

# Critical care nurses' perceptions toward withdrawal of life-sustaining treatments: a phenomenology study

Ibrahim Ahmed Al-Abd<sup>1\*</sup>, Sahar Yassien Mohammad<sup>1</sup>, and Dalia Ali Ameen<sup>1</sup>

<sup>1</sup> Critical Care Nursing, Faculty of Nursing, Ain Shams University, Cairo, Egypt.

\*Correspondence: Ibrahim Ahmed Al-Abd. Address: Critical Care Nursing, Faculty of Nursing, Ain Shams University, Cairo, Egypt. Email: [ibrahim.ahmed.al.abd@nursing.asu.edu.eg](mailto:ibrahim.ahmed.al.abd@nursing.asu.edu.eg)

Responsible Editor: Rizki Fitriyarsari

Received: 30 January 2024 ◦ Revised: 6 June 2024 ◦ Accepted: 20 June 2024

## ABSTRACT

**Introduction:** Withdrawing life-sustaining measures involves complex legal and ethical considerations, and few healthcare providers have received specialized training in this area. This study explored critical care nurses' perceptions of withdrawing life-sustaining treatment.

**Methods:** A qualitative phenomenological design was used, a purposive sample of 15 individuals of both sexes for nurses working in the ICU for at least six months. The study was conducted in seven critical care units at four hospitals at Ain Shams University. The data collection process involved audio recordings of semi-structured open-ended interviews and the data were analyzed based on Tesch's method.

**Results:** Study results revealed that the sample age ranged from 24 to 38 and ranged from 1 year to 14 years working in ICU at various levels starting from nursing staff to head nurses. Critical care nurses' perceptions were reflected through four main themes and related subthemes. The main themes that shaped nurses' perceptions were attitudes toward withholding and withdrawing life-sustaining treatments, ethical perceptions, beliefs impact, and legal framework.

**Conclusions:** Nurses face difficult experiences influencing their perceptions of life-sustaining treatment withdrawal, emphasizing the importance of policy guidance to prevent decisions based only on beliefs. Therefore, further qualitative and quantitative studies are required.

**Keywords:** life-sustaining treatments, Perceptions, qualitative design, themes, withdrawal

## Introduction

Life-sustaining treatments are medications or medical devices to maintain or support vital organ function. This includes mechanical ventilation, pharmacological or mechanical hemodynamic support, and hemodialysis (Bandrauk et al., 2017). The withdrawal of life-sustaining therapies is to remove those that help terminally ill patients die more slowly but no longer offer any benefit. For many individuals, getting the most comfortable death possible is a major priority. (Lobo et al., 2017). Removing life-sustaining treatments necessitates balancing ethical, legal, and medical concerns. Not all medical professionals have received

specialized training in the ability to remove life-sustaining treatments (LSTs) and there are no established protocols to guarantee that patients and their families receive the best possible care (Downar et al., 2016).

The burden of chronic access to life-sustaining care has increased worldwide. The use of these medicines has given rise to ethical issues, especially when dealing with poor prognosis. Regarding this dilemma, it is acceptable or even necessary to withdraw and withhold LSTs (McPherson et al., 2019). Resources for intensive care units are limited, and administering unnecessary therapies to patients may compromise their sense of

dignity. As a result, the significance of research and instruction in advanced care planning, end-of-life care, and withholding and withdrawal of life-sustaining measures has grown (Lee et al., 2020).

Hospital resources were strained by their breakpoints during the epidemic. Owing to pre-pandemic deficiencies, ventilators are in low supply in many nations. Intensive care units can adapt to a rise in demand to a certain extent. Healthcare systems in this circumstance need to handle potentially life-saving therapies using evidence-based policies (Cardona et al., 2020). Stopping life-extending therapy can be more difficult for medical practitioners than choosing not to start in the first place. However, these fears should not take precedence over clinical judgment and should not prevent patients from obtaining potentially beneficial treatment or forcing them to continue receiving ineffective treatment (Ursin, 2019). When handling end-of-life situations, nurses may experience emotional conflicts, stress, and worry. Religious and belief disputes arise as no clear policies and guidelines are controlling the process of life-sustaining treatment withdrawal. Therefore, these patients may require additional assistance. To help nurses in critical care units manage end-of-life concerns better, we should be aware of their viewpoints and assist them as doctors make decisions, but nurses live with it (Kostka, Borodzicz and Krzemińska, 2021).

