Nurse's performance in organization for organ demand: a single institutional case study

Abstract
Objective: To describe the role of nurses in the Organization to search for organs. Method: This is a descriptive research with a qualitative approach, of a single institutional case study type, carried out with eight nurses who worked at the Transplant Center located in the city of João Pessoa / Paraíba. The data were collected through self-administered questionnaires from October to November 2018. For data analysis, the Content Analysis proposed by Bardin was used. Results: based on the cores of meaning identified in the nurses’ responses, thematic categories were created, namely: educational, assistance and administrative activities, performance flow and use of the Nursing Care Systematization. Conclusion: the role of nurses in the Organization to find organs was found to be important, both through educational and care activities, and through the use of Nursing Care Systematization, requiring scientific knowledge and clinical skills on the part of professionals.

Descriptors: Obtaining tissues and organs; Nursing care; Transplant.

RESUMEN
Objetivo: Describir el rol de las enfermeras en la Organización en la búsqueda de órganos. Método: Se trata de una investigación descriptiva con enfoque qualitativo, de un solo tipo de estudio de caso institucional, realizada con ocho enfermeras que trabajaban en el Centro de Trasplantes ubicado en la ciudad de João Pessoa / Paraíba. Los datos se recolectaron a través de cuestionarios autoadministrados de octubre a noviembre de 2018. Para el análisis de datos se utilizó el Análisis de Contenido propuesto por Bardin. Resultados: a partir de los núcleos de significado identificados en las respuestas de las enfermeras, se crearon categorías temáticas, a saber: actividades educativas, asistenciales y administrativas, flujo de desempeño y uso de la Sistematización de la Atención de Enfermería. Conclusión: se encontró importante el rol del enfermero en la Organización para la búsqueda de órganos, tanto a través de actividades educativas y asistenciales, como mediante el uso de la Sistematización de la Atención de Enfermería, requiriendo conocimientos científicos y habilidades clínicas por parte de los profesionales.

Descripciones: Obtención de tejidos y órganos; Cuidado de Enfermería; Trasplante.

RESUMO
Objetivo: Descrever a atuação do enfermeiro na Organização para procura de órgãos. Método: Trata-se de pesquisa descritiva com abordagem qualitativa, do tipo estudo de caso único institucional, realizada com oito enfermeiros que atuavam na Central de Transplante localizada no município de João Pessoa/Paraíba. Os dados foram coletados por meio de questionários autoadministrados durante o período de outubro a novembro de 2018. Para análise dos dados foi utilizada a Análise de Conteúdo proposta por Bardin. Resultados: com base nos núcleos de sentido identificados nas respostas dos enfermeiros foram criadas categorias temáticas, a saber: atividades educativas, assistenciais e administrativas, fluxo de atuação e utilização da Sistematização da Assistência de Enfermagem. Conclusão: constatou-se importância da atuação do enfermeiro na Organização para procura de órgãos, tanto por meio de atividades educativas e assistenciais, quanto através do uso da Sistematização da Assistência de Enfermagem, exigindo conhecimento científico e competências clínicas por parte dos profissionais.

Descritores: Obtenção de tecidos e órgãos; Cuidados de Enfermagem; Transplante.
INTRODUCTION

Organ and tissue transplantation is a reliable and highly effective therapeutic option that aims to provide rehabilitation and increase the perspective of a healthy life in patients with tissue failure or terminal insufficiency of an organ.¹

In Brazil, this activity started in the late 1950s. Since then, technological advances in the health area have allowed to improve surgical techniques and infection control, reducing the rejection of tissues or organs implanted and increasing the number of transplants that occur in the national territory.²

However, despite having one of the largest public organ and tissue transplant programs in the world, data published in the first quarter of 2019 by the Brazilian Transplant Registry show a 2.1% reduction in the rate of transplantation, compared to the year of 2018, falling from 32.8% to 32.1%.³

In this context, the nurse has a fundamental role for the success of the transplantation program, acting in education regarding the donation of organs and tissues, identification of potential donors, maintenance of the viability of a potential donor and provision of care to recipients.⁴

