Facilitating elements in the organ donation process from the perspective of professionals

Elementos facilitadores no processo de doação de órgãos na perspectiva dos profissionais

ABSTRACT

This work has aimed to identify the facilitating elements in the organ and tissue donation process for transplantation from the perspective of professionals from Brazilian Hospital Transplantation Commissions. This is a descriptive, qualitative study conducted with twenty professionals who make up the In-Hospital Commissions for Organ and Tissue Donation for Transplantation. Data collection took place through semi-structured interviews analyzed using the Collective Subject Discourse technique. Three central ideas have emerged, which address the professionals working in Intensive Care and Emergency as members of the Hospital Transplantation Commission (CHT), the Support from the State Transplant Center (CET), and the Coordination of the Hospital Transplantation Commission. The facilitating elements of the organ and tissue donation process were the professionals of the commissions from the respective units involved in the process. An organized and articulated service, with trained professionals and resolute leadership, is necessary to ensure the success in the organ and tissue donation process for transplantation.

Descriptors: Organ Transplantation; Tissue and Organ Procurement; Brain Death; Commission on Professional and Hospital Activities; Nursing.

RESUMO

Objetivou identificar os elementos facilitadores no processo de doação de órgãos e tecidos para transplante, na perspectiva dos profissionais das Comissões Hospitalares de Transplantes. Estudo descritivo, qualitativo, realizado com 20 profissionais que compõem as Comissões Intra-Hospitalares de Doação de Órgãos e Tecidos para Transplante. A coleta de dados ocorreu por meio de entrevista semiestruturada, analisados por meio da técnica do Discurso do Sujeito Coletivo. Emergiram três ideias centrais que versaram sobre os profissionais atuantes na Terapia Intensiva e Emergência como membros da Comissão Hospitalar de Transplantes; Suporte da Central Estadual de Transplante; Coordenação da Comissão Hospitalar de Transplantes. Identificou-se como elementos facilitadores no processo de doação de órgãos e tecidos os profissionais das comissões do quadro funcional das respectivas unidades envolvidas no processo. É necessário um serviço organizado e articulado, de profissionais capacitados e de liderança resolutiva para garantir sucesso no processo de doação de órgãos e tecidos para transplantes.

Descritores: Transplante de Órgãos; Obtenção de Tecidos e Órgãos; Morte Encefálica; Comissão Para Atividades Profissionais e Hospitalares; Enfermagem.
INTRODUCTION

For many patients with terminal organ dysfunction, transplantation is the only therapeutic alternative, but despite the importance and need of organs for transplantation, there is still a worrying disproportion between demand and supply\(^1\). This imbalance between transplant demand versus supply is a worldwide and multifactorial phenomenon that involves ethical dilemmas, conflicts of interest, and especially professionals for the effectiveness of this process\(^2\).

In the first quarter of 2020, Brazil showed an increase in its rate of effective donors, reaching 18.4 per million population (pmp); however, with the beginning of the pandemic in Brazil, the rates decreased and closed the first half of 2020 at 15.8 pmp. The potential donor notification rate (49.1 pmp) decreased by 10% and the family refusal rate dropped from 40% to 37% compared to the 2019 data. In this period, we can highlight the rates of effective donors in the states of Santa Catarina (47.2 pmp) and Paraná (43.8 pmp)\(^3\).

The professionals involved in the organ donation process are organized in an In-Hospital Commission for Organ and Tissue Donation for Transplantation (CIHDOTT), and they work together with the Central Transplantation Center (CET) in the active search and identification of potential donors together with the support team, which is essential in the diagnostic process\(^4\,5\).

The CIHDOTTs have a fundamental role in the organ donation process, such as the identification, notification, and maintenance of a potential donor, the reception of and explanation to the patient’s family, the family interview, the transfer of the organ in the case of authorization of the donation, and the delivery of the body\(^6\).

Given the above and considering that the existence and the effective operation of the CIHDOTTs in hospital institutions significantly contribute to the procurement of organs for transplantation in the national scenario\(^7\), we believe that the knowledge about the experience of CIHDOTT professionals will provide elements that enable a better understanding of the potentialities that can contribute to the effectiveness of the work in the organ donation process for transplantation.

Therefore, this work has aimed to identify the facilitating elements in the organ and tissue donation process for transplantation from the perspective of professionals from Brazilian Hospital Transplantation Commissions (CHT).

