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ORIGINAL PAPER

Healthcare Professionals' Knowledge of the Brazilian Guidelines for Organ Maintenance in Potential Deceased Donors

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ABSTRACT

Objectives: To evaluate the knowledge of healthcare professionals regarding the Brazilian Guidelines for Organ Maintenance in Potential Donors. **Methods:** A quantitative, descriptive, and exploratory study. Participants included healthcare professionals working in the National Transplant Center, State Transplant Centers, Organ Procurement Organizations, Intra-Hospital Organ and Tissue Donation Committees for Transplantation, and critical care units. The study took place from November 2024 to March 2025, and data collection was carried out using an instrument created and validated based on the guidelines of the Brazilian Association of Intensive Care Medicine. The analysis of the results was performed using statistical tests. **Results:** A total of 118 professionals participated, and nurses comprised 86%.There was a prevalence of females (77%); the average age was 37.4 ± 1.4 years, and the average length of experience was 8 ± 2 years. A total of 93% of participants stated that they knew and used the clinical management guidelines. However, the professionals' performance related to specific questions directed at clinical management revealed an average error rate of 37.9%, with nurses showing a higher average, with 40.1% errors, compared to 19.9% for physicians. The question with the highest success rate (92.4%) was related to the recommended value for maintaining mean arterial pressure. In contrast, the question related to body temperature had the lowest number of correct answers (11%). **Conclusion:** Although a significant majority of participants claim to know and use the guidelines for maintaining potential organ donors, there are still important inconsistencies and heterogeneities regarding the recognition of the specific recommendations presented by the Brazilian Association of Intensive Care Medicine. The greatest decline in knowledge was associated with nurses. Investing in greater dissemination of the guidelines and in training professional teams seems to be the most viable way to improve this scenario.

Descriptors: Organ Donation; Organ Transplantation; Brain Death; Intensive Care; Guidelines; Knowledge.

Conhecimento dos Profissionais sobre as Diretrizes Brasileiras de Manutenção de Órgãos no Potencial Doador Falecido

RESUMO

Objetivos: Avaliar o conhecimento dos profissionais de saúde acerca das Diretrizes Brasileiras de Manutenção de Órgãos no Potencial Doador. **Métodos:** Estudo quantitativo, descritivo e exploratório. Participaram da pesquisa profissionais de saúde atuantes na Central Nacional de Transplantes, Centrais Estaduais de Transplantes, Organizações de Procura de Órgãos, Comissões Intra-Hospitalares de Doação de Órgãos e Tecidos para Transplantes e unidades de críticos. O estudo ocorreu no período de novembro de 2024 a março de 2025, e a coleta de dados foi realizada por meio de um instrumento criado e validado a partir das diretrizes da Associação de Medicina Intensiva Brasileira (AMIB). A análise dos resultados foi realizada por meio de testes estatísticos. **Resultados:** Participaram 118 profissionais, predominantemente enfermeiros (86%). Houve prevalência do sexo feminino (77%); a faixa etária média foi de 37,4 ± 1,4 anos e o tempo médio de atuação foi de 8 ± 2 anos. Dos participantes, 93% afirmaram conhecer e utilizar as diretrizes de manejo clínico. Entretanto, o desempenho dos profissionais, relacionado às questões específicas, direcionadas ao manejo clínico, revelou uma média de erros de 37,9%, enquanto os enfermeiros apresentaram uma média superior, com 40,1% de erros, contra 19,9% dos médicos. A questão com maior índice de acerto (92,4%) foi relacionada ao valor recomendado para manutenção da pressão arterial média. Em contrapartida, a questão relacionada à temperatura corporal foi a que obteve o menor número de acertos (11%). **Conclusão:** Embora a maioria significativa dos participantes afirme conhecer e utilizar as diretrizes

para manutenção do potencial doador de órgãos, ainda existem inconsistências e heterogeneidades importantes quanto ao reconhecimento das recomendações específicas apresentadas pela AMIB. A maior decadência de conhecimento foi associada aos enfermeiros. O investimento em maior divulgação das diretrizes e na capacitação das equipes de profissionais parece ser o caminho mais viável para melhorar esse cenário.

Descritores: Doação de Órgãos; Transplante de Órgãos; Morte Encefálica; Terapia Intensiva; Diretrizes; Conhecimento.

