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# Nurses' Knowledge about Potential Donor Maintenance in the Intensive Care Unit

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#### **ABSTRACT**

Objectives: To assess the knowledge of nurses working in the intensive care unit (ICU) regarding the maintenance of potential organ and tissue donors for transplantation. Methods: This is a descriptive exploratory study with a quantitative approach. The study was conducted in the adult ICUs of a highly complex hospital. Data collection began in January 2025. Study participants were 44 nurses working in the ICU, on the day service, and on the night service. The collected information was recorded and organized in a database using spreadsheets developed in Microsoft Excel 2019. Simple descriptive statistics and percentages were used for data analysis to provide a summary of the data and observations. The study followed all ethical and legal principles governing research involving human subjects, in compliance with Resolution no. 466/12 of the National Health Council. It was initiated only after approval from the research ethics committee. Results: Most participants had specialized training in ICUs, and approximately 43.18% had worked in ICUs for 1 to 3 years. Among the professionals evaluated, 65.91% responded that they felt prepared to assist potential organ and tissue donors, but had not worked with the organ and tissue donation process. Conclusion: The study results revealed that some professionals still lack scientific knowledge about patient care, resulting in weaknesses and discrepancies in some of the care provided. The importance of health education, the development of protocols, guidelines, and ongoing training and development are emphasized to improve brain death protocols and retain donor potential.

Descriptors: Brain Death; Organ Donor; Transplant; Nursing Care; Intensive Care Units.

### Conhecimento dos Enfermeiros sobre a Manutenção do Potencial Doador na Unidade de Terapia Intensiva

#### **RESUMO**

Objetivos: Avaliar o conhecimento dos enfermeiros que atuam na unidade de terapia intensiva (UTI) sobre a manutenção do potencial doador de órgãos e tecidos para transplantes. Métodos: Trata-se de um estudo descritivo, de caráter exploratório, com abordagem quantitativa. O estudo foi desenvolvido nas UTIs adultas de um hospital de alta complexidade. A coleta dos dados foi realizada em janeiro de 2025. Os participantes do estudo eram 44 enfermeiros atuantes na UTI, no serviço diurno e no serviço noturno. As informações coletadas foram registradas e organizadas em banco de dados, com utilização de planilhas desenvolvidas no programa Microsoft Excel 2019. Para análise dos dados, foi utilizada a estatística descritiva simples e porcentagem, com o intuito de fornecer uma síntese dos dados e das observações realizadas. A pesquisa obedeceu aos princípios éticos e legais regidos pelo estudo envolvendo seres humanos, respeitando a Resolução n.º 466/12 do Conselho Nacional de Saúde, iniciada após aprovação pelo comitê de ética em pesquisa. Resultados: A maioria dos participantes tem especialização em UTI. Sobre o tempo de atuação em UTI, 43,18% têm de 1 a 3 anos. Dentre os profissionais avaliados, 65,91% responderam que se sentem preparados para assistir aos potenciais doadores de órgãos e tecidos, porém não atuaram no processo de doação de órgãos e tecidos. Conclusão: Os resultados do estudo evidenciaram que alguns profissionais ainda não têm embasamento científico dos cuidados a serem prestados ao paciente, apresentando fragilidade e certa divergência em alguns cuidados prestados. Salientase a importância da educação em saúde, da criação de protocolos e guidelines, além da oferta de treinamentos e capacitações contínuas, visando à melhoria do processo em protocolos de morte encefálica e na manutenção do potencial doador.

Descritores: Morte Encefálica; Doador de Órgãos; Transplante; Cuidados de Enfermagem; Unidades de Terapia Intensiva.



#### INTRODUCTION

Brain death (BD) is defined as the complete and irreversible loss of brain functions, resulting in the cessation of cortical and brainstem activities<sup>1</sup>. According to Article 13 of Brazilian Federal Law No. 9.434/1997, it is mandatory for all health institutions to notify organ procurement and distribution centers of the diagnosis of BD made in patients who were treated by them, regardless of whether or not organs and tissues could be donated<sup>2</sup>.