METHOD

This is a descriptive, exploratory study with a qualitative approach carried out with the professionals of three Hospital Transplantation Commissions of public hospital institutions in the southern region of Brazil. Data were collected from June to July 2017 through a semi-structured interview conducted by one of the researchers, individually and with an average duration of 40 minutes, guided by a script also prepared by this researcher with the following guiding question: What do you identify as facilitating elements for the organ and tissue donation process for transplantation? The interviews were immediately transcribed in full by the researcher using the Microsoft Word program (365 MSO version).

Twenty professionals who met the eligibility criteria and agreed to participate were part of the study. Our inclusion criterion was: professional members of the Hospital Transplantation Commission working in the committee for at least six months. Professionals who were on vacation or on health or maternity leave during the data collection period were excluded.

The participants were invited to be part of the study by telephone and by e-mail, and upon acceptance we scheduled the date, place, and time for data collection, according to the participant's availability.

For data organization, we used the QualiQuantiSoft® software version 1.3.c, and for data analysis we applied the Collective Subject Discourse (CSD) technique. This technique allows greater objectivity and reliability in the data interpretation process, and it also favors the construction of speeches that represent the voices of a group of individuals through the extraction of key expressions, so that synthesis speeches that express a collective can be composed\(^8\).

The CSD technique comprises four methodological approaches in its analysis: key expressions (ECH), which are selected excerpts or literal transcriptions of the discourse that represent the essence of the content of the issue under analysis; Central Ideas (CI), which show and describe the meaning of each of the analyzed speeches; the Anchor (AC), which is the explicit linguistic manifestation of a given theory, ideology, or belief of the author of the speech and which is being used by the speaker to frame a specific situation; and finally, the CSD itself, which is the meeting of the ECH present in the testimonies, which have CI or AC of similar or complementary meaning, written in the singular first person\(^9\).

This study has been approved by the Research Ethics Committee of the Federal University of Santa Catarina, under Opinion No. 1.985.259, CAAE: 63086716.0.0000.0121. All participants have signed the Informed Consent. To preserve the identity of the interviewees, their names were replaced by an alphanumeric code identified by the letters: E (Nurses) and M (physicians) followed by the numbers that correspond to the sequence of interviews (1, 2, 3).

RESULTS

Of the total number of participants (n = 20), we highlight the professionals who were female (n = 13; 65%), aged 41 to 45 years (n = 6; 30%), nurses (n = 14; 70%), and with
experience in CHT that ranged from zero to seven years (n = 8; 40%). Regarding the education of the professionals, half (n = 10; 50%) had a specialization and the other half had master’s degrees.

From the individual testimonies about the facilitating elements for the organ and tissue donation process for transplantation, three CIs (Table 1) and their respective CSDs emerged, originated from a similar ECH.

Table 1. Central Ideas about the facilitating elements for the organ and tissue donation process for transplantation, extracted from individual testimonies (n=20). Florianópolis, SC, Brazil, 2017.

<table>
<thead>
<tr>
<th>Central Ideas (CIs)</th>
<th>(n) Participants</th>
<th>Relative frequency of interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI1 – Presence of CIHDOTT professionals who work in Intensive Care and Emergency Units</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>CI2 – Efficient support from CET</td>
<td>07</td>
<td>35%</td>
</tr>
<tr>
<td>CI3 – Active and problem-solving coordination of CIHDOTT</td>
<td>03</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**CI1 – Professionals working in Intensive Care and Emergency as members of the Hospital Transplantation Commission (CHT)**

*CSD1:* It is a team that works at strategic points, emergency, ICU, and the semi-intensive unit, everyone is inserted in this environment. This way, CHT professionals can monitor more closely, they can be more present and even guide the professionals who are dealing with the support of this type of patient, so this facilitates the opening of the protocol. Being there we can make this identification of the potential donor, so sometimes in the daily assessment itself, we'd arrive in the morning and go to each bed, we'd end up identifying them, because they're our patient, and we can now speed up this process. We'd also managed to create a bond with the family, as we care for the patient, we end up creating this bond with the family, so we know the story, know the family, know who they are. I think the number of doctors who are members of the commission is a positive point, we have a very complete team, with members both in the ICU and in the emergency room with a lot of intensive care doctors, and they influence the maintenance of the potential donor, they also get in touch with the doctors who are watching and I think that this also makes the process easier (E1, E2, E4, E9, E11, E13, E14, M1, M2, M6).