Nurses experience moral distress when unable to solve clinical issues. This may occur if nurses provide care that goes against ethical standards. Concerns among nurses arise from their lack of participation in decision-making (Barlow et al., 2017). The codes of ethics, legal framework, and knowledge specific to nurses are all available to them. They also have a systematic strategy to help design treatments. Additionally, nurses must build strong connections with patients and their families to understand their preferences for the process of making end-of-life decisions (González-Rincón, de Herrera-Marchal and Martínez-Martín, 2019). Withdrawing life-sustaining care remains an issue of dispute in the intensive care perceptions of the nurses involved. Therefore, exploring critical care nurses' perceptions toward withdrawal of life-sustaining treatments as part of multidisciplinary teams could be a great support for minimizing burnout syndrome, relieving stress, stopping mental exhaustion, and emotional draining for nurses, as well as improving the understanding of this process and providing guidance to facilitate the process.

## Materials and Methods

### Study design

A qualitative phenomenological design was used to achieve the study's aims. A qualitative approach was chosen to explore critical care nurses' perceptions toward withdrawing life-sustaining treatments and enrich the interpretation of the phenomena of interest. According to Creswell and Poth (2016), phenomenological design is the best approach for the researcher to gather deep information and perceptions through qualitative methods such as interviews representing it from the perspective of the research participants. This approach has been beneficial, and appropriate, and helped to explore critical care nurses' perceptions of withdrawal of life-sustaining treatments.

### Study Setting and Participants

The study was conducted in seven critical care units at four hospitals at Ain Shams University: The participating ICUs were seven different adult ICUs (Ahmed Shawky Geriatrics ICU, Medical ICU, Trauma ICU, Neurology ICU, Isolation ICU, CCU, and GIT ICU). In phenomenological research, researchers interviewed the participants to obtain considerable data. A purposive sample was taken of critical care nurses who agreed to participate in the study who worked part-time or full-time and had at least six months of experience.

The power of purposive sampling in qualitative research lies in selecting information from rich cases for in-depth study, from which the investigator can learn about the phenomena under study. In qualitative designs, predetermination of the number of participants is almost impossible because the sample size is not determined by the number of participants, but by achieving data saturation (Mwita, 2022).

The Faculty of Nursing Ain Shams University approved letter facilitated the data collection process in hospitals. The first researcher started to visit areas repeatedly to find volunteers who agreed to conduct interviews. Referral sampling was used via the snowball sampling method to recruit participants after showing their willingness to participate in the study. Fifteen critical care nurses (ten men and five women) agreed to participate in the study. After nine interviews, 80% of the data was collected. Information saturation was achieved after fifteen interviews. The aim of the study was clarified to participants included in the study and the confidentiality and privacy of participants were assured. The researcher utilized interview codes in the form of numbers to ensure the privacy of data and confidentiality. Before starting interviews, all of their

rights were explained and their right to withdraw at any time was guaranteed if they felt uncomfortable disclosing any difficult situation they had witnessed. Data collection interviews were terminated when participants were exhausted by describing phenomena under study.

