



## RESEARCH

# End of life: conceptual understanding of euthanasia, dysthanasia and orthothanasia

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## Abstract

This study evaluates the knowledge of intensive care physicians about the concepts of euthanasia, dysthanasia and orthothanasia in Campo Grande/MS, Brazil. The cross-sectional and qualitative research involved 80 doctors who responded to a self-administered questionnaire, with closed and open questions that aimed to assess the interviewee's knowledge of the three concepts. Data analysis showed that 32% of respondents inadequately defined euthanasia, and 75% and 61.2% accurately defined dysthanasia and orthothanasia, respectively. In turn, 46.2% had adequate knowledge of the three terms and practices. We noticed that the years of practice since graduation were inversely proportional to the knowledge of concepts.

**Keywords:** Euthanasia. Death. Terminally ill. Intensive care units. Attitude to death.

## Resumo

### Finitude da vida: compreensão conceitual da eutanásia, distanásia e ortotanásia

O objetivo deste trabalho foi avaliar o conhecimento de médicos de unidades de terapia intensiva de Campo Grande/MS acerca dos conceitos de eutanásia, distanásia e ortotanásia. A pesquisa, transversal e quali-quantitativa, envolveu 80 médicos que responderam a um questionário autoaplicável com perguntas fechadas e abertas, as quais visavam aferir o conhecimento do entrevistado sobre os três conceitos. A análise dos dados demonstrou que 32% dos entrevistados definiram inadequadamente eutanásia, 75% e 61,2% definiram com exatidão os conceitos de distanásia e de ortotanásia, respectivamente, e 46,2% tinham conhecimento adequado dos três termos e práticas. Notamos que o tempo de formado foi inversamente proporcional ao conhecimento dos conceitos.

**Palavras-chave:** Eutanásia. Morte. Doente terminal. Unidades de terapia intensiva. Atitude frente a morte.

## Resumen

### Finitud de la vida: comprensión conceptual de la eutanasia, distanasia y ortotanasia

El objetivo de este trabajo fue evaluar el conocimiento de médicos de unidades de cuidados intensivos en la ciudad de Campo Grande, capital del estado de Mato Grosso do Sul, Brasil, sobre los conceptos de eutanasia, distanasia y ortotanasia. El estudio, transversal y cualicuantitativo, contó con la participación de 80 médicos que respondieron a un cuestionario autoaplicable, con preguntas cerradas y abiertas que tenían como objetivo evaluar el conocimiento del entrevistado acerca de los tres conceptos. El análisis de los datos reveló que el 32% de los encuestados definió de manera inadecuada la eutanasia, y el 75% y el 61,2% definieron con precisión los conceptos de distanasia y ortotanasia, respectivamente, y el 46,2% tenía un conocimiento adecuado de los tres términos y prácticas. Observamos que el tiempo transcurrido desde la graduación fue inversamente proporcional al conocimiento de los conceptos.

**Palabras clave:** Eutanasia. Muerte. Enfermo terminal. Unidades de cuidados intensivos. Actitud frente a la muerte.

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The humanization of medicine involves integrality in health practices, which considers the biopsychosocial and spiritual aspects of patients in the health-disease relation. Concerning the end of life, humanized medicine means, in addition to respect for the person, greater interaction between the team and the patient, with better results when choosing practices and treatments to promote well-being<sup>1</sup>.

Technological development has allowed interventions that, by postponing death, provoke ethical debates and questions about behaviors that subject patients to unnecessary and undesirable suffering<sup>1</sup>. There are three possible paths when facing terminally ill patients, mainly in intensive care units (ICU): dysthanasia, euthanasia and orthothanasia. Choosing one of them involves the humanization of medicine, since the decision should consider psychosocial factors that, at the moment of death, are as or more important than biological aspects.

Dysthanasia is the attempt to maintain life at any cost, with disproportionate medical acts that make death more difficult, inflicting more suffering on patients and their families<sup>2</sup>, with no real prospect of recovering life and well-being. Euthanasia, on the other hand, is the intentional abbreviation of life to alleviate or avoid suffering of the patient whose death is imminent. Finally, orthothanasia is death in its natural and inevitable process, respecting the person's right to die with dignity, supported by palliative care.

