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Physician perceptions and knowledge about limiting life support

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Abstract

This qualitative, descriptive study identified perceptions and knowledge of intensive care unit physicians about limiting life support. Results revealed different understandings and reasons for limiting life support: shared and isolated decision-making; obstacles such as family, professionals, legal issues and unpredictability of death; and specific case reports with benefits, dilemmas, and specificities by clinical picture and age group. Physicians agree on the need to limit life support but lack training on the topic and differences in understanding remain. The multiple reasons for its use and difficulties in decision-making and definition of conduct are permeated by ethical, cultural and personal conflicts, demonstrating the need for better education on the theme at different levels of health professional training.

Keywords: Palliative care. Death. Intensive care units. Clinical decision-making.

Resumo

Percepções e conhecimentos médicos sobre limitação de suporte de vida

Este estudo descritivo e qualitativo identificou percepções e conhecimentos de médicos de unidades de terapia intensiva sobre a limitação do suporte de vida. Os resultados revelaram diferentes compreensões e estímulos acerca do uso da limitação do suporte de vida: tomadas de decisão isoladas e compartilhadas; empecilhos como família, profissionais, questões jurídicas e imprevisibilidade da morte; e relatos de casos específicos com benefícios, dilemas e especificidades por quadro e faixa etária. Existe consenso quanto à necessidade de limitação do suporte de vida, mas falta preparo na formação e persistem divergências de compreensão. Os diferentes estímulos para seu uso e as dificuldades para tomada de decisão e definição de condutas são permeados por conflitos éticos, culturais e pessoais e demonstram a necessidade de educar sobre o tema em diferentes níveis de formação de profissionais de saúde.

Palavras-chave: Cuidados paliativos. Morte. Unidades de terapia intensiva. Tomada de decisão clínica.

Resumen

Perspectivas médicas y conocimiento sobre la limitación del soporte vital

Este estudio descriptivo y cualitativo identificó las percepciones y el conocimiento de los médicos en las unidades de cuidados intensivos sobre la limitación del soporte vital. Los resultados revelaron diferentes comprensiones y estímulos sobre el uso de la limitación del soporte vital: toma de decisiones aislada y compartida; obstáculos como la familia, los profesionales, las cuestiones legales y la imprevisibilidad de la muerte; e informes de casos específicos con beneficios, dilemas y especificidades por condición y grupo de edad. Existe consenso sobre la necesidad de limitar el soporte vital, pero carece de preparación y persisten las diferencias de comprensión. Los diferentes estímulos para su uso y las dificultades para la toma de decisiones y la definición de conductas están impregnados de conflictos éticos, culturales y personales, además de que demuestran la necesidad de discutir sobre el tema en los diferentes niveles de formación de los profesionales de la salud.

Palabras clave: Cuidados paliativos. Muerte. Unidades de cuidados intensivos. Toma de decisiones clínicas.

Research

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From the 20th century onwards, advances in medical technologies have provided many benefits to human health, such as disease control, decreased mortality, and improved medical care provision. But the increase in life expectancy does not always imply a better quality of life, bringing discussions related to finitude, therapeutic limits, and life conditions [1,2].

As the options for therapeutic intervention in serious illnesses have expanded, pinpointing the exact moment when (technically) there is no longer a means to help a patient became harder. Thus, therapeutic obstinacy and dysthanasia have become pervasive in the service routine. In many cases, treatment is maintained until death even in the face of a poor prognosis, including therapies for new diagnoses and resuscitation maneuvers in case of cardiac arrest. Currently, however, professionals are allowed to resort to life support limitation (LSL) during assistance in such cases, considering the condition and respect for the patient's wishes and that of their family members, as outlined in the Code of Medical Ethics (CEM) [3,4].

LSL can be understood as the decision to withdraw or deny advanced life support to irrecoverable terminal patients, without adding treatment for new clinical occurrences until death ensues [5-7]. In some cases, it involves recognizing the uselessness of treatments and has been discussed as a means to enable patients to pass while maintaining their dignity, with less suffering, and a relative degree of control over the situation [8].