#### Instrument

Data collection was performed using semi-structured interviews. The interview was developed by the first researcher guided by previous literature and supervised by other team researchers. It was also revised by four experts from the Faculty of Nursing who have academic experience, not from the research team. The tool was developed by using the mother language in conversation based on a review of relevant recent related literature in which the researcher simply guided the participant in an extended discussion. The interview covered two parts, as the following: Part I: Demographic data: Critical care nurses' data such as gender, age, religion, educational level, place of work, and years of experience. Part II: Open-ended semi-structured interviews: Several audio-recorded online meetings were organized by the first researcher and participants because of the difficulty in conducting meetings during work time and precautions of the pandemic. The researcher conducted the interviews using an interview guide containing 13 open-ended questions. To ensure the recording of comprehensive, accurate, and true reflective descriptions of critical care nurses' perceptions on the withdrawal of life-sustaining treatments, interviews were conducted using a high-quality recording application. Pieces of research were fitted together through true reflective descriptions of critical care nurses' perceptions of the withdrawal of life-sustaining treatments.

#### Data Collection

After receiving institutional approval, data were collected from February 2022 to July 2022. The first researcher recruited fifteen nurses, and contact was initiated; the researcher and participants organized online meetings due to difficulty in conducting meetings during work time and precautions of the pandemic, and interviews were recorded using a high-quality recording application on a laptop. The purpose, significance, and nature of the study were explained before data collection. All participants provided verbal consent for inclusion in audio-recorded interviews. All interviews were conducted in the native language (Arabic). Each interview lasted from 20 to 50 minutes, covering the required questions. Interviews ended when participants

had completed discussing the phenomenon being studied; when no new codes, categories, or themes had developed; and when participants had repeated the same information (data saturation). The interview guide had 13 open-ended questions designed by the first researcher who had previous experience working in ICU based on the literature to allow deeper exploration and lead to a rich description and understanding of their experiences. Questions were simply explained to participants in their own words to understand and express themselves freely. After each question was discussed, the researcher checked whether their understanding of the participants' opinions given in the interview truly reflected the participant's experiences.

#### Data Analysis

The first researcher transcribed the interview and codes made after revision and agreement of other researchers. Data analysis was done manually according to Tesch's method (Creswell and Poth, 2016). Once all the interviews were transcribed, the transcriptions were read, and short notes were made. Each document was read to make meaning of its content and all the identified topics or units of meaning were then listed. Similar topics were then clustered together as major and unique topics. The topics were abbreviated as codes, which were written next to the appropriate sections of the text. The most descriptive wording for the topics was identified and the topics were formulated into categories. The data belonging to each category were gathered and analysis was performed. Thematic analysis was conducted once the process had been completed with all the transcribed interviews.

#### Trustworthiness

Conformability, dependability, credibility, and transferability were the four criteria used to increase the rigor of the study. All the research team was included in technical implementation. Credibility was ensured by including copies of the transcribed interviews. Researcher triangulation was undertaken as the interviews were revised by all researchers. Participant triangulation ensured that multiple perceptions were obtained when the study included participants from different intensive care units. Transferability was ensured through in-depth descriptions of the study performed, providing details of the characteristics of researchers, collection and analysis procedures, sampling strategies, and the data collection and analysis procedures. Conformability was ensured by data accurately representing the information that the

participants provided, and the researcher didn't influence participants or guide them.

### Ethical Considerations

The research approval was obtained from the ethical committee in the Faculty of Nursing at Ain Shams University before starting the study with the number 24.02.214. Verbally recorded consent was obtained from participants. Confidentiality of participants was preserved, and their data were only accessible to the research team.

### Results

The age of nurses ranged from 24 to 38 years and their professional experience in ICUs ranged from 1 to 14 years. The participants' distribution by gender was five women and 10 men. Four main themes were identified based on the findings regarding critical care nurses' perceptions of withdrawing life-sustaining treatment: (a) Attitudes toward the process of withholding and withdrawing LSTs, (b) Ethical perceptions, (c) Beliefs impact, and (d) Legal framework.

#### Theme 1: Attitudes toward the process of withholding and withdrawing LSTs

Attitudes toward withholding and withdrawing of LST was a master theme with four subordinate themes: discontinuation of treatment; the distinction between withholding and withdrawing of LST; limited access to ICU care and withholding and withdrawing of LST, and palliative care and proximity.

