PERFORMANCE OF THE NURSE IN ORGANIZATIONS SEEKING ORGANS FOR TRANSPLANT

ATUAÇÃO DO ENFERMEIRO NAS ORGANIZAÇÕES DE PROCURA DE ÓRGÃOS PARA TRANSPLANTE

RENDIMIENTO DE LA ENFERMERA EN LAS ORGANIZACIONES DE LA DEMANDA PARA TRANSPLANTE DE ÓRGANOS

Ana Elza Oliveira de Mendonça¹, Izaura Luzia Síviero Freire², Quinidia Lúcia Duarte de Almeida Quitéh de Vasconcelos³, Rhayssa de Oliveira e Araújo⁴, Isabelle Christine Marinho de Oliveira⁵, Gilson de Vasconcelos Torres⁶

ABSTRACT

Objective: to report on the performance of nurses in organizations demand for organs. Method: update article, which presents aspects of the nurse's role in organizations demand for organs. Results: the process of donating organs / tissues is complex and requires the involvement of a multidisciplinary team, where the nurse works in the identification and notification of potential donor, opening and conclusion of the Protocol of brain death, clinical management, family support and therapeutic communication. Conclusion: clearly the need for specialized nurses that work in the process of donating organs and tissues for transplantation, in order to proceed in the process steps appropriately, facilitating family coping and reducing waiting lists for organs and tissues. Descriptors: Tissue and Organ Procurement; Organ Transplantation; Nurse’s Role.

RESUMO

Objetivo: informar sobre a atuação do enfermeiro nas organizações de procura de órgãos. Método: artigo de atualização, o qual apresenta aspectos sobre a atuação do enfermeiro nas organizações de procura de órgãos. Resultados: o processo de doação de órgãos/técidos é complexo e requer envolvimento da equipe multiprofissional, onde o enfermeiro atua na identificação e notificação do potencial doador, abertura e conclusão do protocolo de morte encefálica, manutenção clínica, suporte familiar e comunicação terapêutica. Conclusão: é evidente a necessidade de enfermeiros capacitados que atuem no processo de doação de órgãos e tecidos para transplantes, com vistas a proceder nas etapas do processo de forma adequada, facilitando o enfrentamento da família e reduzindo as filas de espera por órgãos e tecidos. Descritores: Obtenção de Tecidos e Órgãos; Transplante de Órgãos; Papel do Profissional de Enfermagem.

RESUMEN

Objetivo: informar sobre la actuación del enfermero en las organizaciones de la demanda de órganos. Método: articulo de actualización, el cual presenta aspectos sobre la actuación del enfermero en las organizaciones de la demanda de órganos. Resultados: el proceso de la donación de órganos / tejidos es complejo y requiere la participación de un equipo multidisciplinario, donde la enfermera trabaja en la identificación y notificación de los donantes potenciales, la apertura y la conclusión del Protocolo de muerte cerebral, la gestión clínica, el apoyo familiar y la comunicación terapéutica. Conclusión: es evidente la necesidad de enfermeras especializadas que trabajan en el proceso de la donación de órganos y tejidos para trasplante, con el fin de llevar a cabo las etapas del proceso adecuadamente, facilitando la familia para hacer frente y reducir las listas de espera de órganos y tejidos. Descriptores: Obtención de Tejidos y Órganos; Trasplante de Órganos; Rol de la Enfermera.

¹Nurse. PhD student in health sciences by Universidade Federal do Rio Grande do Norte/UFRN/RN, Brazil. ²Nurse. Master Teacher of the nursing school at the Federal University of Rio Grande do Norte/UFRN. ³PhD student of the graduate program in nursing/UFRN. Member of the research group nursing procedures incubator/UFRN. Natal/RN, Brazil. E-mail: izaurafreire@yahoo.com.br. ⁴Nurse. Master Teacher of nursing at the Federal University of Rio Grande do Norte/UFRN. PhD student of the graduate program in nursing/UFRN. Member of the research group nursing procedures incubator/UFRN. Natal/RN, Brazil. E-mail: quinidia@hotmail.com. ⁵Nurse. Master's degree by the graduate program in nursing/UFRN. Member of the research group nursing procedures incubator/UFRN. Natal/RN, Brazil. E-mail: isabelle_1807@hotmail.com. ⁶Student in nursing at the Federal University of Rio Grande do Norte. Member of the research group nursing procedures incubator/UFRN. Natal/RN, Brazil. Email: gilsonvtorres@hotmail.com.
INTRODUCTION