Despite being a growing practice worldwide, especially in intensive care environments, LSL still produces insecurities and difficulties concerning decision-making towards its adoption and conduct outlining. The need for LSL is most likely to arise in intensive care units (ICUs). Treating critically ill patients, often with compromised decision-making capacity, falls on the medical team and the family [7]. In the ICU context, where the use of many technological resources and specialized treatments is frequent, besides disease complexity and severity, the implications of death in the relationship between health professionals, patients, and family members are more evident [8,9].

Levin and Sprung [10] highlight the 90% increase in LSL use in intensive care settings, which can be explained by the greater population longevity and the consequent growth in the occurrence of limiting diseases. Nonetheless, studies related to the topic, especially in ICU, are still needed when considering issues such as autonomy and independence [11]. Considering its complexity, this study sought to identify the perceptions and knowledge of ICU doctors on LSL.

Method

This is a descriptive study with a qualitative approach, carried out in four public hospitals in Maranhão, Brazil, with 24 professionals selected by the following inclusion criteria: being a medical professional working for the investigated hospitals with full capacity in the ICU services. Physicians on vacation and/or leave were excluded, as well as those with under one year of intensive care experience.

Data were collected by means of a questionnaire prepared by the researchers to characterize the sociodemographic profile of the sample (with variables related to personal, social, educational, work, and lifestyle issues), followed by a semi-structured interview to assess how medical professionals perceive LSL. Data collection extended from December 2020 to September 2021 due to the COVID-19 pandemic.

Interviews were transcribed in full and investigate using Bardin's [12] content analysis between September 2021 and January 2022.

Our research followed all ethical precepts contained in Resolutions 466/2012 [13] and 510/2016 [14] of the National Health Council (CNS). To ensure anonymity and information confidentiality participants were identified through a code composed by the letter "M" for *médico* (doctor) followed by Arabic numerals according to the order of entry in the study.

Results and discussion

Table 1 presents the sample profile, indicating that most participants were males, between 30 and 49 years old, with one to ten years since training and time working in the ICU.

Table 1. Profile of medical professionals interviewed.

Gender	N	%
Male	16	66.6
Female	8	33.4
Age	**N**	**%**
20-29	2	8.3
30-39	11	45.9
40-49	8	33.3
50-59	3	12.5
Training time	**N**	**%**
1-5	10	41.7
6-10	7	29.2
11-15	4	16.6
16-20	2	8.3
+20 years old	1	4.2
Time working in ICU		
1-5	12	50.0
6-10	8	33.3
11-15	3	12.5
16-20	1	4.2
+20 years old	00	0.0

Statements collected through the semi-structured interviews resulted in three major content analysis categories: "limiting means not to institute useless therapy"; "questions remain on the use of LSL in practice"; and "undergraduate medical education is deficient in approaching LSL and palliative care."

Life support limitation

What is it and who does it apply to?

When asked to define LSL, the respondents showed different understandings of what it represents. Although most view it as a limitation involving different possibilities, a minority still associates LSL with the full interruption of therapeutic support:

"To limit is to stop providing support that is no longer beneficial. It means removing what became futile at that moment, for that patient" (M16).

"It's the absence of drug support, equipment, and auxiliary procedures" (M7).

"Limiting is removing unnecessary procedures, but it does not mean fully interrupting everything. Only of that which is no longer beneficial. It's relative. Something unnecessary for one patient may be necessary for another. So, they are different decisions" (M24).

"It's when the patient is deemed terminal, and all support is suspended to allow them to die from the disease" (M21).

In a way, the statements dialogue with the concept of LSL, which consists of recognizing when treatment is useless. Limitin life support has been presented as a means to enable dignified death for patients, reducing suffering and respecting their conditions. As some participants pointed out, it includes clinical decisions such as withdrawing or not offering advanced life support and maintaining current measures, without adding treatment for new clinical occurrences until death ensues [8].