According to the Resolution of the Federal Nursing Council (COFEN) 292/2004 ⁵ it is up to the nurse to apply the Nursing Care Systematization (Sistematização da Assistência de Enfermagem - SAE) in all phases of the organ and tissue donation and transplantation process, to the recipient and family, including from the transplant (in-hospital) as well as the post-transplant (at the outpatient), this professional being responsible for planning, executing, coordinating, supervising the nursing procedures provided to organ and tissue donors.⁶ ⁷

The nurse is a member of the Organization for Organ Search (Organização para Procura de Órgãos - OPO) team and in this service performs several duties, such as notifying the Organ Procurement and Distribution Centers of the existence of potential donors, interviewing the legal guardian of that donor and providing information about the donor process. It also performs and supervises the conditioning of the organ until surgery, or even performs the transport to another institution.⁸ ⁹

The nurse is essential in the successful transplant program. Thus, it needs to develop essential skills to act effectively in the different phases of this process.⁶

Given this need for knowledge in this area and the considerable growth in the situation of organ transplants in Brazil, interest in the subject arises. To this end, the objective is to describe the role of nurses in the Organization for the Search for Organs.

METHOD

It is a descriptive study with a qualitative approach, from the only institutional case study, exploring the phenomenon of the nurse’s role in the organization to search for organs.

The research was carried out with nurses who worked at the Transplant Center located in the city of João Pessoa / Paraíba. The following criteria were used to select the sample: nurses of both sexes who worked in the aforementioned service and were able to answer a semi-structured questionnaire. Initially, the sample
consisted of all ten nurses who were part of the Transplant Center, however two refused to participate in the research. Therefore, the sample was closed with eight professionals.

Data were collected through self-administered questionnaires, in the nurse’s own place of work, during the period from October to November 2018, at a time that he deemed possible.

The first part of the questionnaire was designed to obtain the profile of the interviewees, by surveying sociodemographic variables, such as: age, sex and academic background. The second, on the other hand, addressed variables that made it possible to identify the role of nurses in the organization to search for organs.

The nurses’ responses were transcribed in full, constituting the corpus of the research that was analyzed by the Content Analysis technique proposed by Bardin, which comprises three stages, namely: pre-analysis (floating reading of the collected material), exploration of the material (coding the core of understanding of it, selecting the theoretical categories) and treatment of the data obtained (inferences and interpretations based on the theoretical referential).

This study was conducted in accordance with the ethical principles of Resolution 466/2012, which regulate scientific research. It is approved by the Ethics and Research Committee of the Health Sciences Center, under CAAE: 97494718.2.0000.5188.

RESULTS

From the data collection implemented to the nursing professionals working in the Organization for Organ Search, social, training and performance data for nurses were extracted, as well as data related to the work developed at the institution.

Regarding social data, among the 08 (eight) respondents, there was a predominance of females, 75% (n=06), with a minimum age of 24 years and a maximum of 63 years, with an average of 36 years (± 12.9).

As for training, 87.65% (n=07) of the professionals come from a private institution, and only 12.5% (n=01) studied in a public institution, 50% (n=04) are between four and seven years old training. With regard to graduate studies, all professionals, 100% (n=08), claimed to have specialization.

With regard to the results related to professional performance in the Organization for the Search for Organs in Paraíba, the majority, 75% (n=06) have between 01 and 03 years of service in this sector, the other 25% (n=02) already have more than 08 years of contribution.

EDUCATIONAL ACTIVITIES

As for the educational activities on organ donation, it is observed in the statements that these professionals work mainly with lectures and leaflets, as we can see in the speeches taken as examples:

"Understands in continuing education, where we give lectures, pamphlets and guidelines regarding the brain death process, organ and tissue donation and transplants". (E1) - E3 and E5 presented similar speeches.