Once the cause of the coma has been identified and is irreversible, and possible reversible causes of coma have been ruled out, tests are performed to confirm the absence of brain function. In Brazil, the diagnosis of BD is confirmed through two clinical neurological examinations: the apnea test and a complementary examination. These criteria are regulated by Resolution No. 2.173/2017 of the Federal Council of Medicine (*Conselho Federal de Medicina-CFM*)<sup>1</sup>.

Thus, once diagnosed with BD, the patient becomes a potential donor. However, there are absolute contraindications that make the organ donation process unfeasible, such as patients who are positive for HIV, HTLV I and II, have refractory sepsis, severe viral and fungal infections, or those that are potentially serious in the presence of immunosuppression, except hepatitis B and C, active tuberculosis, neoplasms (except carcinoma in situ of the uterus and skin) and primary tumors of the central nervous system (CNS)<sup>3</sup>.

However, regarding the growth in the number of donations and transplants performed in Brazil, a significant discrepancy persists between the demand for organs and tissues and the actual donations. According to data from the Brazilian Transplant Registry (*Registro Brasileiro de Transplantes*-RBT), in 2024, approximately 26.570 organ and tissue transplants were performed, while in the same period, 67.879 patients remained active on the waiting list<sup>4</sup>.

Thus, organ transplantation represented a significant scientific advance, providing a substantial improvement in the quality of life for individuals with organ insufficiency and/or failure, particularly when treatments performed were no longer effective due to the progression of the pathology and, consequently, the loss of the organ's physiological function<sup>5</sup>.

In this scenario, BD is a complex process that triggers several physiological changes throughout the potential donor's body, such as hypotension, hypothermia, hyperglycemia, infections, diabetes insipidus, corneal injury, and fluid and electrolyte disturbances. The intensive care unit (ICU) team is responsible for providing all necessary intensive care to ensure the organs and tissues are preserved and viable for potential donation and transplantation. Therefore, early recognition of such changes and prompt interventions and care are essential for donation, as they are related to the potential donor's preservation, ensuring a better quality of life and life expectancy for those on the transplant waiting list<sup>6</sup>.

From this perspective, nurses play a fundamental role in all stages of the process, from identifying clinical signs to initiating the BD protocol and the final transplant process<sup>5</sup>. According to Resolution No. 710/2022 of the Federal Nursing Council (*Conselho Federal de Enfermagem*-COFEN), nurses hold exclusive responsibility for planning, coordinating, executing, supervising, and evaluating nursing actions. This prerogative extends to the donor (living or deceased), their family members, and the recipient, and also encompasses the handling of biological material intended for transplantation<sup>7</sup>.

Therefore, nurses must acquire technical and scientific knowledge about the pathophysiological processes of BD, especially in the care provided to maintain the potential donor effectively, to preserve the viability of organs for transplantation. However, nurses still lack knowledge about the management of the care necessary for the effective maintenance of the potential donor.

This article aims to assess the knowledge of ICU nurses regarding the maintenance of potential organ and tissue donors for transplants. A thorough understanding of this topic is essential to enable professionals to identify potential donors, provide the necessary care, and promote organ and tissue preservation, thereby increasing the likelihood of successful transplant procedures. The research seeks to identify potential knowledge gaps and provide support for the development of training strategies, contributing to the improvement of nurses' performance and, consequently, to an increase in the number of successful donations and transplants.

#### **METHODS**

This study employs a descriptive and exploratory approach, utilizing a quantitative methodology. The study was conducted in the adult ICUs of a highly complex private hospital in the municipality of São Luís, capital of the state of Maranhão.

Data collection, conducted in January 2025, used a two-part structured questionnaire developed by the authors, based on research relevant to the topic, ensuring its relevance and alignment with current scientific knowledge. The first section of the instrument, consisting of nine questions, investigated the sociodemographic profile of the participants; the variables explored included age, gender, time since graduation, specialization, and experience in the ICU, work shift, perception of safety when assisting potential donors, recent course on donation-transplantation, and direct experience in the process.