On the other hand, some statements interpret LSL as a kind of therapeutic abandonment. However, if necessary, therapeutic limitation should be understood as a measure to preserve the patient's dignity, and not as a form of abandonment or negligence [15]. Despite these divergences, all respondents understand that LSL applies to patients with limiting diseases for which there is no curative therapeutic possibility.

"(...) limitation of life support is meant for irreversible conditions, those with no treatment (...)" (M14).

"When the patient has a clinical condition for which treatment is no longer viable, limiting support is needed, as treatment will not impact the patient's condition" (M23).

LSL adoption stems from the principle of reducing unwanted harm to terminally ill patients founded on the premise that the dying process is attributable to the afflicting disease, and not to acts of treatment interruption or withdrawal. Thus, it is different from causing patient death. In cases where the harm outweighs the benefits, treatment measures need to change to comfort care in conscientious detail [16,17].

Research

European critical care societies even recognize the need to limit treatments meant to prolong life in cases of irreversible clinical prognosis, and when therapy seems futile or inadvisable [18,19].

Note that the interviewees refer to such patients in a distinctively varied manner, demonstrating that, in practice, professionals use different terminologies to define the condition:

"(...) *a patient who is no longer viable or who will enter a vegetative stage*" (M4).

"(...) *with no perspective for improvement*" (M5).

"(...) *to patients with no possible clinical recovery*" (M8).

"(...) *when the patient is terminal*" (M10).

"*In the case of patients with no prognosis* (...)" (M12).

"(...) *in irreversible and hopeless situations*" (M18).

"(...) *that incurable patient, in a vegetative state* (...)" (M23).

As with any delicate topic, surrounded by debate and controversy, different euphemisms and terminologies are adopted to refer to health-related processes of finitude, a practice noticeable not only in the professionals' statement but also in academic research, which introduce a vast diversity of terms to refer to such conditions.

Limiting life support

Decision making

When asked to talk about the recommendation for LSL measures, respondents described it as a decision-making process that involves different approaches. Some consider it an isolated medical decision, while others define it as something that should be decided on together with the health team, family members, and even the patient themself, if possible:

"*It is a decision that must be taken together with the multidisciplinary team, family members, and the patient, whenever possible. If things happened this way, I believe 98% of families would accept it*" (M4).

"*Limiting therapy is a medical decision. So, you keep reflecting on this responsibility. Is* [the patient] *dying? Yes? But in this case, you have to intervene. You have to ponder a lot*" (M22).

Implementing LSL is not an easy choice to make, as it challenges physician-centered ethical dilemmas. Such decisions are not usually shared between the health team and the family [20], but they must be taken jointly by the medical and multidisciplinary team, together with the patient's family core. All people involved must be informed, advised, and in agreement, at peace and at ease with the procedure [20,21].

According to Araújo and Leitão [22], family caregivers are perceived as resources that benefit the sick individual but often do not receive due attention from the health team, who neglect the need for help and support required by caregivers.

When discussing the indication for LSL, the respondents shared their opinions regarding their institution during ICU practice. Some reported not having prescribed it to any patient but mentioned not being averse to its use; others were in favor of the practice, but gave different reasons for their decisions; and some indirectly manifested their disagreement towards the practice:

"*It depends a lot on the ICU routine, I'm not particularly against it, but I never got to recommend it, because that's not the routine here. The most I did was switching medications*" (M20).

"*I see the human being as a machine, if it is no longer viable for me, I do not mean to say it needs to be eliminated, but, if it is no longer viable, there is no reason to invest resources in something that you know will not work as it should*" (M4).

"*It's essential. I think you have to get used to it because, in the intensive care unit, you will always have patients who need palliative care. Regardless of most people hoping for curative care, this is not always possible*" (M2).

"*Our practice is limited, this is necessary. In some cases, we avoid torturing the patient, you know? It's a matter of empathy*" (M19).

"There's no way I can be sure of what will happen, as there are people who surprise us, and we have many possibilities in the ICU. Interrupting procedures is a huge burden. It's like giving up, abandoning [the patient]. *I'd rather insist and see what comes out of it"* (M21).