##### *Discontinuation of treatment*

Most of the participants were against discontinuation of life-sustaining treatments and confirmed that it should never be stopped even if the patient appears to be dying because miracles happen, while some of them see that life-sustaining treatments frequently prolong the dying process without providing any real benefit to the patient.

An example of attitudes toward the process of withholding and withdrawing of LSTs theme; is discontinuation of treatment subtheme; a 38-year-old female participant reported:

A 38-year-old female participant reported: *"I don't agree to withdraw life-supporting treatments, and I've never been involved in this process before."*

A 24-year-old female participant stated: *"Many patients in the intensive care unit are in a state that is considered irreversible. Consequently, there is no reason to continue administering life-sustaining medications*

*once hope for recovery is lost. However, upon admission, physicians typically initiate all necessary medications and aggressive courses of antibiotics."*

##### *Distinction between withholding and withdrawing of LST*

Participants found a great difference between withdrawal and withholding LSTs. An example of the distinction between withholding and withdrawing of LST (life-sustaining treatments) subtheme;

a 32-year-old male participant, expressed that *"If we start and withdraw it, I see that is a crime or a greater mistake, but if we withhold from the beginning, it may be a lesser mistake."*

A 24-year-old male participant expressed no clear difference between withholding and withdrawing LSTs. The treatment has a beginning and an end. Withdrawing treatment is like withholding it, as the patient does not benefit.

##### *Limited access to ICU care and withholding and withdrawing of LST*

Many of the participants linked the lack of ICU beds and resources with the necessity of withdrawal of LSTs.

An example of the relation between limited access to intensive care units and the withholding of life-sustaining treatments subtheme is in a 38-year-old female participant who expressed that: *"Yes, there is a relation. It is possible to affect the withdrawal of treatment, not just withholding it. If there are no available beds and the doctor sees that the patient's condition is not going to improve and there is no hope for recovery, then the withdrawal of treatment may begin."*

##### *Palliative care*

All of the participants agreed with applying the concept of palliative care and its great importance.

For the subtheme of palliative care, a 33-year-old male participant reported: *"Yes, of course, it has value. The patient goes through several stages of illness, but unfortunately, palliative care is not widely available in our setting. It may be more available in oncology hospitals."*

#### Theme 2: Ethical perceptions

For the ethical perceptions theme, there were four subthemes found: patient autonomy, justice, telling the truth, and ethical decision-making.

### Patient autonomy.

Participants reported the necessity of applying patient autonomy principles and advocating their rights.

An example of ethical perceptions theme; autonomy subtheme; a 25-year-old female participant, reported that: *"One of patients' rights guaranteed by World Health Organization and applied here if the patient requested or refused a specific treatment, we had a cancer patient in a late stage she asked not to be resuscitated."*

### Justice.

Patients are equally treated by all participants and there is no difference in delivering care. For the subtheme of justice, a 38-year-old male participant reported that: *"Justice is applied in general between all patients but sometimes as we are in a governmental hospital there are some types of discrimination, especially with recommended patients."*

### Telling the truth

Most participants prefer telling the truth and avoiding false assurance. For the subtheme of telling the truth, a 26-year-old male participant reported that: *"We disclose all details of patient condition clearly"*; a 24-year-old male participant reported that *"It's not beneficial for the patient if I tell something that could affect their psychological or physical health, as some patients may become fearful. However, we can clarify the situation to the patient's family."*

### Ethical decision-making.

A sense of inferiority and lack of authority in the decision-making process was described by most of the participants.

For the subtheme of ethical decision-making, a 38-year-old male participant reported: *"We have no participation in these decisions even if it happens; it will remain according to the doctor's orders."*

### Theme 3: Beliefs toward withdrawal of LSTs

There were two subthemes for the theme of beliefs toward withdrawal of LSTs: beliefs impact and religion impact.

#### Beliefs impact

Some participants reported they should try to keep their patients alive on machines for as long as possible, no matter how uncomfortable the machines are, while

others see that, if a patient is dying, it is best not to prolong his life by LSTs.