INTRODUCTION

The field of healthcare, especially the prognosis of patients suffering from serious and debilitating diseases, has been redefined by organ donation and transplantation[1]. Although the success of the therapy is proven by the number of lives saved, transplantation faces limitations in its expansion in the field of practice[1,2].

Data published by the Brazilian Association of Organ Transplants (Associação Brasileira de Transplantes de Órgãos - ABTO) revealed that, in 2024, 39,229 people were waiting for an organ in Brazil. The number of donors during the same period was 4,088[3]. The disproportion between the supply and the need for organs is a worrying fact. This reality has worsened over the years, affecting not only the national scenario but also several other countries[2,3].

In light of emerging challenges, the pursuit of initiatives that improve the steps involved in organ donation and transplantation, increasingly promoting quality, safety, and effectiveness in the process, is mandatory and is being fostered by professionals in the field. Among the strategies, actions aimed at optimizing the clinical maintenance of the potential donor (PD) deserve special mention. These have demonstrated the capacity to impact the process both quantitatively and qualitatively[1,2,4,5].

In this regard, the Brazilian Association of Intensive Care Medicine (Associação de Medicina Intensiva Brasileira-AMIB) In 2011, it adopted standardized recommendations to guide professionals working in adult intensive care units and emergency departments involved in the care of adult individuals diagnosed with or suspected of having brain death (BD)[4,5].

In 2021, the AMIB guidelines were updated. To this end, 27 specialists from different areas discussed the clinical management of PD in ME, reviewing the following topics: mechanical ventilation; hemodynamics; endocrine-metabolic support; infection; body temperature; blood transfusion; and the use of checklists. As a result, 19 recommendations were developed; of these, seven were classified as strong, 11 as weak, and one was considered good clinical practice[6].

Under the use of goal-directed protocols in PD maintenance, a recent systematic review identified an association with increased organ retrieval and transplantation, less primary graft dysfunction, and a reduction in donor losses due to cardiovascular collapse caused by BD. The study also highlights a clear dose-response effect, where greater adherence to recommendations was linked to more promising results[7].

In line with this trend, various studies focused on maintaining PD also correlate professionals' knowledge of the pathophysiology of BD with the effectiveness of the care provided and, consequently, with the outcomes achieved[8-10].

However, despite the importance of a skilled team, a 2024 study with intensive care professionals demonstrated disagreement regarding important aspects of the clinical management of PD. The authors identified a lack of consensus on care related to the use of vasopressors and hormones, as well as adjustments to ventilation parameters and management of electrolyte disturbances, revealing, to some extent, a decline in knowledge in the area[10]. Other studies suggest that the lack of consensus on maintaining the PD may be related, in part, to the absence of training and/or preparatory courses focused on the topic[10,11].

In light of the evidence, it is credible that the benefits derived from the use of goal-directed protocols, together with the provision of assistance by a properly trained team in maintaining the PD, are the key to ensuring graft quality, as well as optimizing the survival of transplanted organs[7,10,11].

Despite the importance of the topic, it has been little explored in the literature, with no other research found that thoroughly evaluates the experience and level of understanding of professionals regarding the Brazilian Guidelines for Organ Maintenance in Potential Deceased Adult Donors (Diretrizes Brasileiras de Manutenção de Órgãos no Potencial Doador Falecido Adulto) of AMIB.

Given this reality, the present study aims to contribute to the field of transplantation, with the objective of answering the following guiding question: what is the knowledge of healthcare professionals working in the organ donation process for transplantation regarding the Brazilian Guidelines for Organ Maintenance in Potential Deceased Adult Donors from AMIB (Brazilian Association of Intensive Care Medicine)?

The rationale for developing this study is based on the aforementioned benefits, as well as the fact that Brazil, especially the state of Santa Catarina, has been using the aforementioned guidelines for approximately 14 years[4,5]. Thus, the aim is to evaluate the professionals' experience regarding the recognition and application of recommendations based on AMIB guidelines in their practical work.

It is assumed that understanding the subject is fundamental to ensuring the provision of adequate assistance for organ preservation, thus maximizing the chances of success in transplant procedures. Therefore, this work will contribute to strengthening actions aimed at increasing not only the quantity, but also, and perhaps primarily, the quality of organs for transplantation, providing advancements to the sector.