To safeguard the inviolable right to life and its inalienability, the Federal Council of Medicine (CFM) issued Resolution 1.805/2006<sup>3</sup>, which ensures the dignity of the terminally ill patient, allowing treatment to be suspended as long as due care for suffering relief is guaranteed. Subsequently, through Resolution CFM 1.931/2009<sup>4</sup>, which approves the Code of Medical Ethics (CEM), the Council reinforced the physician's obligation to offer palliative care. Although this resolution describes and allows the practice of orthothanasia, it does not mention the term itself, nor does the CEM. In addition, the lack of laws regulating the practice leads to divergences between the medical and legal spheres, creating uncertainty among professionals.

There is also lack of information about these practices among health professionals<sup>5</sup>, causing not only deontological and legal violations<sup>6</sup>, but also disrespect for the patient's dignity. Based on this

reality and considering the constant relationship with death in the work at intensive care units (ICUs), the purpose of this research is to verify the intensive care physicians' knowledge of dysthanasia, euthanasia and orthothanasia, since understanding these concepts is fundamental to humanize care and mitigate patient's pain and suffering<sup>3</sup>.

## Materials and method

This is a primary observational cross-sectional field research, with qualitative and quantitative approach, carried out with intensive care physicians from three institutions: Hospital Regional de Mato Grosso do Sul, Santa Casa de Campo Grande and Maria Aparecida Pedrossian University Hospital. The research took place between July 2015 and November 2016, with data collection between May and August 2016.

The participants were physicians on duty exclusively at the ICU and who signed the informed consent form (ICF), excluding those who performed only sporadic procedures in the environment, those who did not want to participate or did not agree with the content of the ICF. The sample was composed of 80 professionals, considering, for convenience, a 95% confidence level and a 5% sampling error to avoid research selection bias<sup>7</sup>.

We collected the data with a self-administered questionnaire, based on an instrument presented in the study "Impact of the CFM Resolution 1.805/06 on physicians dealing with death"<sup>8</sup>. The following aspects were assessed: conduct adopted by professionals regarding terminality; consistency in relation to the conceptualization of the terms; and the interviewees' perception of the outcome of the health practices adopted, whether favorable or unfavorable to the patient or family. We divided all answers into four axes.

The first axis gathered sociodemographic data: age, gender and years of practice since graduation in the medical field. The other axes addressed issues related to euthanasia, dysthanasia and orthothanasia, respectively. Professionals were asked if they had already performed any of these practices, and to define them so that the researchers could later analyze the compatibility of the explanations with the scientific definition of the concepts.

We considered that the correct answer to the term “euthanasia” should have at least two of the following ideas: “practice to shorten the patient’s life” or “to cause the patient’s death,” “relief from suffering” and “death without pain.” Answers that had only one or none of these notions were considered inadequate.

For “dysthanasia” the answer should contain at least one of the following ideas: “therapeutic obstinacy,” “prolongation of the dying process,” “maintenance of ineffective treatments that painfully prolong the patient’s biological life, without quality of life or dignity” and “patients without prognosis.” Answers that did not contain any of the terms were considered inadequate.

Finally, their concept of “orthothanasia” should have one of the notions: “correct death” or “death at the right time,” “no interference from science,” “natural death without interference,” “palliative care that provides comfort to the patient” and “no use of disproportionate methods to prolong life.” Answers that did not contain any of the terms were considered inadequate.

We used a descriptive statistical analysis with Excel 2016, version 1701 (Compilation 7766.2060). The chi-square test established the level of significance (5%), with 95% confidence interval.