Currently, Brazil has the largest public world transplant program, with funding of 95% of procedures performed through the unified Health System (SUS), which involve since the preoperative examinations of both the giver and the receiver, hospitalizations, surgeries, medicines of high cost, up to the multidisciplinary monitoring pós-alta.¹

Therefore, this encouragement of public sector through the Ministry of health (MS) for the development of transplantation, culminated in the last decade, in progressive increase in the number of transplants. The Brazil went from 4,092 solid organ transplants, such as the kidneys, heart, liver and Lung in 2002 to 7,426, in 2012. However, there is still significant mortality of patients in queues due to the disproportion between the need and the number of transplants place.²

Several factors cause this difference; among these are the educational level of the population, cultural standards, stimulus programs for the donation and transplantation, appropriate legislation and infrastructure for the diagnosis of brain death (ME), and maintenance of the potential Donor (PD), capture and transplant.³

In order to increase the number of organ donors and the patients benefit from transplantation therapy, MS created the search Organization (OPO), with entity coordinating role supra-hospital responsible for organizing and supporting, within the framework of its activities and in accordance with the provisions of the Technical Regulation of the National transplant System (SNT), activities related to the process of organ donation, the possible donor maintenance, identification and search for solutions to the weaknesses of the process, building partnerships, the development of activities and the training of health professionals to carry out the identification and completion of the donation of organs or tissues.¹³

This institution must have, necessarily, with at least one coordinator, and medical nurses and administrative agents. All top-level professionals must possess proven experience in areas of critical patients care, diagnosing interview, and ME, donor screening with relatives of PD.¹⁴

With regard to the nurse, this professional by having his general and recognized training skills to manage human and material resources, entered and conquered new spaces for the development of their activities. Because, to act on organ donation and transplantation, the nurse needs to be qualified, trained and constantly updated in order to keep up with scientific and technological developments. In addition, it is necessary that this professional know dealing with bereaved relatives after sudden death and approach them about organ and tissue donation.

From these observations: How nurses work in organizations seeking organs?

Given this challenge, the goal is to inform about the role of the nurse in organizations seeking organs.

Historical and legal aspects for the use of organs from donors in brain death

Since the dawn of civilization, the human being seeks the knowledge about your own body and of others, which is evident through the reporting of theologians, philosophers and scientists who have documented the care, the experiences and the curiosities of man in relation to body parts, organs and tissues throughout history. Warriors from several tribes took the blood and ate the bodies of brave enemies to take advantage of its attributes. The 15th and 16th centuries left the testimony of numerous unsuccessful experiences of blood transfusions and transplant attempts, which have deployed the Foundation for the advancement of science.⁶

Barnard, in 1967, performed the first heart transplant and Starzl, in 1963, the first of the liver. Carrel reported the first lung transplant experiments in 1907, but Hardy and his collaborators described the first clinical case in 1963. Kelly and his collaborators, in 1966, made a kidney and pancreas transplantation in a patient with diabetic nephropathy in terminal phase.⁶

In Brazil the transplantation of organs and tissues, began in 1964 in Rio de Janeiro and the following year 1965, in the city of São Paulo, with the completion of the first two kidney transplants in the country. The first heart transplant took place also in the city of São Paulo in 1968, directed by Euricilides de Jesus Zerbini.²⁶

Despite the advancement of surgical techniques, such surgeons faced problems related to rejection. In 1978, the introduction of Cyclosporine that is an immunosuppressive drug, used to reduce the risk of rejection, revolutionized clinical transplants around the world. Moreover, in the 80’s, withdrawals of multiple organ were standardized; new immunosuppressive medicines developed a solution of cryopreservation organ which
contributed to the success of transplants worldwide.6-8

Since the initial phase so far, transplant activities have evolved considerably in techniques, results, variety of organs transplanted and number of procedures, but this time has permeated by questions involving, especially legal and ethical aspects, mainly for cultural influences peoples' suffering.4,5