METHODS

This is a descriptive and exploratory study, with a quantitative approach, carried out with multidisciplinary teams working in the organ donation and transplantation process in Brazil, which was conducted from November 2024 to March 2025. The inclusion criterion was being a healthcare professional working in one of the following areas: National Transplant Center (Central Nacional de Transplantes); State Transplant Center (Central Estadual de Transplantes-CET);Organ Procurement Organization (Organização de Procura de Órgãos); Intra-Hospital Commission for Organ and Tissue Donation for Transplants (Comissão Intra-Hospitalar de Doação de Órgãos e Tecidos para Transplantes); and/or critical care units (emergency and intensive care units). Exclusion criteria were not working in the organ donation and transplantation process and/or not agreeing to participate in the research.

For data collection, a semi-structured, self-administered instrument with 25 questions was used. Of these, 13 were related to the professional's profile (age; sex; education; profession; unit of work; length of service in the unit; length of service in the institution; number of BD protocols followed; knowledge of AMIB guidelines for maintaining PDs; preparedness/confidence in using the guidelines; use of the guidelines in assisting PDs; difficulties in applying the guidelines; and suggestions for training). The other 12 questions were related to knowledge and skills regarding the recognition of recommendations present in the Brazilian guidelines for the management of potential organ donors in brain death, as advocated by AMIB[5-7].

It is worth noting that, prior to application, the instrument underwent prior validation with five professionals from CET Santa Catarina (CET/SC), who have worked in the field for over 10 years, to refine the data collected and identify necessary adjustments. These participants were not part of the total sample.

Data collection was carried out during the Hospital Transplant Coordinator Training Course in Florianópolis. At that event, with the necessary approval from the CET/SC management and the Ethics Committee, the study proposal was presented to the participants, clarifying its objective and the strategies adopted. Subsequently, participants were invited to participate voluntarily, by signing a free and informed consent form in duplicate. Those who agreed were given the physical form to complete manually, and after approximately 15 to 20 minutes, the forms were collected.

The information obtained was tabulated in a Microsoft Excel® spreadsheet (version 2022), and subsequently analyzed using descriptive statistics and parametric tests, calculating the absolute and relative frequency for the variables studied, using the analysis of variance test. Pearson's correlation was used to verify the association between sociodemographic variables and issues inherent to the knowledge and use of the guidelines.

To meet ethical research criteria, the recommendations of Resolution No. 466/12 of the National Health Council were followed[12].The project was approved by the Research Ethics Committee of the Federal University of Santa Catarina under opinion number 7.431.679.

RESULTS

Of a population of 150 health professionals present at the course, 118 agreed to participate. Of these, 101 (86.3%) were nurses, 13 (11.1%) were doctors, and three (2.6%) were other professionals. Regarding sex, 77.1% were female and 22.9% were male.

As for the level of education, there was a predominance of specialization (68.6%). With respect to the number of BD protocols followed, there was a fairly even distribution between those who followed fewer than five (34.2%) and those who followed more than 30 (35.1%). Participants were also asked about their knowledge and use of the AMIB PD management guidelines, with 108 and 106 participants, respectively, stating that they know and use these guidelines (Table 1).

In the sample, regarding age, the minimum age found was 22 years and the maximum was 63, with an average of 37.4 ± 1.4 years. As for the length of service, the average was 8 ± 2 years (Table 2).

Table 1. Distribution of participants by profession, sex, education level, protocols followed, knowledge and use of AMIB's clinical management guidelines for PD.

Characteristics	n	%
Occupation		
Nurse	101	86.3
physician	13	11.1
Others	3	2.6
Sex		
Female	91	77.1
Male	27	22.9
Education		
Undergraduate	17	14.4
Residency	7	5.9
Specialization	81	68.6
Master's degree	11	9.3
Tracked cases		
Less than 5	39	34.2
6 to 10	14	12.3
11 to 20	13	11.4
21 to 30	8	7.0
Mais de 30	40	35.1
Are you familiar with the AMIB guidelines for the clinical management of PD?		
No	8	6.9
Yes	108	93.1
Do you use the AMIB guidelines for clinical management of PD?		
No	8	7.0
Yes	106	93.0

Source: Elaborated by the authors.