The second section of the questionnaire, in turn, focused on assessing participants' knowledge regarding donor retention. This section contains 10 multiple-choice questions designed to cover crucial aspects of the clinical management of these patients. Responses were evaluated and considered correct only when they strictly conformed to the most recent scientific literature and established clinical guidelines for donor retention, ensuring the validity and accuracy of the knowledge assessment.

The nurses were approached during their workday. Initially, the complete research flow was explained, and the Informed Consent Form (ICF) was provided. The questionnaire was then administered. The inclusion criteria for the study were nurses working in the adult ICU, with three months or more of experience, and who agreed to participate. Exclusion criteria included those on vacation or leave, nurses from other departments, and those who did not complete the questionnaire correctly.

The study participants were 56 nurses working in the ICU, on the day shift (DS) and night shift (NS). After applying the inclusion and exclusion criteria, the sample consisted of 44 nurses.

The collected information was recorded and organized in a database, using spreadsheets developed in the Microsoft Excel 2019 program. For data analysis, simple descriptive statistics and percentages were used, aiming to provide a summary of the data and observations made.

The research adhered to all ethical and legal principles governing research involving human subjects, respecting Resolution No. 466/12 of the National Health Council (*Conselho Nacional de Saúde*-CNS), and was only initiated after approval by the Research Ethics Committee (*Comitê de Ética em Pesquisa*-CEP) at Hospital São Domingos, under opinion number 7.325.876, CAAE: 83820324.0.0000.5085, and signature of the ICF by the participants.

#### **RESULTS**

The study sample consisted of 44 nurses, corresponding to approximately 78% of the nurses working in the adult ICUs of the hospital chosen for the study, who met the inclusion criteria.

Regarding the characterization of the sociodemographic profile of the study participants, as shown in Table 1, the age group distribution is as follows: 50% (n = 22) were between 30 and 40 years old. Regarding sex, 72.73% (n = 32) of the participants were female, and 27.27% (n = 12) were male. Regarding the time since graduation, 36.36% (n = 16) had 4 to 6 years of training. The majority (75%, n = 33) had a specialization in the ICU, and regarding the time spent working in the ICU, 43.18% (n = 19) had 1 to 3 years of experience.

Regarding work shifts, 56.82% (n = 25) worked on the DS. Among the professionals evaluated, 65.91% (n = 29) reported feeling prepared to assist potential organ and tissue donors. We sought to determine whether participants had supplemented their recent training with any specific training related to the complex process of organ and tissue donation and transplantation in the last 30 days. Regarding courses on the donation-transplant process during this period, 97.73% (n = 43) reported not having taken any courses. Furthermore, 84% (n = 37) stated that they had not worked or participated in the organ and tissue donation process.

Regarding the second block of the study, data were collected on the maintenance of the potential donor, and the pattern of participants' responses regarding the correct alternative was observed (Table 2). Regarding the target temperature to be maintained in the potential donor, it was observed that 84.09% (n = 35) responded correctly (> 35 °C, ideally from 36 °C to 37.5 °C). Only 4.55% (n = 2) correctly stated that, as a measure to reverse and control hypothermia, the environment should be heated, a thermal blanket should be used, and venous fluid infusion above 43 °C should be performed.

Regarding hemodynamic support for potential donors, 31.82% (n = 14) correctly identified the minimum blood pressure target to be achieved, i.e., maintaining a mean arterial pressure (MAP) of greater than 65 mmHg or a systolic blood pressure (SBP) of greater than 90 mmHg. As the first-choice measure to achieve this minimum blood pressure target, the majority (68.18%, n = 30) correctly chose the use of crystalloids. Regarding the conduct and indication of cardiopulmonary resuscitation (CPR) in potential donors, only 34.09% (n = 15) of the nurses stated that it should be started immediately.

Regarding the potential donor's glycemic control, only 25% (n = 11) of the nurses correctly responded that monitoring should be performed at least every 6 hours or, in the case of insulin pump use, every 2 hours. The majority of participants indicated that monitoring should occur at least every 4 hours and, in the case of insulin pump use, every 2 hours.