In regard to the legal aspect, the Act of donating organs and tissues in life or after death exceeds the threshold of a praiseworthy action, humanitarian, simple because the process, from donation to transplantation, implies the observance of some fundamental rights of the donor and recipient, such as the right to life, to physical integrity, the right to their own body, freedom of conscience and the power of disposal of the body itself.8,9

Fundamental rights or civil liberties or Human Rights is defined as a set of rights and guarantees of the human being institutionalized, whose main purpose is to respect their dignity, with the protection of the State power and the guarantee of minimum conditions of life and development of the human being, namely, to guarantee respect for the human being to life, liberty, to equality and dignity, for the full development of his personality. This protection should be recognized by national and international legal systems in positive ways.5,9

It is imperative to recognize that the efforts of the pioneers in the implementation of the transplants contributed greatly to the development of technologies in the area of health, enabling the growing success of the transplanted organ and tissue status around the world. Thanks to these professionals, the transplant went from dream to reality, and has been claiming more each day, while invaluable feature to save and improve the lives of people.

In this way, will be presented, then, as it was conceived the public service organization of transplants, under the responsibility of the Ministry of health professionals.

- **The National System of organ transplants and organ search organizations**

  The organ donation process in Brazil organized in the following structure: The national Transplant System (SNT); National Center for notification, capture and distribution of organs and tissues (CNNCDO); Notification Center, capture and distribution of organs (CNCDO); Search Organization (OPO); Organization of demand for Corneas (OPC) and Hospitals Notifiers.9

  The politics of organ and tissue transplants in Brazil if the law supports/1997 and 10,211 9,434/2000, which determine how basic guidelines: the gratuity of the donation, the charity in relation to non-maleficence and receivers in relation to living donors. Lay still, guarantees and rights to patients needing transplants, regulate the entire network assistance through teams, and permits the operation of national-level institutions. In this way, the transplant policy is in line with laws no 8,080/1990 and 8,142/1990 governing the functioning of the SUS.2,5

  Law No. 8,489/1992 provides for the removal and transplantation of tissues, organs and body parts for therapeutic and scientific purposes and with the understanding that the bodies collected accounted for public goods, emerged the need to regulate the activity, creating a national coordination for the transplant system and by setting clear criteria, technically correct, just and socially acceptable for disposal of the bodies.5

  In 1997 the creation of the so-called Transplant law no 9,434, February 4, 1997, whose objective was to provide for the removal of organs, tissues and human body parts for transplant purposes, and Decree No. 2,268, June 30, 1997 that regulated and created, within the Ministry of health the National transplant System (SNT) with the assignment to develop the fundraising process and tissue distribution, organs and parts taken from the human body for therapeutic purposes and transplants.2

  The introduction of SNT demanded great efforts by its complexity and scope, including, among many other procedures, the implementation of Unique Lists of recipients, the creation of the State Central Organ transplants, standardization of these activities, registration and authorization of services and specialized teams, funding criteria, the stimulation of procedures and even adoption of measures necessary for the full functioning of the system.10

  Even with the notorious legal, organizational and technological advance are still evident ethical conflicts that the issue of organ transplants and affecting civil society as a whole, permeating the class of health professionals and public authorities.

  The biggest questions relate to the origin of tissues and organs to be transplanted, because, depending on where the donation transplant undergoes changes in nomenclature. Autotransplant when the donor and the receiver is the same person,
allotransplants are those between different people and can be donors in brain death, xenotransplantation is performed with organs of different species, but is still in the process of studies. 6,7

The xenotransplantation is the transplantation of organs, tissues and cells for human animals. Large are the technological challenges involved in this research, especially in relation to the immune response of the receiver, to the physiology of the graft and the possibility of transmission of zoonosis. Nevertheless, are the ethical issues that raise the most important controversies, discussing the validity of development costs of new immunosuppressive drugs and safe strains of genetically modified animals, animal handling, and the psychological risks to the recipient and raising doubts about the genetic heritage and public health in the medium and long term. 7,11

