



Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

ORIGINAL ARTICLE

LIVER TRANSPLANT IN REFERENCE HOSPITAL: NURSING SKILLS IN OUTPATIENT SERVICE

TRANSPLANTE HEPÁTICO EM HOSPITAL DE REFERÊNCIA: COMPETÊNCIAS DO ENFERMEIRO NO SERVIÇO AMBULATORIAL

TRASPLANTE HEPÁTICO EN UN HOSPITAL DE REFERENCIA: COMPETENCIAS DEL ENFERMERO EN LO SERVICIO DE AMBULATORIO

Francisca Diana da Silva Negreiros¹, Alice Maria Correia Pequeno Marinho², José Huygens Parente Garcia³, Cleide Carneiro⁴, Maria Isis Freire de Aguiar⁵, Ana Maria Maia Rodrigues⁶

ABSTRACT

Objective: to describe the skills of nurses in outpatient liver transplant. **Method:** an exploratory study with a qualitative approach, with nurses working in liver transplantation clinic of a referral hospital through non-participant interviews and observation with use of thematic analysis technique. **Results:** the waiting period involves activities related to the reception, screening, nursing consultation, technical procedures, health education, interaction with the multidisciplinary team, teaching and research and management of human and material resources. After transplantation, care are directed to the prevention of complications and empowerment for self-care. **Conclusion:** the collaboration of the nurse in the multidisciplinary team is essential for a positive outcome in the process of liver transplantation, because they need to promote safe and effective care, both to clients and their families. **Descriptors:** Liver Transplantation; Nurses; Professional Competence; Nurse's Role.

RESUMO

Objetivo: descrever as competências do enfermeiro no serviço ambulatorial de transplante hepático. **Método:** estudo exploratório com abordagem qualitativa, com enfermeiros que atuam no ambulatório de transplante hepático de um hospital de referência, por meio de entrevista e observação não participante, com emprego da Técnica de Análise temática. **Resultados:** o período de espera envolve atividades relativas ao acolhimento, triagem, consulta de enfermagem, procedimentos técnicos, educação em saúde, interação com a equipe multiprofissional, ensino-pesquisa e gerenciamento de recursos humanos e materiais. Após o transplante, os cuidados estão direcionados para a prevenção de complicações e empoderamento para o autocuidado. **Conclusão:** é imprescindível a colaboração do enfermeiro na equipe multiprofissional, para um desfecho positivo no processo do transplante hepático, pois precisa promover a assistência segura e efetiva, tanto aos clientes quanto aos seus familiares. **Descritores:** Transplante de Fígado; Enfermeiros; Competência Profissional; Papel do Profissional de Enfermagem.

RESUMEN

Objetivo: Describir las competencias del enfermero en lo servicio de ambulatorio de trasplante de hígado. **Método:** un estudio exploratorio con enfoque cualitativo, con las enfermeras que trabajan en el hígado clínica de trasplante de un hospital de referencia a través de entrevistas no participantes y la observación con el uso de la técnica de análisis temático. **Resultados:** el período de espera incluye actividades relacionadas con la recepción, selección, consulta de enfermería, procedimientos técnicos, la educación sanitaria, la interacción con el equipo multidisciplinario, la enseñanza y la investigación y la gestión de los recursos humanos y materiales. Después del trasplante, la atención se dirige a la prevención de las complicaciones y la habilitación para el autocuidado. **Conclusión:** la colaboración de la enfermera en el equipo multidisciplinario es esencial para un resultado positivo en el proceso de trasplante de hígado, debido a que necesita para promover una atención segura y eficaz, tanto a los clientes y sus familias. **Descriptores:** Trasplante de Hígado; Enfermeros; Competencia Profesional; Rol de la Enfermera.

¹Nurse, Master in Education in Health, University Hospital Walter Cantídio (HUWC), Federal University of Ceará (UFC). Fortaleza (CE), Brazil. E-mail: negreiros.diana@gmail.com; ²Geologist, PhD in Public Health, Professor, Master of Vocational Education in Health (CMEPES) - Master's Degree in Health Education Training), State University of Ceará (UECE). Fortaleza (CE), Brazil. E-mail: alicepequeno@gmail.com; ³Doctor, PhD in Pharmacology, Professor, Surgery Department of the Medicine School of Federal University of Ceará (UFC). Fortaleza (CE), Brazil. E-mail: huygensgarcia@hotmail.com; ⁴Social Worker, PhD in Social Work, Assistant Professor, State University of Ceará (UECE), Master Course Coordinator of Vocational Education in Health (CMEPES). Fortaleza (CE), Brazil. E-mail: cleide.carneiro@uece.br; ⁵Nurse, PhD, Professor, Department of Nursing of Federal University of Ceará (UFC). Fortaleza (CE), Brazil. E-mail: isis_aguiar@yahoo.com.br; ⁶Nurse, Master in Clinical Care in Nursing and Health, University Hospital Walter Cantídio (HUWC) the Federal University of Ceará (UFC). Fortaleza (CE), Brazil. E-mail: ana_maria_cartaxo@hotmail.com