### Results

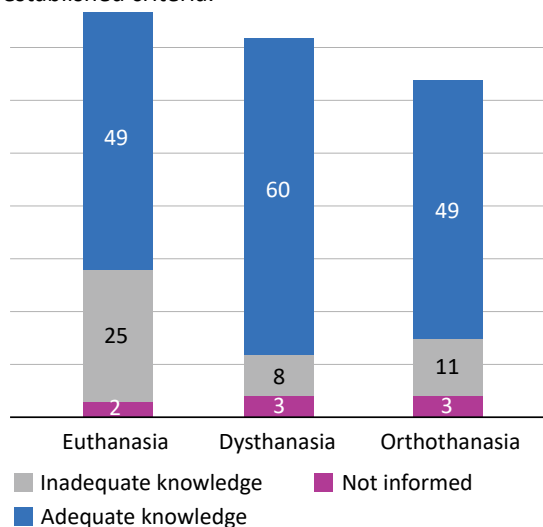
The sample sociodemographic profile is shown in Table 1. Of the 80 participants, 76 answered the questions on “euthanasia,” with 49 (61.3%) showing adequate knowledge, and two (2.5%), despite having affirmed to know it, did not answer the question on the term (Figure 1). Seventy-one participants answered the questions on “dysthanasia,” and 60 (75%) showed adequate knowledge (Figure 1). Sixty-three participants responded the questions on “orthothanasia,” and 49 (61.3%) demonstrated adequate knowledge (Figure 1). In turn, only 37 (46.3%) out of the 80 respondents had adequate knowledge of the three practices.

Eight physicians (10%) said they had already carried out euthanasia on patients, 70 (87.5%) denied it, and two (2.5%) did not answer. Among those who performed it, six (75%) considered the decision beneficial to the patient or the family, one (12.5%) thought that there was no impact, and one (12.5%) did not give his opinion on the practice adopted. None of them considered the action harmful.

**Table 1.** Characterization of the physicians

Variable	n	%
<b>Age</b>		
<30	19	23.8
30-40	34	42.5
>40	27	33.7
<b>Gender</b>		
Female	46	57.5
Male	33	41.3
Not informed	1	1.2
<b>Years of practice since graduation</b>		
<4	16	20.0
4 to 5	5	6.3
6 to 10	21	26.3
11+	37	46.2
Not informed	1	1.2
<b>Religion</b>		
Catholicism	46	57.5
Protestantism	9	11.3
Spiritualism	13	16.2
No religion	7	8.7
Other	4	5.0
Not informed	1	1.2

**Figure 1.** Knowledge assessed according to the pre-established criteria.



Forty-five interviewees (56.3%) said they had already performed dysthanasia, 32 (40%) denied it, and three (3.7%) did not answer. Among those who performed it, 10 (22.2%) considered it beneficial to the patient or family, 31 (68.9%) considered it harmful, three (6.7%) affirmed to have observed no impact, and one (2.2%) did not indicate his opinion.

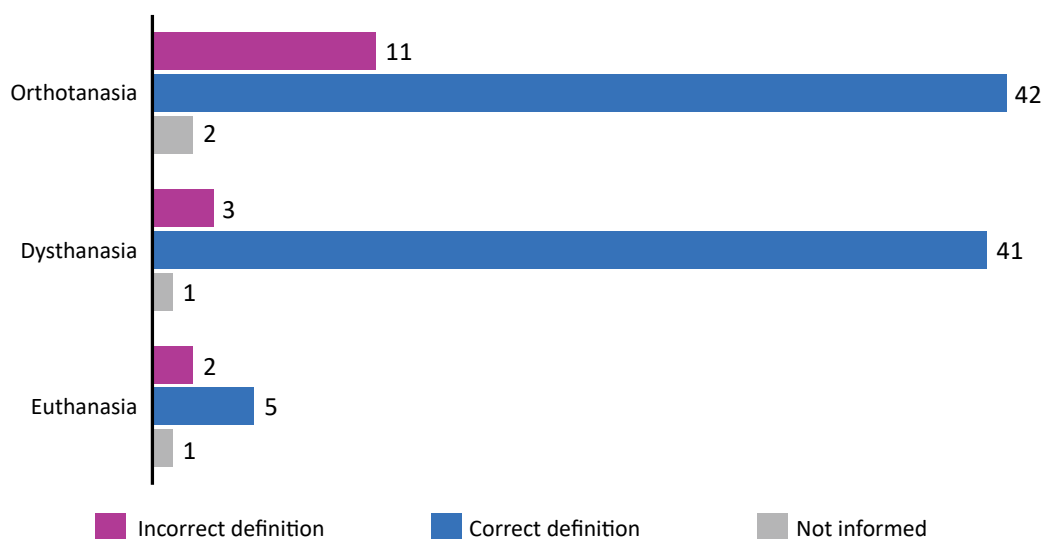
Fifty-five participants (68.8%) said they had already carried out orthothanasia, 18 (22.5%) denied it and seven (8.7%) did not answer. Among those who performed it, 49 (89.1%) considered it beneficial, two (3.6%) considered it harmful, three (5.5%) affirmed to have observed no impact, and one (1.8%) did not indicate their perception in relation to the practice adopted.