An example of a beliefs impact theme is a 30-year-old female participant, who reported: *"I believe that everything has a predetermined time, and we provide treatment for the patient until their time will come."*

A 26-year-old male participant reported: *"No matter how much we work on a patient who has lost hope in their recovery, such as a lung cancer patient, we know that, although how hard we try, there will be no positive outcome and the patient will die later."*

#### Religion impact.

Religion has a great role in forming participants' opinions toward those sensitive dilemmas. For the subtheme of religion's impact, a 38-year-old male participant reported: *"Yes, the concept of religion has an impact. First and foremost, every patient in my view should receive their care in a complete pattern."*

A 29-year-old female participant reported: *"I don't have a religious background about these concepts, but if a doctor asked me to withdraw a certain treatment, I would feel dissatisfied and if the patient died, I would feel that it may be due to my negligence."*

#### Legal framework

For the theme of a legal framework, three subthemes were found: malpractice and negligence, euthanasia, and DNR.

#### Malpractice and negligence

Some participants reported incidences of malpractice and negligence with the patient appearing to be dying.

An example of a legal framework theme, malpractice, and negligence subtheme is a 29-year-old female participant who reported: *"To be honest, yes, I have seen such cases, but it is a rare occurrence. I feel that the nursing staff can't try with the case. They see that it's not going to make a difference in the end because they will die already."*

#### Euthanasia

Participants showed a low level of knowledge regarding euthanasia and its types. For the subtheme of euthanasia, a 38-year-old female participant reported: *"I'm not sure, to be honest. I have never heard of it before; a 25-year-old male participant reported "It is not legal in Egypt, but it exists outside Egypt."*

#### DNR

The lack of policies guiding DNR orders in hospitals was reported by most of the participants. For the subtheme of DNR, a 25-year-old male participant reported: *"No one writes 'do not resuscitate' in patient documents. This may only be a verbal agreement. Sometimes, I wrote it on the treatment sheet, but they asked me not to write it."*

A 25-year-old male participant reported: *"recently, the doctor writes in the medical notes that the patient should not receive cardiopulmonary resuscitation and the matter should be officially documented as it is counted in the mortality rate statistics."*

## Discussions

The current study aimed to explore critical care nurses' perceptions of withdrawal of life-sustaining treatments. The findings of the study provided insights into the low level of knowledge of ICU nurses regarding ethical and legal issues in end-of-life care, especially the process of life-sustaining treatment withdrawal and the need for structured guidelines and policies which help the multidisciplinary team be able to share in these decisions and tolerate stress arise from implementing these steps. The goal was accomplished through a structured discussion of the sociodemographic traits of the participants, along with the study topics and associated subtopics. Data were gathered from the study participants through in-depth interviews to capture their perceptions, feelings, thoughts, and hopes that arose from their experiences caring for end-of-life patients.

Regarding the subtheme of discontinuation of treatment, the results indicated that most participants were unwilling to discontinue life-supporting treatments, even in cases in which the patient's prognosis was poor. This may be attributed to religious beliefs and a lack of clear policies and procedures to address ethical dilemmas. These findings are consistent with Taylor et al. (2020) who detailed the tensions experienced by nurses during the LST withdrawal procedure. Concerning the subtheme of distinction between withholding and withdrawing life-sustaining treatments, the study results showed that most participants found that the two processes were not equal; they thought it was a crime or a greater mistake, but if it was withheld from the beginning, it may be a lesser mistake, while some of them saw that they are equal and there is no difference between withdrawal and withholding life-sustaining treatments. These findings agree with Ursin (2019), who reported that some healthcare members may find it more difficult to

withdraw LSTs than to decide not to start it in the first place, as they would feel responsible for the patient's death. These results are not supported by the findings of Larcher et al. (2015) who reported withholding, withdrawing, and limiting life-sustaining treatments ethically the same.