In terms of infection control care, regarding the collection of blood, urine, and tracheal secretion cultures, 75% (n = 33) correctly responded that these should be performed whenever infection is suspected. Regarding care to be taken to protect the corneas, the vast majority (88.64%, n = 39) responded that they would keep the potential donor's eyelids closed and protected with gauze moistened with isotonic solution. Aiming to identify diabetes insipidus early in the control of diuresis, an equal distribution of responses was observed: 38.64% (n = 17) stated that they monitor and investigate when diuresis exceeds 200 mL/h, while another 38.64% (n = 17) indicated the same procedure only when diuresis exceeds 400 mL/h.

 $\textbf{Table 1.} \ Sociodemographic profile of nurses working in the ICU, S\~{a}o \ Lu\'{i}s, state of Maranh\~{a}o, 2025.$ 

Block 1 - Sociodemographic profile questionnaire	n	%
1. What is your age range?		
18-29 years	18	40.91
30-40 years	22	50.00
41-50 years	4	9.09
> 50 years	0	0.00
2. What is your sex?		
Female	32	72.73
Male	12	27.27
3. How long has it been since you graduated?		
< 1 year	1	2.27
1-3 years	13	29.55
4-6 years	16	36.36
> 6 years	14	31.82
4. Do you have a specialization in ICU?		
Yes	33	75.00
No	11	25.00
5. How long have you worked in the ICU?		
< 1 year	8	18.18
1-3 years	19	43.18
4-6 years	12	27.27
> 6 years	5	11.36
6. What is your work shift?		
Day shift	25	56.82
Night shift	19	43.18
7. Do you feel prepared to assist potential organ and tissue donors?		
Yes	29	65.91
No	15	34.09
8. In the last 30 days, have you taken another course related to the donation-transplant process?		
Yes	1	2.27
No	43	97.73
9. Do you work or have you worked directly with the organ and tissue donation process?		
Yes	7	15.91
No	37	84.09
Total	44	100.00

Source: Elaborated by the authors.

Table 2. Knowledge about the maintenance of donor potential, São Luís, state of Maranhão, 2025.

Block 2 - Questionnaire on maintenance of potential donor	n	%
1. What is the target temperature to be maintained in the potential donor?		
< 35 °C (ideally 33 °C to 34.7 °C)	6	13.64
> 35 °C (ideally 36 °C to 37.5 °C)*	37	84.09
> 38 °C (ideally 38.1 °C to 38.5 °C)	1	2.27
2. What are the measures to prevent and reverse hypothermia?		
Heat the room, use a thermal blanket, and infuse venous fluids at a temperature above 36°C.	21	47.73
Only the thermal blanket is needed.	21	47.73
Heat the room, use a thermal blanket, and infuse venous fluids at a temperature above 43°C.*	2	4.55
3. How should mean arterial pressure (MAP) monitoring be performed?		
Invasive method*	28	63.64
Non-invasive method	5	11.36
Indifferent	11	25.00
4. What is the minimum blood pressure target to be achieved?		
Maintain MAP > 65 mmHg or SBP > 90 mmHg*	14	31.82
Maintain MAP > 65 mmHg or SBP > 95 mmHg	9	20.45
Maintain MAP > 65 mmHg or SBP > 100 mmHg	21	47.73

Continue...



Table 2. Continuation..

Block 2 - Questionnaire on maintenance of potential donor	n	%
5. What is the first step to achieving the minimum blood pressure target?		
Use of crystalloids*	30	68.18
Use of vasopressor drugs	6	13.64
Use of crystalloids and vasopressor drugs	8	18.18
6. What should be done in case of cardiopulmonary arrest (CPA) in a potential donor?		
Start CPR immediately.*	15	34.09
Cardiopulmonary resuscitation (CPR) maneuvers should not be performed on patients with BD.	29	65.91
7. What should be the interval for performing glycemic control?		
There is no need to check blood sugar.	10	22.73
Monitor at least every 4 hours and, if using insulin in a pump, every 2 hours.	23	52.27
Monitor at least every 6 hours and, if using insulin in a pump, every 2 hours.*	11	25.00
8. Regarding endocrine-metabolic support aimed at the early diagnosis of diabetes insipidus, how should diuresis be controlled?		
Monitor and investigate if there is diuresis > 100 mL/h.	10	22.73
Monitor and investigate if there is diuresis > 200 mL/h.*	17	38.64
Monitor and investigate if there is diuresis > 400 mL/h.	17	38.64
9. Should blood, urine, and tracheal secretion cultures be performed?		
Collecting cultures is contraindicated.	3	6.82
A culture collection is not necessary in patients diagnosed with BD, even if an infection is suspected.	8	18.18
They should be performed whenever there is a suspicion of infection.*	33	75.00
10. What precautions should be taken to protect the corneas?		
Keep the eyelids closed and protected with gauze moistened with isotonic solution.*	39	88.64
Keep your eyelids closed and protected with dry gauze.	4	9.09
Eye drops should not be used on the eyelids.	1	2.27
Total	44	100.00