Regarding the interviewees who performed euthanasia (8 professionals), dysthanasia (45 professionals) and orthothanasia (55 professionals),

two (25%), three (6.7%) and 11 (20%), respectively, did not adequately define the practice they supposedly adopted (Figure 2). Statistical significance was  $p=0.04$ .

Concerning the correlation with years of practice since graduation, the concepts have been correctly defined by 10 (62.5%) of the 16 professionals with less than four years of practice, 3 (60%) of the five professionals with 4 to 5 years of practice, 10 (47.6%) of the 21 professionals with 5 to 10 years of practice, and 10 (27%) of the 37 professionals with more than 11 years of practice ( $p=0.03$ ).

**Figure 2.** Correlation between practice and adequate knowledge of concepts



## Discussion

ICU professionals live with life terminality on a daily basis, and studies carried out in this context can reveal an overview on the subject. In this study, we observed that the participants with more years of practice since graduation had more difficulties in defining the concepts of dysthanasia, euthanasia and orthothanasia, a result similar to that found in other studies<sup>8,9</sup>. This fact can be explained by gaps in the academic background of more experienced physicians, since these themes have only gained prominence in recent years.

On the other hand, the better performance of younger participants shows some progress in medical schools, although there is still lack of training and updating courses for professionals to learn about the new practices related to life terminality. The gaps felt by the physician when faced with ethical conflicts in everyday life<sup>8</sup> are due to the exclusive focus of

education on biomedical and technical aspects, without a humanistic perspective.

In a survey carried out at the hospitals of the Medical School of Marília (Famema)<sup>8</sup>, São Paulo, Brazil, most physicians affirmed to have adequate knowledge of euthanasia and dysthanasia, as occurred in a study with ICU nurses from a large hospital in São Paulo<sup>10</sup>. As for orthothanasia, in the study by Vasconcelos, Imamura and Villar<sup>8</sup>, almost all participants knew the concept. However, in our research the number of professionals with adequate knowledge was lower than in these two studies.

When reviewing the bibliography, we noted that few studies assessed this knowledge through critical checking. This methodological care is an important issue, since, as this research demonstrates, there may be a divergence between the professional's perception and reality. The discrepancy is clear especially regarding the concept of euthanasia, which 76 intensive care physicians affirmed to know, although

more than half of the definitions were mistaken. The clear definition of concepts is fundamental for a good medical practice, since the erroneous perception of what is determined may interfere with its application, harming the patient. Overestimating one's knowledge also ends up discouraging the search for new information and improvement<sup>5</sup>.

Lack of knowledge of thanatology terms shows that many physicians who deals with end of life on a daily basis do not have fundamental information to make decisions to avoid distortions and failures in communication. The result is discomfort and suffering not only for patients and families, but also for the professionals themselves.

Regarding the prevalence of practices among respondents, orthothanasia was the most frequent, followed by dysthanasia, corroborating the study by Vasconcelos, Imamura and Villar<sup>8</sup>. The higher frequency of orthothanasia was expected, since it is a procedure considered appropriate by the medical profession and by CFM, although in some cases its distinction is imprecise when compared with euthanasia and dysthanasia.