Regarding the subtheme of the relation of limited access to ICU care, withholding and withdrawing of LST, some of them found no relation and interfering in these situations, but most participants said that there is a direct relation between lack of ICU beds and the decision to withdraw life-sustaining treatments, especially during the pandemic, when there was a lack of ICU beds there were patients who needed care more than end-stage patients. They confirmed this relationship if asked about the number of ICU beds compared to the number of patients, saying the ratio was disastrous due to the lack of intensive care beds. These findings are consistent with Cardona et al. (2020) who reported a lack of hospital resources during the COVID-19 pandemic and hospital resources reached their limits. Several countries face a shortage of ventilators. ICUs have some capacity to respond to increased demand; in this situation, healthcare systems need to have policies to judge the withdrawal LSTs process.

Regarding the subtheme of palliative care, all participants noted the value and necessity of providing palliative care but reported that they did not have these departments in their hospital, as the concept of palliative care in Egypt still needs to be paid attention to and to cooperate with the Ministry of Health, the private sector, and community resources to offer palliative care centers. These findings agree with Sameh Eltaybani et al. (2020), who reported a lack of adequate funding for palliative care facilities, the absence of a national organization dedicated to the field, the exclusion of palliative care from the country's healthcare agenda, and inadequate training of medical professionals in the field.

Regarding the subtheme of patient autonomy, all participants confirmed applying patient rights, especially in fully conscious patients and highly educated patients. Families who can make decisions otherwise have the upper hand, especially in governmental hospitals, but doctors and nurses explain, clarify, and share with patients and families in medical decisions. This result is consistent with the findings of Molina-Mula and Gallo-Estrada (2020) who mentioned the importance of establishing strategies to enhance patients' ability to make decisions and increase their autonomy.

Concerning the subtheme of justice, all participants informed that all patients were equal in providing care even if some recommended patients had their care and treatment without distinction. From a researcher's point of view, it is an ethical obligation to be fair in providing healthcare in governmental or private hospitals, which enhances the concept of humanity. This finding agrees with Manda-Taylor et al. (2017) who reported that everyone should be treated equally, fairly, and impartially according to the definition of justice. According to the principle of justice, we must consider the perspective of the entire community.

Regarding the subtheme of telling the truth, most participants described that they prefer telling the truth about patient's condition to patients and their families. They try to be careful and kind while delivering these messages, especially to patients, to avoid affecting their psychological condition badly, while some of them stated that giving information about patient condition is not one of their responsibilities. From the researcher's point of view, nurses should follow hospital policies regarding this issue, especially in breaking bad news. These findings are in harmony with Chamsi-Pasha and Alba (2017) who reported that the patient had the right to be aware of his health and prognosis. The patient should be provided with additional information if needed.

Participants of the study stated in the subtheme of ethical decision-making that they have no authority in making decisions regarding the withdrawal of life-sustaining treatments and that they considered these medical decisions. They felt empowered less in these situations, especially when a few doctors allowed nurses to participate in these decisions. These findings are not consistent with Vanderspank-Wright et al. (2018) who stated that LSTs withdrawal decision involves all members of healthcare teams and not limited to physicians and nurses only.

Concerning the subtheme of beliefs, some participants were against the withdrawal of life-sustaining treatments, and they felt an obligation to complete with the patient until the end, as each person had a time of death. They found it more humanistic than scientific, while some of them stated that we should not waste our resources in hopeless conditions, and they hoped to generalize guidelines and policies to control this subject, especially with a lack of resources and ICU beds. These findings are in harmony with Taylor et al. (2020) who described challenging scenarios that emotionally impacted nurses, causing them to feel

stressed and lose the motivation to engage in this process.

Regarding the subtheme of the impact of religion, most participants were honest when they explored that religion has a significant role in forming directions and ways of thinking regarding the withdrawal of life-sustaining treatments, and defined religion as a reference to solve these debates. These findings completely agree with O'Neill et al. (2017) who described that recent studies have demonstrated that Islamic culture and religion may impact those who live and practice in Muslim nations. For instance, in our society, talking about death is taboo.