Source: Elaborated by the authors. \* Correct answer

#### DISCUSSION

Maintaining the potential donor is essential to ensuring the viability of organs for transplant. Therefore, nurses must be knowledgeable about the physiology and its potential alterations in these patients to ensure adequate organ preservation and their harvesting under viable conditions. Considering the importance of intensive care nurses in maintaining potential organ and tissue donors, this study aimed to assess the knowledge of ICU nurses regarding the care of potential organ and tissue donors for transplantation.

Among the intensivists evaluated, there was a predominance of females, with an age range of 30 to 40 years. These results are similar to those of a study with a prevalence of females (81.7%) and an average age range of 35 years<sup>9</sup>.

Most nurses in the study had specialized training in ICUs and had relatively short experience, ranging from 1 to 3 years of experience. Similar results were found in a study in which the majority of the participating population had completed higher education and specialized training in ICUs, with at least 12 months of experience in the field<sup>10</sup>.

Although 65.91% of the nurses interviewed considered themselves qualified to provide care to potential donors, the study showed that 97.73% had not taken any courses on donation and transplantation in the last 30 days, and 84.09% had no direct experience in the field. These data directly impact the quality of care and underscore the importance of ongoing health education on this topic within the institution. This information is vital for assessing professionals' up-to-date knowledge and commitment to the latest organ and tissue donation and transplant protocols.

Similar results were found in a study where 85% of respondents reported feeling prepared to care for patients diagnosed with BD, while 70% of nurses stated that they had never participated in refresher courses on BD patients/potential donors<sup>11</sup>.

Nurses' knowledge is essential for effective donor retention, and ongoing education can significantly contribute to improving care. Therefore, continuing education and development activities should be conducted across the entire team, contributing to the implementation of new protocols, guidelines, and other technologies that can serve as tools for improving care for potential donors<sup>12</sup>.

Patients with BD experience several pathophysiological changes resulting from the inactivation of pressure, hormonal, and respiratory control centers, compromising several vital functions. Due to progressive damage to the brain and brainstem, there

is a loss of body temperature control, leading to hypothermia. In this context, early detection of these changes and immediate intervention, from the moment BD is diagnosed, are essential to prevent hypothermia and minimize potential donor losses<sup>3</sup>.

Reliable body temperature monitoring is essential and should be performed using the pulmonary artery, esophagus, tympanic membrane, and nasopharynx. Axillary, oral, or rectal temperature measurement is not recommended. Temperature control prevents cardiac dysfunction, arrhythmias, coagulopathies, and cold-induced diuresis, which could compromise the viability of organs for donation<sup>13</sup>.

To maintain organ viability, body temperature must be kept at 35 °C, ideally between 36 °C and 37.5 °C. Of the participants, 84.09% indicated this as correct. A previous study demonstrated that nurses demonstrated knowledge by stating that core temperature should be maintained above 35 °C, ideally between 36 °C and 37.5 °C<sup>14</sup>.

Regarding the measures used to reverse hypothermia, the environment should be heated, a thermal blanket should be used, and venous fluid infusion at a temperature above 43 °C should be performed. Only 4.55% (n = 2) of participants answered this correctly, while 47.73% responded that the temperature would be above 36 °C, and 47.73% stated that only the thermal blanket would be necessary.