Salins and collaborators [17] highlight the persistent considerable variability in decisions regarding limiting/withdrawing life support therapies around the world. Downar and collaborators [16] state that these decisions are even less frequent in undeveloped and developing countries.

Although the patient's characteristics may facilitate prognosis from the progressive decline of their clinical condition during the last stage of life, when faced with death processes in end-of-life care, which require decisions on therapeutic limits, cases of therapeutic obstinacy are common in the ICU [23].

Determining when the patient is going to die is difficult, and experiencing their last days or weeks of life can also influence approaches and further frustrate decision-making regarding either providing, limiting, or withdrawing life support. End-of-life prediction is often inaccurate, and current prognostic tools and models are limited. However, this uncertainty must be minimized to ensure that it does not prevent important decisions relevant to health professionals, terminally ill individuals, and their significant others [23,24].

Professional opinions also differed regarding the right time to implement LSL. Some believe LSL should take place even before arrival at the ICU and, when the patient has already been admitted, it should be instituted as soon as possible. Others advocate that LSL should be the team's last resort and implemented only when the patient has entered the active process of dying.

"Patients with a poor prognosis should not even be sent to us. The limitation should start out there, not after the patient is here" (M15).

"If it is a case where the patient is already in an active dying process, I think we can limit some procedures. They are already dying, so it makes no difference" (M10).

"A terminal patient, who arrives here with an irreversible disease, you know? We often know what to expect. So, you should already consider the limitations that will help to give them a better ending" (M9).

Bioethics is fundamental to assist health professionals in better facing end-of-life care conflicts and can facilitate and support decision-making insofar as moral issues are properly considered [3].

ICU physicians face increasingly difficult decisions regarding the continuation of life-sustaining treatments and, in such situations, the choice to limit or even withdraw them is often made after patients begin deteriorating, when their short-term prognosis is poor [25].

In a 2012 study on palliative care intervention implemented by the Emily Couric Clinical Cancer Center at the University of Virginia, Romano and collaborators [26] concluded that when introduced early, palliative care significantly reduces end-of-life ICU admissions and leads to fewer inpatient or ICU deaths, showing that palliative care exerts greater influence when implemented at earlier stages and can steer care towards the patients' ultimate goals, preventing them from suffering the consequences of unintentional ICU hospitalizations. A factor that can prove decisive for this early referral is the physician's training [27].

End-of-life care should begin when needed and can last for days, months, or even years. People in different situations can benefit from it—while some may die in the next few hours or days, others receive this care for many months [28].

When favorable to recommending LSL, respondents report making the decision while considering benefits such as dignity, comfort, relief of suffering, pain control, and avoidance of futile measures. The term 'palliative care' appeared in several statements as a practice that supports the decision to limit procedures for patients who would not benefit from curative therapy:

"The issue here is to alleviate the patient's suffering, providing careful pain support, and psychological assistance to the family. It is no longer a curative issue, but a matter of palliation... palliative care" (M2).

"By limiting intervention, we avoid procedures that would prolong suffering without changing the prognosis. It is palliative care. We give comfort to the patient and only use procedures that allow for this: comfort" (M24).

"There is no reason to keep this person alive without any quality of life, subject to repetitive infections and hospitalizations" (M4).

Medical professionals have a duty to alleviate suffering, which includes healing sometimes, relieving often, and comforting always. No exception to this principle exists when the disease is incurable and death is imminent, whether there is medical consensus or not. Indiscriminate and aggressive medical interventions in such situations violate one's right to live and die with dignity. Medical procedures should therefore be limited when health professionals all agree that continuing treatment would result in more harm than good [29].

Those who oppose or do not perform LSL in their care practice reported discomfort with this approach and highlighted reasons that may hinder its recommendation, such as the team, the service routine, legal complications, and even their own interventionist beliefs:

"It's a tough decision, you can't be sure what will happen. I have an obligation to fight for the patient" (M21).