Table 2. Distribution of participants by age and length of service at the institution where they carry out their professional activities.

	Mean	Median	Standard deviation (SD)	CV	Q1	Q3	IQR	Min	Max	n	CI
Age	37.4	36	8.0	21%	32	42.8	10.8	22	63	118	1.4
Length of service	8.0	6	7.4	92%	2	12	10	0.2	31	111	1.4

Source: Elaborated by the authors.

Considering the professionals' performance in answering the 12 questions directed at the clinical management of PD, based on AMIB guidelines, the average correct answers were 61.2%, compared to an average error rate of 37.9% (Table 3).

Table 3. Distribution of correct and incorrect answers across the 12 questions.

	Mean	Median	Standard deviation	CV	Q1	Q3	IQR	Min	Max	n	CI
Acerto	61,2%	58%	18,1%	30%	50%	75%	25%	8%	100%	118	3,3%
Erro	37,9%	42%	18,2%	48%	25%	50%	25%	0%	92%	118	3,3%

Source: Elaborated by the authors.

By establishing a correlation between some data and the error rate, it was possible to identify that there is statistical significance when the evaluated variable is related to the professional category. Nurses presented a higher average error rate, with 40.1%, compared to 19.9% for physicians ($p < 0.001$) (Table 4).

Table 4. Comparison between occupation, educational level, and error rates.

Occupation	Error								
	Mean	Median	Standard deviation	CV	Min	Max	n	CI	*p*- value
Nurse	40.1%	42%	16.5%	41%	0%	75%	101	3.2%	< 0,001
physician	19.9%	17%	14.2%	72%	0%	42%	13	7.7%	
Education									
Undergraduate	36.8%	33%	19.8%	54%	8%	92%	17	9.4%	0.264
Residency	31.0%	33%	26.2%	85%	0%	75%	7	19.4%	
Specialization	39.8%	42%	16.8%	42%	8%	75%	81	3.7%	
Graduate degree	30.8%	33%	19.1%	62%	0%	58%	13	10.4%	

Source: Elaborated by the authors.

The analysis of the error index with age and years of experience, using Pearson's correlation, was negative, implying that the variables are inversely proportional. The error index showed a statistically significant correlation only with age, with r = -0.208 (p = 0.024); however, it is a weak correlation (Table 5).

Table 5. Correlation of error rates with age and professional experience.

	Age	Experience
Corr (r)	-0.208	-0.173
p-value	0.024	0.070

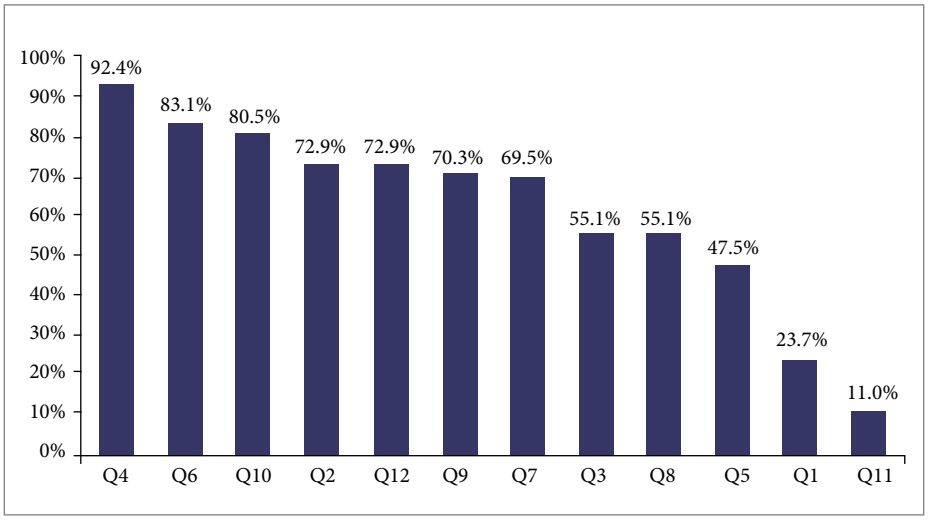
Source: Elaborated by the authors.