**CI2 – Support from the State Transplant Center (CET)**

*CSD2:* I think that the support that we have from CET also helps a lot. Sometimes, we run into a situation that we aren’t able to solve, the CET, both in terms of medical alert, coordinator, and the team on duty there, they solve things. They’re really very active. The hospital is close to the center so for me, I call CET and the team is quickly here, I can call anytime, I as CIHDOTT, they are always very helpful. As for the material issue, we keep borrowing, so they send us materials that we are missing and even help in the sense of: look I don’t know what to do, we explain the condition, and they guide us. And also if it were not for the backup of the center, surely the CHT of this hospital wouldn’t be able to perform this way. The center is always training, has a transplant coordinator course, has a critical situations communication course, now there will be an operating room coordination course, so they are always offering courses for CIHDOTT. The CET instigates a lot, stimulates, and gives opportunity, even the meetings that it carries out, which happen once or twice a year, are made with the intention of exchanging experience among the CHTs of Santa Catarina and it is something that is very good, I see that our difficulty is not just ours. It is the difficulty of other groups. And the ideas that others have had to solve problems, sometimes we didn't have (E1, E4, E12, M1, M3, M4, M5).

**CI3 – Active and problem-solving coordination of CHT**

*CSD3:* The CHT coordination is very active, when there is a problem with a difficult doctor the Commission interferes, demands, guides, and gives instructions on how to do the maintenance. If any doctor takes a long time to order the arteriography, we pass it on to the coordination and they immediately talk to the doctor. They go after everything, always wanting to improve, always in search, very committed, if we go to them with a problem they already want to solve it, so having someone with this profile in the coordination is very important (E3, E2, E13).

**DISCUSSION**

Regarding the profile of the professionals interviewed, in line with other studies, there was a predominance of female
nurses\(^{9-10}\). In this context, nursing is the profession that makes up the largest group of the health care workforce, widely distributed and performing the most diverse roles, functions, and responsibilities\(^{10}\).

We could see an expressive representation in CSD1, which was constructed from ECH extracted from the testimony of 50% of the professionals who highlighted that one of the facilitating elements in the organ and tissue donation process was the fact that the CIHDOTT professional works in the Intensive Care Unit, Semi-intensive Unit, and the Emergency Unit, considered as strategic places by professionals to identify potential donors.

Furthermore, it is known that the institution's professionals, who are directly involved with the support in ICUs and emergencies, have a fundamental role in helping to identify potential donors and subsequently in their maintenance, therefore, the CIHDOTT should promote programs of continuing education for all professionals of the institution so that they can have an understanding of the organ donation process\(^{7}\).

A study that has aimed to identify the causes of loss of potential organ and tissue donors has shown that the intensive, semi-intensive, and emergency units are places considered as strategic to identify a potential donor; however, there are still losses related to the underreporting of potential donors to the State Transplant Centers and from family refusal after confirmation of brain death\(^{11}\). Therefore, the inclusion of professionals from these units in the CIHDOTT can be a strategy to minimize underreporting as well as to begin family reception as early as possible.

In this study, the professionals have expressed that, as they work in these sectors, they are consequently closer to the family of the potential donor, which favors the welcoming and the creation of bonds. The decision to opt for organ donation by family members can be influenced by their understanding of the concept of brain death, by their emotional and cognitive needs, by perceptions regarding the quality of care for their family member, and by the knowledge and empathy of the professional who will approach them\(^{11-12}\).

As the organ donation process - from the identification of the potential donor to the confirmation of the diagnosis of brain death, the family interview, and the possible organ procurement - usually takes place in the Intensive Care Unit environment, the multidisciplinary team that will be part of this process and will carry out the maintenance of the potential donor must be qualified technically-scientifically and humanized\(^{11-12}\).

A systematic review has reported that because professional nurses are always present in patient care, they are the professional who is closest to the patient and their family, and it becomes their responsibility to maintain a bond of trust, empathy, and respect, to welcome, and to explain possible doubts about diagnoses and procedures to be performed, which can facilitate family consent for organ donation\(^{2}\).