"This is the same as going out looking for trouble. This withdrawing treatment idea is an invitation to be sued by the family. And it is not provided for under the law. It's a hassle (...)*"* (M13).

"Sometimes I think it would be the best [course of action], *but the family will never agree, and the team, well... there are many who don't accept it. It is not how we do things"* (M20).

Despite the opinions, LSL is a legal practice in Brazil, guaranteed under CFM Resolution 1,805/2006 [30] and CEM in 2019 [4], both linked to the Federal Council of Medicine (CFM), which support the physician's decision to limit or withdraw procedures that extend the life of terminally ill patients, thus respecting the will of the person or that of their legal representative. Physicians are supposed to clarify the appropriate therapeutic modalities for each situation, register the decision in the medical record, ensure the patient and their family the right to a second medical opinion, and continue to provide comprehensive care to alleviate suffering [7].

Family usually figures among the hardest barriers for the LSL, since, according to the respondents, they greatly influence decision-making, even when the professionals themselves are in favor of LSL. To the interviewees, the family is driven by personal feelings and has a hard time agreeing with support limitations, to the point of attacking and/or threatening health professionals when invited to consider the possibility:

"People expect us to do everything to save patients. I once tried to approach a family. There was absolutely nothing we could do for the patient. They knew, and she was suffering. Still, they threatened me and even decided to make a complaint against me to the ombudsman" (M13).

"It is not uncommon for the patient's entourage to misunderstand this practice (...) *they have feelings for their loved one, are sentimentally attached, so sometimes they have some problems"* (M4).

"The family is attached to the patient, they have hope. We know it's because of attachment that they can't take the patient's suffering as a priority. It's uncomfortable, but they don't accept it and we respect their decision (...)*"* (M17).

Family members generally do not admit the impossibility of recovery, thus insisting on maintaining the treatments, hoping for an unrealistic cure [31].

Recognizing the importance of the family and its values is important, but in case of conflicting opinions, the medical decision prevails. According to the respondents, the family hardly agrees with the diagnosis of terminal illness due to emotional involvement, so they tend to choose what would be best for themselves and not for their loved one [7].

When the patient can no longer decide and LSL is communicated to the family, they usually insist on futile maintenance, but even in face of this obstinacy, therapeutic measures should not be maintained indefinitely, as this would cause unnecessary harm, which it is neither a medical duty nor objective [32].

Regarding family members and their interference in decision-making, some interviewees stated that the education level and time of patient follow-up

positively influences the acceptance by some regarding LSL adoption:

"When the patient's loved one has a better level of knowledge and is better guided, we see that they can be understanding and realize that it is the best thing to do" (M4).

"Sometimes the family ends up giving in, they lose hope with time; given time, they manage to realize that the situation is causing great suffering for both them and the patient (...)" (M17).

Health professionals must act effectively for the family to accept death as part of life, seeking to minimize the suffering of both parties—the family and the patient. It is up to the team to clarify doubts, encourage positive attitudes, and, above all, be candid and accessible, as a disoriented family makes the process even harder, while a family aware of the LSL benefits provides support to the patient and the team [33].

Understanding the possible advantages of palliative care requires time and access to clear information. Depending on how the team conducts the process, the family can perceive the motivations for and progressively develop mutual trust and complicity [34].

However, differences in ethics, religion, culture, and predictive abilities hinder formulating a consistent approach to limiting treatment in critical illness [25].

The practice of limiting life support

Respondents who have already recommended LSL to their patients described the experience regarding the procedures avoided or withdrawn and explained how they carried out this practice:

"It means withdrawing or limiting support with vasoactive drugs, routine exams, medications, invasive procedures, advanced life support (...)" (M11).

"(...) it is terminal! So, we keep the feeding, manage the pain, and carry on with the necessary medication, but stop doing the rest. If there's no prescription, there is no use, you know? Things like CVCs, dialysis, surgery (...)" (M16).

"Disintubation, interruption of vasoactive drugs, and suspension of dialysis (...)" (M6).