"Yes, in continuing education, the right to information that he can self declare himself a donor and that the family that authorizes the donation". (E6)

ASSISTANCE ACTIVITIES

Assistance was described by nurses as activities ranging from the search for the potential donor to assistance during the capture of organs and tissues, according to the statements below:
“Identification of the possible donor through active search, maintenance of the potential donor, in the collection responsible for the logistics and perfusion of the organs”. (E1) - E2 presented a similar speech.

“Maintenance of a patient in an EM protocol, welcoming family members, collection of exams, monitoring the patient in an EM profile, checklist of materials and inputs for collections and maintenance, internal and external search”. (E7) - E5 presented a similar speech.

“Pick up the organ at the airport and drop it off at the hospital, assist doctors in opening the protocol for ME 1st and 2nd clinical exam and image exam (doppler), blood collection for exams, physical, assist with the team in the sector where the patient is find in the maintenance of the potential donor, assist in the surgical block during the capture”. (E8)

**ADMINISTRATIVE ACTIVITIES**

The administrative activities of nurses at OPO occur by filling in documents and protocols, opening and closing the occurrence book, feeding the donation system and monitoring the results of the exams, as reflected in the speeches:

“Filling in donation terms, attachments, filling in the donation system, monitoring the exams (results)”. (E2) - ES, E6 and E8 presented similar speeches.

“Filling in attachments, accompaniments, GAL forms, requests, receipt of results and materials, replacement of materials and forms at OPO, opening and closing in OPO’s occurrence book”. (E7)

**USE OF NURSING ASSISTANCE SYSTEM (SISTEMATIZAÇÃO DA ASSISTÊNCIA DE ENFERMAGEM - SAE) IN THE PERFORMANCE OF THESE ACTIVITIES**

When we reported on the use of SAE in the performance of these activities, opinions differed in two ways: some nurses said they did not use it, while the vast majority said they used it and described its operation, as we can see in the speeches below:

“Among the stages of SAE, we use data collection to search for information relevant to the ME process. We list the diagnoses, planning, implementation and finally the evaluation, where the patient’s evolution is recorded in order to achieve the expected results during the other stages. (E1)

“We don’t have it”. (E2) - E8 presented a similar speech.

“Yes. Maintenance of the potential donor is carried out, through standardized measures that increase the quality of this assistance, the number of potential donors, decrease the number of donors lost due to hemodynamic instability, and thus result in an increase in the number of organs available for transplants”. (E3) - E4 and E5 presented similar speeches.

“Faced with the detection of the potential donor: we will apply the history (raising the problems), in the assessment and maintenance use the physical examination as a fundamental tool to support the nursing diagnosis (clinical judgment)” (E6) - E7 presented a similar speech.

**DISCUSSION**

The social data obtained in the studies reflect the dynamics of the common gender profile in the category of Nursing in the Brazilian scenario, with the majority being women; as well as the work process, reflecting the age at which they graduate. Similar data are found in Andrade, Silva and Lima 12 in a study carried out in the same place, in which 60% of the nurses in the OPO were female and aged between 29 and 61 years old.

The findings related to professional training corroborate the study by Gomes, Machado-Taylor and Saraiva13 when they analyze and reflect the reality of Brazil in relation to higher education, where one can observe the increase in the number of private institutions to the detriment of the stagnation in the supply of public education.

The results related to professional qualification to work in the service showed that 100% of the professionals are trained / qualified before taking office. And, in fact, because it is a highly complex service, OPO requires a professional team specialized in the care of critical patients and highly qualified to assume the service, as stated in Ordinance No. 2600/2009 of the Ministry
of Health. Studies by Andrade, Silva and Lima and Andrade et al. confirm the results found when they expose the peculiarities and the importance of nursing care.

As for the specific data on the performance of nurses' activities in the Organization for Organ Search, in the educational activities on organ donation, it is possible to observe the performance of these professionals, mainly through lectures and pamphlets.

Studies such as Mendes, Rosa and Barbosa show that the educational activities of OPO nurses involve not only the education of the public as mentioned by the interviewees, but permeates other aspects such as the education of other health providers as well as educational activities that involve their own professional development.