As for dysthanasia, its occurrence could be related to communication problems between physician and patient/family, since the lack of clarification in the prognosis can generate unfounded hope for recovery<sup>6</sup>. This expectation can bring more pain and suffering, with useless therapeutic methods and inappropriate use of the scarce resources of the health system. Finally, the fact that eight physicians said that they carried out euthanasia on patients is worrisome, since it is characterized as a crime by the Brazilian legislation<sup>6</sup>.

The physicians' response to these three practices should be critically analyzed, since a significant number of professionals were unaware of the concepts. Therefore, it is possible that many adopt behaviors without proper clarification, making mistakes when they think they are acting ethically. For not clearly knowing the limits of the concept, maybe the physician believes he has used orthothanasia, when, in fact, he carried out euthanasia.

Regarding the impact of the behaviors adopted, the data show that, according to the physicians'

perception, dysthanasia tends to generate negative outcomes, while orthothanasia benefits patients and family members ( $p=0.04$ ). The result was expected; as shown in the literature<sup>5</sup>, orthothanasia is the most appropriate practice for human assistance, respecting the dignity of the patients and offering them the best conditions.

Finally, we must point out that the good relationship with the patients and their families is as important as the understanding of terms and concepts. Keeping them informed is essential, as clarification brings comfort and confidence, minimizing the suffering inherent to death.

### Final considerations

Less than half of the research participants demonstrated real knowledge of the concepts of dysthanasia, orthothanasia and euthanasia – the last as the most frequently defined in a wrong way. The picture is worrying, since knowledge of a conduct determines its performance in practice. To reverse this situation, it is necessary to invest in training of professionals who deal with life terminality on a daily basis. Another problem detected was the large number of intensive care physicians who admit having practiced dysthanasia – more than half of the interviewees. Among these, most considered the practice unfavorable as it prolongs the patients' and their families' suffering without bringing benefits, and even causing material losses.

A significant result was the relationship between the professional's experience and knowledge of the concepts. Physicians with more years of practice were less able to define euthanasia, dysthanasia and orthothanasia, while those who have recently graduated had a better performance. Although the data show advances in academic background in recent years, they also indicate the approach of thanatology must be more emphasized in the curriculum of medical courses, including discussions on biolaw and bioethics. Moreover, continuing education programs are essential to update health professionals' knowledge.

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#### Participation of the authors

All authors participated in the theme discussion and in the article writing and revision.


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## Appendix

### Questionnaire

#### Identification

Age: ( ) <30 years old ( ) 30 to 40 years old ( ) >40 years old

Gender: ( ) male ( ) female

Years of practice since graduation: ( ) <4 years ( ) 30 to 5 years ( ) >11 years

#### Theme: Euthanasia

1. Do you know about euthanasia?

( ) Yes

( ) No

2. Describe your knowledge of the definition of euthanasia.

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3. Have you ever performed euthanasia?

( ) Yes

( ) No

If yes, go to the next question. If not, go to question 5.

4. Have you identified any impact of this practice on the patient or the family?

( ) Yes, it was favorable

( ) Yes, it was unfavorable

( ) No

#### Theme: Dysthanasia

5. Do you know about dysthanasia?

( ) Yes

( ) No

6. Describe your knowledge of the definition of dysthanasia.

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7. Have you ever performed dysthanasia?

( ) Yes

( ) No

If yes, go to the next question. If not, go to question 9.

8. Have you identified any impact of this practice on the patient or the family?

( ) Yes, it was favorable

( ) Yes, it was unfavorable

( ) No

#### Theme: Orthothanasia

9. Do you know about orthothanasia?

( ) Yes

( ) No

10. Describe your knowledge of the definition of orthothanasia.

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11. Have you ever performed orthothanasia?

( ) Yes

( ) No

If yes, go to the next question. If not, the questionnaire is finished!

12. Have you identified any impact of this practice on the patient or the family?

( ) Yes, it was favorable

( ) Yes, it was unfavorable

( ) No