Regarding the questions directed at the recommendations in the Brazilian Guidelines for Organ Maintenance in Potential Deceased Adult Donors from AMIB, the question with the highest success rate was number 4, related to the recommended value for maintaining mean arterial pressure (MAP), where 92.4% of participants chose the correct option, followed by question 6, on recommendations for managing blood pressure unresponsive to volume expansion, with 83.1% correct answers. In contrast, question 11, related to body temperature, had the lowest number of correct answers (11%), followed by question 1, on oxygen saturation, with 23.7% correct answers (Table 6 and Fig. 1).

Table 6. Distribution of questions by order of correct answers.

Question		n (correct)	%
Q4.	MAP recommendations	109	92.4
Q6.	Management of BP non-responsive to volume expansion	98	83.1
Q10.	Recommendations for infection and sepsis	95	80.5
Q2.	Tidal volume recommendations	86	72.9
Q12.	Red blood cell transfusion recommendations	86	72.9
Q9.	Urine output control recommendations	83	70.3
Q7.	Recommendations after starting norepinephrine	82	69.5
Q3.	PEEP recommendations	65	55.1
Q8.	Sodium and potassium level recommendations	65	55.1
Q5.	BP management – cases of hemodynamic instability	56	47.5
Q1.	O2 saturation recommendations	28	23.7
Q11.	Body temperature control	13	11.0

Source: Elaborated by the authors.



Source: Elaborated by the authors.

Figure 1. Distribution of questions by correct answer frequency.

DISCUSSION

The sample of healthcare professionals was predominantly composed of nurses, corroborating other research that shows this is the most numerous professional group in the donation and transplantation system[13-15]. The predominance of the female sex, as well as the age range around 37 years, was also trend evidenced in other studies that addressed the profile of the multidisciplinary team that provides assistance to organ transplant recipients[10,11,16].

Regarding the number of correct answers, considering the average performance associated with the 12 questions applied on the guidelines, 61.2% of the participants were able to accurately identify the AMIB recommendations for the proper management of PD, with the average error percentage being 37.9%. However, when the error was associated with the professional profile, nurses performed worse, presenting an error rate of 40.1%, compared to 19.9% for physicians ($p < 0.001$).

Although approximately 93% of professionals stated that they were familiar with and used the AMIB guidelines for PD care, it is important to highlight that the significant percentage of errors suggests that the application of these recommendations in clinical practice may be deficient.

Like other research, this study found a lack of scientific basis among professionals in providing care to potential donors, with nurses exhibiting the most weaknesses and discrepancies in this context[10,11,17-19]. It is important to emphasize that deficiencies associated with the clinical maintenance of potential donors are directly related not only to donor loss due to cardiorespiratory arrest, but also to reduced organ quality and acceptance. Researchers have warned that problems with hemodynamic and physiological preservation have resulted in organs that are not viable for transplantation[20-24].

Evidence from the literature indicates that implementing goal-oriented maintenance strategies positively impacts outcomes. A recent review identified that four out of five goal-directed protocols resulted in a higher number of organ recoverys. Furthermore, the reviewed publications also demonstrated an increase in organs transplanted per donor. Maintenance strategies were also associated with fewer organ losses due to cardiovascular collapse, as well as a lower frequency of primary renal graft dysfunction post-transplant[7].

Given these observations, it is possible to affirm that the errors presented by professionals regarding the recognition of the goals and guidelines advocated in clinical management harm the organ donation and transplantation process, reducing the chance of organ utilization. It is worth highlighting that the guidelines under discussion were developed specifically for nursing professionals involved in the care of patients diagnosed with or suspected of having brain death[6]. When these professionals have doubts or make mistakes about what is recommended, it reveals their lack of knowledge or adherence to the recommendations of experts in the field who, through evidence, seek to reduce the rate of cardiac arrest in PDs and increase graft viability[6].

In analyzing the error rate associated with the participants' experience and age, an inverse relationship was evident: as age and experience increase, errors decrease. This reality was also identified in a study conducted with doctors and nurses, in which greater knowledge retention was observed among professionals with more prior experience in the stages of the organ donation process[15]. It can be inferred, therefore, that retaining professionals who have been dedicated to the area of donation and transplantation in the system for a longer period benefits the process.