Most transplants come from living related donors, i.e. with direct inbreeding with the receiver-parents, children, grandparents, cousins of 1st degree, not only by the bonds of love and stronger solidarity between people in the family, but especially by higher possibility of compatibility with the receiver. Ethical questions in these cases reside in the level of autonomy and freedom of the possible donor to decide in favor of the procedure and how much the donation could involve risks to your health. Was the donor of a kidney to develop kidney disease in the future? That complication could arise from the surgery itself. 7, 9,11

When it comes to donations between unrelated people, i.e. without any degree of kinship, to these questions added doubts with respect to the commercialization of organs and financial compensation for the donation or other reward opportunities, categorically prohibited under Brazilian law.11

When the source of organs and tissues from deceased donors, the procedure supported by the family consent, without which, even with the patient’s life, the donation will not be able to hold up 12–3.

In relation to the production of organs and tissues for donation, the ethical procedures pointed out the need for research for possible marketing situations and duress, embarrassment, fraud and murder.14

Another important aspect concerns the ethical beliefs and religions, in spite of all denominations understand that the transplant is an act of love, justice and charity, which aims the well and life. Despite the religions accept and understand that the Act of giving, should be voluntary free and loosened financial interests or power, there are some differences. In the case of Jehovah’s witnesses, they approve since that does not involve blood transfusion and Tibetan Buddhists approve since the bodies not removed immediately for believing that consciousness has a few hours to leave the body. 4, 6, 8

The nurse should show appreciation by family decision regardless of their religious belief to express their opinion during the dialogue with families and friends of the potential donor. Based on this understanding, it will be discarded the functioning of OPO and the actions taken by the nurse.

● Insertion of the nurse in organizations seeking Organs

Search organizations (OPO) conceived and implemented in some Brazilian States, where the number of transplants was at very low levels in relation to the number of inhabitants, to improve the identification of patients with criteria for brain death Protocol. 15

Nurses and doctors trained by TNS make up the team of OPOs. These professionals are apparently the same functions and meet twelve-hour duty scales, so that is always available to travel to hospitals and monitor the implementation of the Protocol of brain death.15

This initiative of TNS was due to lack of organ donors, which characterized as an obstacle to the implementation of a national programme of transplants in Brazil. The lack of human and technical resources and information, associated with prejudice related to cultural and religious issues has generated a growing imbalance between the number of organs, bone, and tissue available for donation and the growing queue of patients waiting for a transplant. 5

The organ shortage is due to numerous factors such as the complexity of the donation process, failure detection and/or notification of brain death, difficulties in the maintenance of organ donors and potential lack of consent to the donation.12–4, 16

The ME can be clearly diagnosed and documented through the examination of the cerebral circulation by extremely safe techniques, as resolution of 1,480 1997do CFM, establishing the Protocol for this event. 3

After the diagnosis of ME, the patient becomes a PD, for some time, the conditions of blood circulation and breathing should maintained by artificial means until it has made possible the family consent to the
removal of organs and tissues for transplantation.17

For each organ, there are specific criteria for viability, removal, packaging and completion of transplantation in a timely manner. Because conservation times outside the body refrigerated varies for each organ.5

After ME, the heart continues beating on medicines, the lung works with the help of mechanical devices and the body fed intravenously, through a process to imitate life. However, PDs does not resist more than 72 hours in these conditions, forcing the fast-action for recovery of organs, parts and tissues of interest.5-17

Current techniques allow the transplantation of cornea, kidneys, heart, pancreas and islets, liver, intestine, lung, bone marrow, bone, skin, heart valves, tendons, veins and cartilage, with excellent prognosis. In the last decade, multiviscera’s and alocomposters tissue transplants, such as the face, hands and arms, showing the progress of technology, however, in our country these procedures still await.18

Potentially, any documented person, 21 years, major or minor duly authorized by the controller, can be a donor. The exceptions are for those who are victims of incurable infectious diseases, cancer or diseases whose evolution has committed the State of interest.4

Stresses that organ donation in life occurs only in the case of double organs, such as kidneys, for example, or part of the liver, due to regeneration capacity of the organ within 60 to 90 days, part of the lung and bone marrow.4-5

However, the ideal would be that the organs used for transplants were from donors in ME. However, there are still many obstacles in the process of donation, which hinder the collection of organs and organ transplants in our country, among them the refusal.