Regarding monitoring the potential donor's hemodynamic pattern, appropriate measures should be taken and care provided as for any critically ill patient in an ICU. For hemodynamic support, invasive blood pressure monitoring is recommended, maintaining a MAP > 65 mmHg or SBP > 90 mmHg; in cases of hypotension, the first measure to be used is the use of crystalloids  $(20-30 \text{ mL/kg})^3$ .

In the study, the majority of nurses (63.64%) stated that monitoring should be done invasively; however, regarding the blood pressure target, only 31.82% correctly stated that MAP > 65 mmHg or SBP > 90 mmHg should be maintained, while 47.73% incorrectly responded that MAP > 65 mmHg or SBP > 100 mmHg should be maintained.

In the event of cardiopulmonary arrest (CPA), basic and advanced life support maneuvers should be conducted according to the American Heart Association (AHA) guidelines, including those for tachyarrhythmias. In cases of bradyarrhythmias, atropine should not be used; a transcutaneous or transvenous pacemaker is recommended<sup>3</sup>.

When asked about the procedure to be taken in the event of a cardiac arrest in a potential donor, there was uncertainty among participants. Only 34.09% (n = 15) of the nurses correctly answered that CPR maneuvers should be initiated immediately, while 65.91% (n = 29) responded that they should not. A previous study showed that cardiac arrest recorded 988 cases that led to donation failure<sup>13</sup>.

Regarding clinical measures to maintain endocrine-metabolic support, specifically regarding the glycemic control interval, only 25% (n = 11) correctly responded that monitoring should be done at least every 6 hours, and in the case of insulin pump use, every 2 hours. Meanwhile, 52.27% (n = 23) incorrectly responded that monitoring should be done at least every 4 hours and, in the case of insulin pump use, every 2 hours. It should also be considered that 22.73% (n = 10) stated that, in potential donors, it is not necessary to check blood glucose.

In endocrine-metabolic support, glycemic control is considered one of the most crucial factors to achieve optimal outcomes. Among potential donors, at the time of organ harvesting, 28% experienced episodes of hyperglycemia, and insulin infusion was recommended to maintain blood glucose levels between 120 mg/dL and 180 mg/d $L^{15}$ .

Still, regarding endocrine disorders, pituitary and hypothalamic dysfunction results in insufficient production of antidiuretic hormone (ADH), causing diabetes insipidus. If not treated properly, it can lead to polyuria, hypovolemia, severe hypernatremia, and hypovolemic shock—conditions that can be detrimental to the performance of the organ being transplanted, especially in liver and kidney grafts. For the treatment of polyuria resulting from diabetes insipidus, desmopressin is recommended; in its absence, vasopressin can be used<sup>16</sup>.

Aiming at the early diagnosis of diabetes insipidus, there was divergence between two alternatives: 38.64% (n = 17) correctly stated that diuresis control should be monitored and investigated if there is diuresis > 200 mL/h, while another 38.64% (n = 17) indicated that the investigation should occur if diuresis exceeds 400 mL/h.

Regarding infectious aspects in the potential donor, if the infection is responding well to treatment, donation can proceed normally. However, in cases of uncontrolled infection, donation is contraindicated, and the transplant center team must evaluate all suspected cases of infection. Therefore, it is recommended that potential donors with suspected infection undergo culture collection, and, if clinically indicated, targeted antibiotic therapy be continued or initiated.<sup>3</sup>

Regarding the collection of cultures (blood, urine, and secretion), 75% (n = 33) of the nurses correctly responded that it should be performed whenever there is a suspicion of infection, while 18.18% (n = 8) answered that it is not necessary in patients diagnosed with BD, even if there is a suspicion of infection.

Critically ill patients are at increased risk of developing infections in the ICU, as are potential donors. Therefore, all preventive measures, such as hand hygiene and the use of personal protective equipment (PPE), must be taken, as untreated infections can derail the donation process. In this context, nurses identify and record the initial signs of an infectious process, according to



institutional protocol, aiming to ensure early intervention and prevent the transplant process from being interrupted, which could cause harm to the recipient<sup>17</sup>.