Related to the subtheme of malpractice and negligence, some participants reported witnessing malpractice due to hiring nurses who are not highly qualified and sometimes nurse aid may be assigned to patients during a severe shortage of nurses; they also witnessed some nurses who neglected delivery of care for patients at the end stage of life, especially when they were responsible for many patients. Still, most of them were honest and tried to deliver nursing care to all patients regardless of their condition. These findings agree with Myers, Heard and Mort, (2020) who reported malpractice claims involving critical care nurses, seeking to prevent patient harm and close monitoring for skin integrity.

Participants showed unfamiliarity with the subtheme of euthanasia, and they did not know its process, as it is not legal in Egypt and against Islamic rules. These findings are consistent with those of Cayetano-Penman, Malik and Whittall (2021) who concluded that euthanasia challenged nurses in their aim to provide care. It is necessary to provide comprehensive education, professional guidelines, and awareness of current nurse regulations.

Regarding the subtheme of DNR, participants showed a variety of policies, some of which reported that this type of order must be documented and considered legal, whereas others reported that DNR orders have no legal criteria and may be only oral orders. These findings are consistent with those of Goodarzi et al. (2022) who conducted a study on the knowledge, attitude, and decision-making of nurses in the resuscitation team toward terminating resuscitation, and they reported in their conclusion that the lack of nurses' knowledge regarding DNR is considered an ethical challenge. Nurses must have clear standards regarding DNR orders to avoid legal or psychological challenges. This enhances their engagement with the decision-making process.

The findings have demonstrated that nurses play an integral role in the process of withdrawal of life-sustaining treatments. Every new nurse entering critical care should get advanced training on removing life-sustaining measures, and regular updates to support the development of skills and confidence in this procedure. Establishing protocols for discontinuing life-sustaining treatments can reduce the source of conflict during this phase of treatment withdrawal. To establish optimal practices, it would be helpful to critically evaluate current treatment withdrawal protocols and clinical practice recommendations, as well as how these guidelines are implemented in intensive care.

These results imply that professional education on LST withdrawal's religious and cultural aspects can influence nurses' views toward the process. Stress among nurses might probably be decreased by increasing cultural awareness and improving perceptions. ICU nurses could have a better experience participating in the withdrawal of life-sustaining treatment if they frequently attend multidisciplinary meetings where all parties are involved in discussions on treatment withdrawal.

The findings of this study explored critical care nurses' perceptions of withdrawal of life-sustaining treatments. An educational program can be adopted to enhance nurses' knowledge about end-of-life issues, especially the process of sustaining treatment withdrawal. One of the research limitations is that the data may not cover all perceptions of nurses regarding the withdrawal of life-sustaining treatments. Another limitation of the study was the difficulty of conducting face-to-face interviews because of hospitals' pandemic precautions.

## Conclusion

It can be concluded that critical care nurses who were participants of the current study showed several feelings, experiences, and perceptions toward withdrawal of life-sustaining treatments that were reflected through four themes and related subthemes that included attitudes toward withholding and withdrawing LST, ethical perceptions, beliefs impact, and legal framework.

## Acknowledgments

The author is grateful to all nurses who participated in the study.

## Funding Source

This study was self-funded without any external sources.

## Conflict of Interest

The authors declare no conflict of interest.