"These are situations in which we will not institute invasive measures, monitoring, daily exams, and sometimes even antibiotics... Above all, we do not resuscitate" (M24).

A survey carried out with ICU physicians in Brazil, Argentina, and Uruguay, found that more than 90% of the participants had already limited or withdrawn some type of artificial life support, with cardiorespiratory resuscitation, administration of vasoactive drugs, dialysis methods, and parenteral nutrition being the most frequently suspended or limited therapies [35,36].

A prospective multicenter study on the limitation of life support techniques upon ICU admission evaluated the withdrawal and limitation of cardiopulmonary resuscitation, endotracheal intubation, non-invasive ventilation, vasopressor drugs, dialysis, and/or blood products transfusion. Results revealed that invasive measures were more frequently limited or removed, whereas decisions to limit non-invasive life support measures were less constant and almost always involved the full withdrawal of any treatment [37].

Limitation is described as a choice centered on the reality of each patient, considering their condition and needs, while honoring their life history:

"Even if we put together a strategy, this will never be the same for each person. We usually set up a strategy and adapt it to each case (...). I try seeing things from the patient's perspective or how they lived, to understand what limitation would be for them (...)" (M3).

"When the team understands that treatment should be limited, I try to choose the measures according to the needs of that specific patient and adapt to the different moments they are going through (...) in the end, I'll have withdrawn everything" (M21).

A change in the patient's clinical condition requires a resizing of the therapeutic plan, reassessing what may be best for the individual. In the ICU, the offer of a large therapeutic arsenal sometimes leads intensivists to lose grip on the balance between benefit and harm. Respecting the patient's autonomy and wishes as much as possible requires continuous reflection, as it helps to define what is best for a specific case [17,38].

According to the respondents, by limiting life support they seek to benefit both the patient and

the family, who, due to the prolonged monitoring of the patient in dysthanasia, are usually overburdened and undergo losses:

"(...) these are patients who suffer a lot, so it would be a way to reduce their suffering and that of their family members" (M1).

"It's not just the patient, there's a whole context behind it... there's a family, and people losing jobs. It takes a lot for this patient to receive support, and you would be supporting something that is no longer viable in organic and social terms" (M4).

"The family has to give up a lot to be there with a patient who is no longer viable. So, by limiting treatment, we help to alleviate this unnecessary burden" (M17).

Therapeutic obstinacy must not be understood as a merely futile and unnecessary treatment. We must highlight the harm it brings to patients, in terms of suffering, and to family members, who are forced to abandon their routines, homes, jobs, and other relatives to provide support to a patient whose prognosis, regardless of any investments, is unavoidably death [39].

From the experience with LSL, some respondents highlighted feelings of frustration and guilt as a result of specific situations. In some cases, there was the underlying belief that limiting treatment equals giving up on the patient:

"I was devastated. Their daughter would say that the patient made it clear she didn't want to be intubated, and everyone was aware of that, but they didn't accept it (...) so, when I pushed the tube, it felt like I was violating her will" (M17).

"We spoke to the family and there was a consensus not to resuscitate, but when he went into arrest, his mother lost it... she tried to resuscitate him, screamed for us to do something (...) I was gutted for days, you know? I should have tried to reanimate him. Her pain haunted me" (M23).

"The day team registered it and, when she went into arrest later that night, I started questioning myself... I wasn't prepared to just stand there. I left [the hospital] *devastated (...) you know? It felt like I didn't do my job"* (M12).

Several feelings are linked to LSL adoption among medical professionals, including insecurity and guilt, given the clash of paradigms and truths that involve moral, cultural, ethical, and religious values regarding life and death [39,40].

Still on the experience with LSL, some statements insinuated that the patient's age also leads to reactions of discomfort and annoyance, possibly related to the difficulty of accepting the death of children and youth.

"I had already had to recommend not to resuscitate older patients, and it wasn't easy—because we don't want anyone to die—, but when it happened with young people, I felt a greater burden. It's harder to say, "Let them die." You know?" (M14).