Another essential care concern is corneal maintenance. Most nurses (88.64%, n = 39) correctly answered that the eyelids should be kept closed and protected with gauze moistened with isotonic solution; 9.09% (n = 4) stated that the eyelids should be kept closed and protected with dry gauze, and only 2.27% (n = 1) responded that eye drops should not be used on the eyelids.

To maintain the cornea, the eyelids should be kept closed and protected with gauze moistened with isotonic solution. The use of eye drops and ointments is permitted, but not required<sup>3</sup>.

A study highlights the importance of nurses in managing the care provided to these patients, emphasizing that knowledge is crucial not only for nurses but for all healthcare professionals involved in the potential donor's care and the transplant process. In this context, education about the donation and transplant process is essential to improving the quality of donated organs, considering that inadequate care of potential donors is one of the factors contributing to the unfeasibility of organ donation in Brazil<sup>18</sup>.

Educational strategies for nurses working with potential donors are a fundamental pillar for improving the quality of care, standardizing procedures, and optimizing multidisciplinary work. Developing technical, ethical, and communication skills specific to this context enables early detection of potential donors, minimizes knowledge gaps, and ensures more efficient operational flows among team members, inpatient units, and transplant services. Investing in the continuing education of these professionals increases the reliability of clinical decisions, facilitates the obtaining of informed consent, and, consequently, contributes to increasing effective donations and successful transplants<sup>19</sup>.

#### **CONCLUSION**

The study's results reveal that some professionals still lack scientific knowledge about the care they should provide to patients, demonstrating weaknesses and some discrepancies. This highlights the need for improved care for potential donors, as even minor misconduct can derail a donation.

It is important to emphasize that the importance of health education is undeniable and should be a central pillar of any healthcare system. It is crucial to emphasize the creation and implementation of well-defined clinical protocols and guidelines that serve as clear guidance for healthcare professionals. Furthermore, providing ongoing training and development is crucial to ensure that the team remains current with best practices and innovations in the field.

In this specific context, excellence in maintaining potential donors is a crucial link in the organ and tissue donation chain, directly impacting the success of transplants. By investing in education, protocols, and ongoing training, healthcare institutions will be better equipped to develop and implement optimized strategies, resulting in improved care outcomes for patients involved in donation and transplantation. This, in turn, will contribute to enhancing the quality of life and survival of countless individuals awaiting a transplant.

Thus, scientific improvement not only of nurses, but of the entire team, in relation to the necessary care, can contribute significantly to improving the donation-transplant process, since deficiencies in training and qualifications directly influence clinical care and the donation process.

The findings of this study may provide a solid foundation for developing and implementing significant improvements in the management of potential donors. The primary goal is to ensure high-quality care for these individuals, promoting optimal clinical conditions that are crucial for the viability of the organ to be transplanted. Such optimized care can lead to increased rates of effective donations, primarily by facilitating the acquisition of family consent, a crucial and often challenging step in the organ donation process.

#### Study limitations

One of the main limitations of this study is its single-center design. While this approach may offer advantages in terms of methodological rigor and uniformity, it limits the diversity of the population studied, compromising the generalizability of the results. Future research is recommended to adopt a multicenter design to validate and expand the scope of the findings.

Additionally, it is essential to note that, given the methodology employed, no formal psychometric validation process was conducted for the data collection instrument. Although the questionnaire was developed based on relevant literature and the authors' experience, through an in-depth literature review and expert consultation to ensure its relevance and theoretical pertinence, the lack of external validation constitutes a potential and significant limitation of the study. Therefore, this aspect highlights the need for future research that incorporates this rigorous methodological step, aiming to enhance the quality of the instrument, the generalizability of the findings, and its contribution to the body of scientific knowledge.

#### **CONFLICT OF INTEREST**

Nothing to declare.

#### **AUTHOR'S CONTRIBUTION**

Substantive scientific and intellectual contributions to the study: Bastos VS, Lima AMSA, Maramaldo ICR; Conception and design: Bastos VS; Data analysis and interpretation: Bastos VS; Article writing: Bastos VS, Lima AMSA, Maramaldo ICR; Critical revision: Bastos VS, Lima AMSA, Maramaldo ICR; Final approval: Bastos VS.

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Available upon reasonable request.

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