Education aimed at the general public allows nurses to demystify misconceptions about the organ donation process in order to increase donation rates as mentioned by Andrade et al. in a study with similar data on the experiences and strategies of an OPO.

The assistance part was described by nurses as activities that range from the search for the potential donor to assistance during the capture of organs and tissues. The spoken expressions reveal the nurses' activities similar to those described by Rocha, Canabarro and Soubrac in a study on the duties of an OPO, where the work begins with the active search for possible donors in all ICUs and consists of the evaluation of all patients under the use of drugs and on mechanical ventilation.

According to the same authors, the patient who obtains Glasgow less than 7 starts to be monitored by the OPO, with exams and daily monitoring of its clinical evolution being performed in order to avoid a late diagnosis of late brain death. Once the potential donor with brain death is identified, the nurse notifies the Transplant Center and waits for the medical team to notify the family of the death; this done, the nurse conducts a family interview about the possibility of organ and tissue donation and clarification of doubts. When the donation is authorized, the nurse is responsible for monitoring the PD, making laboratory tests and serology feasible. Nurses also work in a surgical block to extract organs. All this work has as main objective the viability of organs and tissues for transplants.

Thus, nurses located in this type of service need scientific knowledge and technical skills, and plausible clinical competence, whether to assist the donor, the recipient, or the families.

The administrative activities cited by nurses are provided for in the Ministry of Health Ordinance No. 2600/2009, that inculcates to the nurse responsible for the organ donation process of the Intra-Hospital Commission for Donation and Tissues for Transplantation (Comissão Intra-Hospitalar de Doação de Órgãos e Tecidos para Transplante - CIHDOTT) to notify the Organ Procurement and Distribution Notification Center about the existence of a potential donor, or when the donation is not fulfilled. It is also up to the nurse to approach and interview the legal guardian, as well as fill out documents and protocols.

Regarding the flow of action in the organ transplantation process, nurses report the scope of their work, describing their activities, especially those of assisting the potential donor.

When we reported on the use of SAE in the performance of these activities, opinions differed on two fronts: some nurses said they did not use it, while the vast majority said they did and used it.

The Systematization of Nursing Care (SAE) is a specific activity of nurses, which has been developed over time, through a method and strategy of scientific work in order to identify and stratify health problems and subsidize nursing care actions that can contribute to the promotion, prevention, recovery and rehabilitation in the health of the individual, family and community.
of SAE while two seem to be unaware, which reflects and justifies the need for continuing education aimed at professionals in order to improve their professional and consequently better service provision.

In this sense, the results differ from those found by Silva et al (2011) that, when investigating the nurses’ knowledge about the Systematization of Nursing Care in a Large Hospital in Recife, found that 69% of nurses had no knowledge about SAE and especially about nursing diagnoses.

Andrade, Silva, and Lima emphasized that SAE should be applied to the donor, the recipient and the families in all phases of the donation and transplantation process, and, as described by nurses, this constitutes a care management tool that adds quality to the service, ensuring greater probability safe and effective assistance.

CONCLUSION

It was found that the nurse has a relevant role in the organization to search for organs, performing administrative and educational activities in addition to technical-assistance with the application of the Nursing Care Systematization (SAE) that range from assistance to the living or deceased donor, to the recipient, and families.

The nursing team is also responsible for spreading information to society in general about organ donation/transplantation, which is a key factor in terms of demystifying the donation process.

It is also observed that in reality these professionals coexist in a lack of understanding and application of SAE. Despite this, it was identified that the majority of respondents already use it as a care management tool and are aware that it adds quality to the service, ensuring a greater likelihood of safe and effective assistance.

Based on the above, it is expected that the study presented here will promote the development of new studies on this theme and may provide information for directing public policies that favor the implementation of new teams for Organizing and Searching for organs, as well as the development educational activities geared to society, since continuing education can minimize indecision, when it responds to society’s questions about organ donation and provides new survival opportunities for those waiting for a transplant.

REFERENCES