"We don't have a pediatric ICU here, so we also care for the children... You know that thing about fighting death? For children, it is worse. Much worse. (...) when I realize that it is not feasible, I feel uncomfortable, you know?" (M19).

Different publications on understanding and coping with death involving pediatric patients point to many difficulties. Doubts and difficulties regarding end-of-life decisions for children abound, mainly in defining how far the curative effort should go, due to affective, ideological, and other issues. Thus, the maintenance of futile treatments and procedures often prevails to the detriment of the children's comfort [39].

Although some report some type of training and education on the topic, the respondents observed that most often the experience with LSL stems from practice. They point to the insufficient approach at medical school and question the lack of investment by institutions for permanent palliative care education, thus admitting that learning arises with the demands of each case:

"During medical school, I had no contact [with this practice]. *However, I did a graduate course in intensive care where we had a discipline focused on the content, it was very well taught. There we had contact with doctors, psychologists, and performed simulations with actors"* (M1).

"I never took a palliative care class. Not even at the residency, because when I did it, they didn't even talk about it. I began learning here in the ICU

when they started to discuss these issues. I had to learn from practice" (M18).

"Nowadays, you have to learn about it because it's a situation that will happen to you, you know? Nowhere do they teach you, not even in the hospital itself. But the patient teaches you (...). *I did it because it was necessary... I was learning there"* (M19).

Health professionals usually deal with death situations, but are not sufficiently trained on the subject [41]. Besides, many physicians understand that palliative care equals terminal care, which increases the risk of late referral, implying non-involvement with LSL practices [27,42].

In a study on LSL, Forte [36] found that respondents who more often removed ALS had attended courses or lectures on end-of-life or palliative care in the ICU, read articles or texts on such topics, usually practiced intensive care medicine as their main activity, and were interested in participating in discussions regarding these issues in the ICU. Thus, educational institutions specialized in health care must invest in their students' education to encourage not only the development of technical skills, but also interpersonal skills such as empathy, congruence, acceptance, and dialogue, which are fundamental for human care, especially in the face of death [43].

Final considerations

LSL adoption for critically ill patients has been increasing worldwide, suggesting a trend of growing acceptance of the reality of futile treatments. Among the respondents, however, the understanding of treatment limitation shifts between it being 1) a practice aimed at enabling a dignified death to the patient; 2) a practice that must fit the patient's condition and needs; and 3) therapeutic abandonment, using the perceived moment as a criterion to recommend treatment withdrawal, limitation, and denial.

Professionals agree that LSL is indicated for end-of-life patients, and at the same are insecure about the difficulties in predicting death, which hinders decision-making. This process also involves issues regarding the degree of agreement with the medical decision (whether it should be isolated or shared with the health team, patients, and family members), although the statements analyzed only reported situations in which family interference was hindering instead of participatory.

Family non-acceptance was criticized, regardless of recognizing that conscious family members have an easier time accepting LSL, implying the need for better communication and guidance between them and health professionals. Experiences with family members, even those in favor of LSL, have revealed the feelings of insecurity and guilt arising from death and the reactions of other relatives.

The lack of preparation during medical school also presented a consensus, as the respondents claim that their experience with LSL stemmed from practice or continued education courses.

This demonstrates a need for further investment in education on the topic at different education levels so that LSL conducts begin at the right time, are correctly used, and practiced safely. Professionals should also be trained to properly inform patients and families about the possibilities of LSL, allowing for autonomy in their decision-making.

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Bárbara Fernanda Melo Barros contributed to the study conception and design, data collection, analysis and interpretation, as well as to the discussion of results and manuscript writing. Natasha Fiterman Rodrigues, Julia Bacelar Barros, and Vanise Barros Rodrigues da Motta collected, analyzed, and interpreted the data. Amanda Namíbia Pereira Pasklan and Vanise Barros Rodrigues da Motta reviewed the text and approved the version to be published. Sara Fiterman Lima developed, revised, and approved the project's final version to be published.

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