a life event. However, despite the good acceptance of euthanasia in the population studied, this acceptance is lower when it is for oneself than when it is required for a terminally ill elderly third party.

On the other hand, euthanasia in children is less approved, possibly because child death has a special connotation and less acceptance. Perhaps death in children is less accepted because of the future prospects for their lives and the calamity that a terminal illness generates, or because of the apparent infrequency of occurrence of terminal illness in this population. In addition, children are considered to have less decision-making capacity, so third-party decisions on end-of-life issues may be perceived as more problematic.

In relation to religion and its impact on the acceptance of euthanasia, the findings of

our study are related to the results presented by Abolfazl et al. (19). They concluded that the higher the students' levels of religious orientation, the more opposed they were to euthanasia. Additionally, Jacobs and Hendricks (20) evaluated university students of different religions and found that 62%, mostly of Christian faith, would opt for alternative measures to help terminally ill patients, such as palliative care.

The majority of participants in our study are of the opinion that physicians should not be obliged to perform euthanasia. Only 10.5% of students in the health area said they agree with this scenario, in contrast to 23.6% and 28.3% of students in the faculty of Law and other faculties, respectively. These findings are interesting, since the fact of causing the death of a person, even if it could be considered an act of "mercy", still implies moral and religious dilemmas. The fact of hastening death goes against the classical academic training in health sciences, which aims at curing diseases. On the other hand, it is evident that in other disciplines not related, at least directly, to the health sciences, there is greater acceptance of the obligatory nature of the performance of euthanasia by physicians. In our opinion, it may be related to a lack of knowledge of the activities of health care professionals and the context that may be involved in making decisions about a patient with advanced disease.

In medical students, a decrease in the acceptance of euthanasia was documented as they reach more advanced levels. This decrease may be subject to increased contact with patients and exposure to end-of-life situations in their care activities.

One of the limitations of this study is the use of non-probability sampling. Although a high number of people in two very different university populations (public and private, Bogotá versus Popayán, with a diversity of academic interests and levels of religiosity) participated voluntarily, this represents a great difficulty for the generalization of the results. In Colombia there are more than 290 institutions of higher education distributed throughout the national territory, which present a great cultural, social and religious diversity.

Conclusions

This study demonstrates the lack of knowledge in the study population about the definition of euthanasia established by the World Health Organization. It is very likely that this lack of knowledge exists in Colombian society in general and demonstrates the need to open spaces for information and dialogue on euthanasia, and on the different processes and forms of dignified death. Medical decisions at the end of life should be individualized depending on the patient's cultural and religious perspectives and wishes. These conversations should take place not only in the clinical practice setting, but in every learning space in the community. Regarding the results of this study, there is a clear tendency among medical students to establish their own concept of euthanasia and a marked opposition to its mandatory practice. This tendency is reinforced as the student progresses through the semesters, a situation that is related to the increase in patient contact and clinical practice.

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Conflict of interest

All authors certify that they are aware of the journal's conflict of interest policy and that they have no conflicts of interest related to the publication of this manuscript.

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Annex. Questionnaire “Knowledge and attitudes about euthanasia in university students in two institutions of higher education in Colombia”.

The questionnaire has three sections. The different sections were characterized by different types of questions and response options. The objective was to explore the knowledge of definitions and the positions that university students have on euthanasia.

Section 1 of 3

Authorization
1. Do you authorize the completion of this survey under complete anonymity?
Section 1 of 3
Respondent data
1. Date survey was conducted
2. What faculty do you belong to? a. Architecture-Design b. Engineering c. Medicine d. Law e. Other
3. What semester are you studying? a. 1 b. 2 c. 3 d. 4 e. 5 f. 6 g. 7 h. 8 i. 9 j. 10 k. Other postgraduate program:
4. Sex a. Male b. Female
5. Age in completed years
6. Which theological current do you identify with? a. Catholicism b. Christianity c. Atheism d. Agnostic e. Protestant f. Buddhism g. Islam h. Jehovah's Witness i. No answer j. Other
7. Level of religiosity a. 1 (low) b. 2 (medium) c. 3 (high)

Section 2 of 3

Section 2 of 3
Knowledge
1. Do you know what euthanasia is? a. Yes b. No
2. Which of the following definitions is most related to the term euthanasia? a. The act of intentionally causing the death of a person who has an incurable disease in order to prevent him/her from suffering. b. An act by which a person deliberately causes his or her own death. It is usually the result of despair arising from or attributable to physical or mental illness c. Not to prolong death. And in due course it occurs with all the appropriate medical relief and human comforts possible.
3. Definition of Euthanasia according to the WHO: "The action of a physician who deliberately causes the death of a patient".
4. Does your definition of euthanasia correspond to that formulated by the WHO? a. Yes b. No
5. Generally speaking, do you agree with the use of euthanasia as defined by the WHO? a. Yes b. No c. Does not answer
6. Have you ever had a close person who has suffered or is suffering from a terminal illness? a. Yes b. No c. Does not answer

Section 3 of 3

Section 3 of 3
Opinion
This section will present hypothetical cases in which your opinion will be asked regarding different aspects related to euthanasia.
Case 1. Part 1: "If you were terminally ill and the doctors assured you that there was nothing that could be done, you were in a lot of pain and were no longer able to perform basic activities such as eating or going to the bathroom on your own, would you agree to euthanasia?" a. Yes b. No c. Does not know
Case 1. Part 2: "According to the case previously presented, would you agree to someone else using it?" a. Yes b. No c. Does not know
Case 2: "If your mother, at the age of 80, had an incurable terminal illness and were suffering, and decided to request euthanasia from her doctor, would you agree with and support her decision?" a. Yes b. No c. Does not know
Case 3: "If an 8-year-old child had a terminal illness that prevented him from doing normal things for his age, such as playing or running, was in a lot of pain, and wanted to end his life, would you agree to use euthanasia?" a. Yes b. No c. Does not know
Case 4: "Would you agree that the country's legislation should oblige all physicians to perform euthanasia, even against their will, without the possibility of abstaining, as part of the fulfillment of their work and duty to the patient?" a. Yes b. No c. Does not know