Continuing the analysis of the data collected by this study, the evaluation of professional performance for each specific question revealed that, regarding questions 1, 2, and 3 (Q1-Q3) concerning ventilatory support, 86% of the professionals recognized the recommendation to maintain a tidal volume of 6 to 8 mL/kg. Similarly, 55.1% identified the suggestion for maintaining positive end-expiratory pressure (PEEP) between 8 and 10 cmH_2O in normal lungs. However, regarding the question on peripheral oxygen saturation (SpO_2), only 23% chose the option to adjust the titration of inspired oxygen fraction and PEEP to maintain $SpO_2 \geq 90\%$, aiming to sustain a protective ventilatory strategy.

Other studies that evaluated donor management protocols on the impact of lung procurement also presented divergences concerning knowledge and recommendations about mechanical ventilation[10,25]. In one of these studies, although most professionals correctly answered questions regarding the criteria for a lung donor and stated they were aware of the measures for proper maintenance, about a quarter did not know which ventilatory parameters to choose, and almost half did not choose the recommended ventilatory strategy for potential donors[25].

Although the physiological and inflammatory changes caused by BD affect all organs, the heart and lungs are usually more susceptible. Therefore, all strategies that enable the preservation and recovery of these organs are of particular importance[26]. The implementation of protocols based on a lung-protective ventilation strategy has been associated with a 15% to 20% increase in lung utilization[26]. It was found that the number of lungs available for transplant doubled when the strategy shifted from conventional to lung-protective measures[25]. Therefore, the importance of professionals recognizing and adhering to AMIB guidelines regarding mechanical ventilation to maximize the use of lungs in transplantation is highlighted.

Regarding the questions on hemodynamic care (Q4-Q6), question 4, which addresses the recommendation to maintain MAP above 65 mmHg, achieved the highest success rate, being selected by 92.4% of the participants. Concerning BP management in cases of hemodynamic instability, 47.5% of the professionals demonstrated knowledge aligned with AMIB guidelines regarding the administration of 30 mL/kg aliquots of crystalloids in the event of hypotension (MAP < 65 mmHg) with signs of fluid responsiveness. Furthermore, 83.1% of the respondents identified that, in cases where the blood pressure target is not achieved through volume expansion, immediate infusion of norepinephrine should be initiated.

A 2021 study revealed that approximately 20% of organs are not used for transplantation due to consequences arising from hemodynamic instability in PD[27]. Thus, the lack of recognition and/or application of measures aimed at maintaining hemodynamic stability, as revealed by some research participants, negatively impacts the transplantation process, since it reduces the utilization of organs.

With respect to questions related to endocrine and electrolyte management (Q7-Q9) for patients using norepinephrine, 69.5% of participants correctly identified the recommendation to combine vasopressin and hydrocortisone. As for maintaining serum sodium levels < 155 mEq/dL and potassium between 3.5 and 5.5 mEq/dL, 55.1% of professionals answered correctly. For these two questions, a study conducted in 2024 indicated that 45% of physicians agreed with the combination of vasopressin and hydrocortisone; however, 35.5% of nurses did not know the answer[10]. Regarding sodium and potassium levels, most doctors stated they followed the parameters recommended by AMIB, but, as with the previous survey, most nurses also did not know the answer[10].

Finally, in terms of endocrine and electrolyte management, 70.3% of professionals correctly chose to recommend the use of desmopressin when urine output > 4 mL/kg/hour. The participants in this study demonstrated superior knowledge of this recommendation, since in the aforementioned study, only 40% of physicians and 48.4% of nurses stated that they follow this standard[10].

The endocrine and metabolic changes that occur in brain death are associated with progressive clinical manifestations, such as hypoosmolar polyuria, secondary hypovolemia, hypernatremia, and serum hyperosmolarity. If not managed properly, they can cause severe disorders and ineffectiveness in organ donation[6, 28, 29]. Once again, the responsibility of professionals in recognizing and adhering to maintenance measures is highlighted, since the quality and outcome of transplants depend on it.

Concerning the performance on a specific question, study participants achieved a high success rate (80.5%) in recognizing the need for appropriate antibiotic therapy (Q10) for at least 24 hours, with culture collection at different sites, as recommended in the guidelines, in cases of infection and sepsis in the PD.