## References

- Bandrauk, N., Downar, J. and Paunovic, B. (2018) 'Withholding and withdrawing life-sustaining treatment: The Canadian Critical Care Society position paper', *Can J Anaesth*, 65(1), pp. 105–122.
- Barlow, N. A., Hargreaves, J. and Gillibrand, W. P. (2018) 'Nurses' contributions to the resolution of ethical dilemmas in practice', *Nursing ethics*, 25(2), pp. 230–242.
- Cardona, M. et al. (2020) 'Supporting decision-making on allocation of ICU beds and ventilators in pandemics', medRxiv, pp. 2020–2029.
- Cayetano-Penman, J., Malik, G. and Whittall, D. (2021) 'Nurses' perceptions and attitudes about euthanasia: a scoping review', *Journal of Holistic Nursing*, 39(1), pp. 66–84.
- Chamsi-Pasha, H. and Albar, M. A. (2017) 'Ethical dilemmas at the end of life: Islamic perspective', *Journal of Religion and Health*, 56, pp. 400–410.
- Creswell, J. W. and Poth, C. N. (2016) *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Downar, J. et al. (2016) 'Guidelines for the withdrawal of life-sustaining measures', *Intensive care medicine*, 42, pp. 1003–1017.
- Eltaybani, S., Igarashi, A. and Yamamoto-Mitani, N. (2021) 'Palliative care in adult intensive care units: a nationwide survey', *Nursing in critical care*, 26(5), pp. 315–325.
- González-Rincón, M., de Herrera-Marchal, P. D. and Martínez-Martín, M. L. (2019) 'The role of the nurse at the end of the life of a critically ill patient', *Enfermería Intensiva (English ed.)*, 30(2), pp. 78–91.
- Goodarzi, A. et al. (2022) 'Knowledge, Attitude and Decision-making of Nurses in the Resuscitation Team towards Terminating Resuscitation and Donot-Resuscitate Order', *Ethiopian Journal of Health Sciences*, 32(2).
- Kostka, A. M., Borodzicz, A. and Krzemińska, S. A. (2021) 'Feelings and emotions of nurses related to dying and death of patients—A pilot study', *Psychology research and behavior management*, pp. 705–717.
- Larcher, V. et al. (2015) 'Making decisions to limit treatment in life-limiting and life-threatening conditions in children: a framework for practice', *Archives of disease in childhood*, 100(Suppl 2), pp. s1–s23.
- Lee, S. I. et al. (2020) 'Decision-making regarding withdrawal of life-sustaining treatment and the role of intensivists in the intensive care unit: a single-center study', *Acute and Critical Care*, 35(3), pp. 179–188.
- Lobo, S. M. et al. (2017) 'Decision-making on withholding or withdrawing life support in the ICU: a worldwide perspective', *Chest*, 152(2), pp. 321–329.
- McPherson, K. et al. (2019) 'Limitation of life-sustaining care in the critically ill: A systematic review of the literature', *Journal of Hospital Medicine*, 14(5), pp. 303–310.
- Molina-Mula, J. and Gallo-Estrada, J. (2020) 'Impact of nurse-patient relationship on quality of care and patient autonomy in decision-making', *International journal of environmental research and public health*, 17(3), p. 835.



- Mwita, K. (2022) 'Factors influencing data saturation in qualitative studies', *International Journal of Research in Business and Social Science* (2147-4478), 11(4), pp. 414–420.
- Myers, L. C., Heard, L. and Mort, E. (2020) 'Lessons learned from medical malpractice claims involving critical care nurses', *American Journal of Critical Care*, 29(3), pp. 174–181.
- O'Neill, C. S. et al. (2017) 'Nurses' care practices at the end of life in intensive care units in Bahrain', *Nursing ethics*, 24(8), pp. 950–961.
- Taylor, I. H. F. et al. (2020) 'Intensive care nurses' experiences of withdrawal of life-sustaining treatments in intensive care patients: A qualitative study', *Intensive and Critical Care Nursing*, 56, p. 102768.
- Ursin, L. Ø. (2019) 'Withholding and withdrawing life-sustaining treatment: ethically equivalent?', *The American Journal of Bioethics*, 19(3), pp. 10–20.
- Vanderspank-Wright, B., Efstathiou, N. and Vandyk, A. D. (2018) 'Critical care nurses' experiences of withdrawal of treatment: A systematic review of qualitative evidence', *International journal of nursing studies*, 77, pp. 15–26.

**How to cite this article:** Al-Abd, I.A., Mohammad, S.Y., and Ameen, D. A. (2024) 'Critical care nurses' perceptions toward withdrawal of life-sustaining treatments: a phenomenology study', *Jurnal Ners*, 19(3), pp. 275-283. doi: <http://dx.doi.org/10.20473/jn.v19i3.54320>