• Family refuses to process the donation of organs and tissues for transplant

The process of organ donation follows a sequence of events, which are: Identification of possible donor; confirmation of the notification; CNCDO; assessment of potential donor; family; donor information interview; selection of receivers; transplant teams; extraction of organs; release the body to the family.18

The process is of extreme complexity and begins with the identification of the potential donor (PD), in hospitals, especially in the ICU where they contact the patient's brain death, which generates the CNCDO compulsory notification.16

The next step the Commission is Intrahospital donation of organs and tissues for Transplantation (CIHDOTT) that performs the family interview and offers the possibility of donation, if so, to obtain formal consent for the donation.19

The interview is an extremely delicate moment family of the donation process, requiring sensitivity, professional communication skills, peace and empathy, in addition to technical knowledge about ME and about all the details of each particular case, and must be able to respond safely and patiently to questions of family, showing himself always receptive and available at any time.20-1

So the family interview is characterized as a watershed from which stops the process in case of negative family and delivered the body to the family. Hence the important role of professionals in the OPO, in particular nurses considered more experienced and prepared for this moment. Even when the family deny donating, professionals must maintain the same posture in front of the family, taking its decision without showing his frustration and sadness.22-4

Case, the decision of the family either the decision of the family either by consent and signature of the deed of gift, the nurse of the OPO, must inform the CIHDOTT that notifies the State Transplant Center (etc.), which is responsible for access to the computerized system and identify the possible receivers. When there is no compatible receiver in the State, where the donor, National Transplant Center (CNT), with headquarters in Brasilia, offers free transportation of organs and tissues for transplant to the selected receiver in another State.25

Popping up the availability of organs and tissues of cadaver donor, the selection of the receiver. The National transplant system manages the single queue for each organ or tissue transplants performed by SUS and establishes justice criteria for distribution of organs between the candidates.25

These criteria that guide the choice can be related to the time of inclusion on the waiting list, compatibility of the ABO system, physical similarities, as weight and stature, compatibility between tissues, assessed by the completion of the human leukocyte antigen (HLA), and still, the urgencies and emergencies that put the receiver in zero priorities in the national list. There are still technical, geographical and logistical criteria
that relate to human resources, materials and transport.2

The principles that guide the choice of receiver emphasize the principles of equality between people, which is evident in the production of waiting lists by date of inscription and a single national registry. Also used, criteria for medical needs of patients and the likelihood of successful treatment and of social utility, whose selection criteria are sex, race, age, lifestyle and social support structure.2.4

The difficulties in justifying, selecting a donor by the medical needs of patients has led to the emergence of some specific legal and technical resources to this end. This is the Ordinance of the Ministry of health no. 1,160 who established the use of the Model for End Stage Liver Disease (MELD) and Pediatric End-Stage Liver Disease (PELD) for determining the severity of the patient's clinical state candidate for liver transplant cadaver donor.1

In this way, the queues for donors of organs and tissues for transplant portray the steady growth of demand without, however, a similar increase in donor funding.5

The delay without forecasting and the uncertainty of result, in attendance have strong impact on the wellbeing of the patient and his family the odds of cure, the nature and extent of the consequences that result in economic losses for society as a whole.20

The biggest obstacles in the process of donation of organs and tissues for transplant related to lack of donors, due initially to any failure or delay in opening and closing protocols of brain death. Hence the relevance of the creation of the OPOs, which has contributed to the efforts in finding donors, held by health professionals prepared, despite still being negative rates very high in our country.26

One of the determining factors of family refusal, is primarily the relationship of the people with her body, which includes the meaning and the importance given to it, in his life, symbolism and representations that attaches to the body and its organs, as read with the freedom to dispose of the body, how it feels in the face of the absence or incapacity of a part of your body.8

Followed by the beliefs, myths and superstitions about death, life after death; of rape or mutilation of corpses; fear and denial of death, but also of distrust and insecurity relating to ethical issues and finally by ignorance of the laws and of the process in detail.8.11