Furthermore, the active involvement of professionals, both from the nursing team and the multidisciplinary team in the donation process, has been shown to fundamentally favor the team's awareness, provide education and training, and facilitate the process in all its stages\(^{13}\).

The CSD2 includes speeches about the importance of efficient support from the CET and the training provided to CIHDOTT professionals as facilitating factors in the donation process. The active participation of the CET in the training, qualification, habilitation, and permanent education of its professionals is one of the duties provided for in specific regulations\(^{7}\).

A Brazilian study to identify the role of the nursing team in the care provided to brain-dead patients in the ICU has reported that the donation process is complex and requires a trained and committed team\(^{13}\).

An international study from a developing country has reported that the lack of a multidisciplinary team trained and dedicated to the donation process is a challenge and is directly linked to successful fundraising programs. After investing in ongoing training programs, transplant rates improved and were comparable to the results expected in developed countries\(^{14}\).

The work carried out by the multidisciplinary team that makes up the CIHDOTT plays a fundamental role in carrying out transplants and is directly related to technical and scientific knowledge about brain death and the maintenance of potential donors, with abilities related to social, ethical, and psychological factors and with a bond established with family members through support and explanations\(^{13}\).

In this sense, the permanent education of the coordinator and the other members of the CIHDOTT team is a determining factor for the success of the donation and transplantation process, thus the training, courses, and lectures offered by the CET are fundamental strategies to instrumentalize the support so that non-conformities can be avoided in the process from the moment the patient enters the institution until the end of the process\(^{5,13}\). Such skills should be developed through permanent education offered in the training of the Central Transplantation Center\(^{4}\).

The speeches of CSD3 point out the active and resolute coordination of CIHDOTT as a facilitating factor in the donation process. Despite this, many professionals who act as coordinators in the CIHDOTT do not carry out the activity with exclusive dedication and are often not paid for such role, thus working as coordinators in parallel with patient care. In Brazil, there is no formal regulation to support the payment of CIHDOTT professionals, being this only a reality in some states\(^{7}\).
The importance of the coordinator’s performance is shown in a study that has aimed to report the results of an evaluation in relation to changes in the number of potential donors and actual donors after the implementation of a project to coordinate organ and tissue transplants in a charity hospital. The study has shown that the presence of a coordinator brought a significant improvement in the number of brain death notifications and in family reception\(^{(16-17)}\).

The current legislation provides for a minimum number of CIHDOTT professionals, that is three professionals, one of whom must be a physician or nurse assuming the role of CIHDOTT coordinator\(^{(5-6)}\). An international study has reported that the presence of an experienced and trained organ and tissue transplant coordinator increases donation rates, as they can improve family discussions, which emphasize the importance of organ donation and the fact that brain death is a real death\(^{(18)}\).

Finally, multi-professional teams trained and available to collaborate with donations and transplantation are one of the foundations for the success of each process stage\(^{(19)}\).

We highlight that a limiting factor of this study is that it only comprises a specific social context, and we cannot generalize the facilitating elements as national data, although there is a tendency to do so. However, the experience of nurses in their daily lives is important in order to understand the dynamics and complexity of the organ and tissue donation process.

**CONCLUSION**

This study has enabled the identification of facilitating elements in the process of organ and tissue donation for transplantation, such as the fact that CIHDOTT professionals are present in Intensive Care, Semi-intensive, and Emergency Units, as these places are considered local strategies for the early identification of potential donors. We have highlighted the importance of efficient support from the State Transplant Center, as well as the training of support teams in the area of donation and transplantation; furthermore, we have emphasized the active and problem-solving coordination of CIHDOTT as a facilitator of this rich and complex process. We can see that the effectiveness of the organ and tissue donation for transplantation depends on a service that is organized and well-articulated with other professionals and organizations, with trained professionals and active leadership in order to decrease the time and suffering of those who await an organ or tissue in the transplant list in Brazil.

We consider that with the knowledge about the experience of these professionals and the identification of the factors that facilitate the performance of CIHDOTT, this study may contribute with managers of hospital institutions who wish to implement a Hospital Transplantation Commission and improve the process of organ donation for transplantation. We also expect to contribute with the expansion of the production of scientific knowledge on this topic and the reflection on the subject, especially regarding the work of CIHDOTT, which is fundamental for the effectiveness of the organ donation process.

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