The question with the highest error rate concerned temperature (Q11), where 76% of professionals mistakenly chose the option that recommended "maintaining above 35 °C without vasopressor OR with vasopressor". According to current AMIB guidelines, the recommendation of a temperature higher than 35 °C should only be adopted in cases of hemodynamic instability, i.e., when using a vasopressor.

For stable potential donors (not on vasoactive drugs), AMIB suggests moderate hypothermia (between 34°C and 35°C, through core temperature monitoring), a condition associated with better kidney graft function. This alternative was chosen by only 11% of participants. A study conducted in 2023 also identified the difficulty professionals have in differentiating the recommended temperature values associated with the stability of the kidney transplant recipient[17]. These findings are corroborated by a recent

study, which pointed to confusion on the part of doctors and nurses regarding recommendations on temperature and hypothermia in PD[24].

The last question of the research instrument (Q12), regarding the guideline suggestion for red blood cell transfusion if hemoglobin < 7 g/dL, obtained a 72.9% success rate. This result aligns with the findings of another study, in which the majority of professionals also recognized the need for this practice[10].

In summary, the multiple measures planned for maintaining PD (peripheral dysfunction), to control the complex scenario triggered by BD, aim at the adequate management of circulatory shock, which generally involves all the components that determine oxygen transport[7]. Excellent clinical management of PD is a crucial link in the organ donation chain, directly impacting the success of transplants[11].

Therefore, it is crucial to highlight the importance of professionals recognizing the pathophysiological repercussions of brain death. These professionals must possess the technical and scientific expertise necessary to implement best practices appropriately, using protocols that guide safe and effective action. To this end, it is essential to recognize the need to maintain a trained and up-to-date team on the best evidence to improve and enhance the care provided in managing PD[9].

Considering the aspects discussed, it can be inferred that by investing in continuous education and training, coupled with the adoption of clinical protocols/guidelines, healthcare professionals and institutions will be better equipped to develop and apply optimized strategies, resulting in better outcomes in the organ donation and transplantation process, contributing to improved quality of life and survival for countless individuals awaiting a transplant[8,11].

Furthermore, specialized literature increasingly reinforces the importance of using guidelines, as well as health education associated with continuous training and capacity building, aiming to improve the activities performed by professionals in maintaining the PD[11,30]. In its guidelines, AMIB promotes the provision of monitored care with evidence-based clinical goal checklists[4-6].

CONCLUSION

There is a clear synergistic relationship between the early identification of the main physiological changes caused by BD and the prompt action of the team through standardized and assertive procedures. Such measures have the potential to impact the organ donation and transplantation process, helping to reduce the long waiting lists for organs.

Within the scope of this investigation, it became evident that, although a significant majority of participants claim to know and use the Brazilian Guidelines for Organ Maintenance in Potential Deceased Adult Donors, there are still important inconsistencies and heterogeneities regarding the recognition of the specific recommendations presented by AMIB (Brazilian Association of Intensive Care Medicine). The greatest decline in knowledge was associated with nurses. Professionals with more experience in the field demonstrated better performance.

It is worth highlighting that investing in greater dissemination of guidelines and in training the teams of professionals who assist potential donors seems to be the most viable way to ensure that the physiological changes presented in this context are detected before deleterious effects occur on the organism, thus preventing multiple organ failure.

By revealing that the recognition of measures indicated for the clinical management of PD is not yet widespread among professionals working in organ donation and transplantation services in Brazil, this work contributes to triggering improvements in the area, to increase the quantity and quality of organs for transplantation. With this, the number of lives saved through organ transplantation can be maximized.

CONFLICT OF INTEREST

Nothing to declare.

AUTHOR'S CONTRIBUTION

Substantive scientific and intellectual contributions to the study: Costa JM, Knihs NS, Garcia MC; **Conception and design:** Costa JM, Knihs NS; **Data analysis and interpretation:** Costa JM; **Article writing:** Costa JM; **Critical revision:** Costa JM, Knihs NS, Garcia MC; **Final approval:** Costa JM.

DATA AVAILABILITY STATEMENT

All dataset were generated or analyzed in the current study.

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DECLARATION OF USE OF ARTIFICIAL INTELIGENCE TOOLS

The authors declare that no artificial intelligence tools were used in the preparation, writing, data analysis, or review of this manuscript.

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