The donation process becomes extremely stressful by itself give a painful and tense moment of loss of a loved one, pegged to the need to assess and judge the reasons given by strangers in favor of donation and often face differing views, pressures and worksite enforcement of other family and friends.20.1

However, altruistic and charitable people want to help others and so I tend to accept the donation as a gift of life, an opportunity to do well, to save a life, a lovely way to keep alive the memory of the loved one. However, are major barriers for families assimilate that ME is irreversible due to the appearance of the patient be just in a deep sleep.12.20

Another obstacle is the lack of consensus among the family, and in General, when this occurs, the relative who refuses to donate ultimately prevail. There is also the fear that death can be rushed or caused in hospitals, for the benefit of someone who needs the organ or that diverted or sold. In General, families are more of a justification not to authorize the donation.20.22

The misinformation of the company sets up in a great obstacle to the process of donation, because the lack of information and knowledge, especially about the brain dead and on the benefit that the donation brings to donor families, to the beneficiary of donated organs and their families and to society as a whole.27

Awareness-raising campaigns, are really helpful in the process of facilitation of consent, the role of the committees within the transplant and hospital nurses of OPOs should be to interact with the family, raising their confidence, clarifying processes, supporting, contributing to the acceptance of reality and to the minimization of suffering, which eventually may result in consent for organ donations, parts and tissues of the loved one died.22.4

The interview is one of the steps of greater complexity in the process of donation of organs and tissues for transplant, involving ethical, legal and emotional aspects. The interview requires preparation on the part of the fundraising professional, to clarify doubts, share feelings and make the donation process. Since the family interview happens a few minutes or hours after the communication to the family of the diagnosis of brain death (ME) of your relative, that is, at a time of extreme grief and suffering.8

Brazilian law stipulates that there must be the family consent to execution of donations. Being so, the family the central element in this process and that it can take a decision on the donation of organs and tissues of a
coherent and autonomous, it is necessary to clarify the entire donation process and its implications.4,11

After obtaining family consent, the nurse of the OPO in collaboration with the team of hospital Fundraising Committee must make the monitoring of procedures for removal of organs and tissues, checking legal aspects to be met by the Forensic Medicine Institute, taking care to ensure that the donor is not forgotten in the midst of the technical protocols.28

Despite many advances in technology, there is still a lack of preparation of health professionals in General; it believed that the absence of this theme in most curricula of healthcare courses could be contributing to such. To try to minimize the unpreparedness of the professionals, the OPOs created and proving effective in daily active search in all-public and private hospitals.28

Therefore, the identification of a potential donor, the early diagnosis of brain death and the notification to the transplant centers are key to the growth in the number of captures. However, it should note that the reception of families, strengthening the bond of trust, throughout the process, and a family interview well directed is fundamental and will contribute to a positive attitude of the family donation.29

Priority multiprofessional teams with trained, fully empowered to cooperate, in their specific areas in the process of organ donation and the patient's preparation for the transplant.29

**FINAL REMARKS**

The purpose of donating is of noble feelings as altruism, selflessness, unconditional love and to waive next while teachings from our Creator and source of vital energy.

The process of organ donation is complex in its essence and requires the involvement of the entire multidisciplinary team, where the nurse of the OPO is inserted and has an important role in the identification and notification of the potential donor, opening and conclusion of the Protocol of clinical donor maintenance, ME; family support through interaction, empathy and therapeutic communication.

To reflect on the role of the nurse in the OPO, making efforts with a view to the preservation of life and human dignity as ethical foundation that permeates the entire process of organ donation. Since the decision to donate or not, is pervaded by many feelings like pain, anguish, fear, denial of death and unexpected loss revolt, situations where people demonstrate difficulties in dealing with their emotions.

All professionals working in the field of donation and transplantation of organs and tissues, must have as main purpose the respect to the pain of others and even if there is no family consent to clarify the whole process with objectivity and clarity. The goal of the professionals is above all to emphasize the principles of ethics, legality and humaneness, not overlapping more suffering to the family of the donor.

You must invest in the training of health professionals committed to this cause and in education of the population, so that all stages of the process of organ donation released, facilitating coping and reducing queues for organs and tissues in our country.

**REFERENCES**


Performance of the nurse in organizations...