INTRODUCTION

Liver transplantation is a surgical procedure of high complexity, indicated for patients with irreversible liver disease, a subject of public health concern and relevance in the social context. Thus, it increasingly requires the development of expertise in this area to improve professional practice, particularly nurses.

Among the areas of nursing work, the liver transplant demand that the professional is qualified and competent in the safe performance of his duties as the transplantation of organs, particularly the liver, requires complex infrastructure and multidisciplinary team specializing in exercise its activities and monitoring of customers seriously compromised by acute or chronic liver disease.¹

Nursing care requires the development of skills in order to provide quality to customer needs, families and communities in physiological, pathological and psychosocial aspects. In this context the nurse, as a member of the multidisciplinary team, plays a vital role in the success of the transplant program, and needs to continually update their knowledge, skills and attitudes in this very specific and complex area.²

Competent nursing is understood as a set of knowledge, skills and attitudes that enable nurses to act in an appropriate manner at all times. All of these skills can be expressed in terms of responsibility to the patient, the nurses themselves, health team, the profession, the community and society in general.³

In this sense, the nurse needs to develop core competencies to the complexity of care to act in different phases of the perioperative period. Such skills include aspects of reference for transplantation and assessment, care in the waiting period for transplantation, intraoperative, in-hospital post-transplant and ambulatory; live donor assistance; professional development; professional practice and ethics.⁴

The nurse's role in liver transplantation begins in the outpatient service when the customer is directed to evaluate the indication of transplantation. In this period, the nurse has the opportunity to guide the client and family as the pre-transplant testing protocol; procedures before, during and after surgery; the importance of adherence to treatment with immunosuppressants and about legal criteria, ethical and technical of the waiting list.¹

In this perspective, the nurse plays a crucial role in establishing a successful transplant program. The study aims to describe the skills of nurses in outpatient liver transplant in a referral hospital.

METHOD

Descriptive, exploratory study with a qualitative approach. We chose this approach because it allows the investigation of the principles of history, relationships, representations, beliefs, perceptions and opinions of individuals.⁵

The research took place in the outpatient liver transplant in a referral hospital in Ceará. Participated in this research three nurses who worked in the outpatient unit of liver transplantation. It was established as inclusion criteria the acting for two or more years as a nurse in liver transplantation and all fulfilled the requirement, there is no exclusion.

Data were collected in June 2014, using two techniques: semi-structured interviews and non-participant observation. The interviews were previously scheduled, had an average of 60 minutes and were held at the Ceará Liver Transplant Center, located in the outpatient clinic of the hospital. To better data collecting, interviews were audio recorded and later were transcribed in specific program for further analysis. The observation period was pre-defined with the subjects, with an average of 60 hours. Field diary was used to record the notes during the observation of the practices of nurses in service.

Thematic analysis was used to data interpretation. This method is considered the most suitable for the qualitative approach of research in the health service and comprises three stages: pre-analysis, material exploration, treatment of results and interpretation.⁵ From this process emerged two thematic categories: "Performance of nurse in the period of waiting" and "back to the clinic: customer empowerment on self-care."

The study followed the principles of bioethics recommended in Resolution No. 466 of the National Health Council (CNS)⁶, which regulates the guidelines and standards involving research on human subjects and was approved by the Research Ethics Committee, Embodied Opinion number: 646.428. All participants were informed about the study and signed a consent form. To guarantee confidentiality and anonymity, the subjects were represented by acronym composed of the number of chronological order the

Negreiros FDS, Marinho AMCP, Garcia JH et al.

interview, followed by the letter E, of “enfermeiro” (nurse in portuguese).

RESULTS AND DISCUSSION

The speeches of the subjects did touch upon the themes: "Nurses' performance in the period of waiting" and "Back to clinics: customer empowerment on self-care."

♦ Nurses' performance in the waiting period

This category reflects the nurse in the outpatient service, with respect to activities related to mediate preoperative period, at which time the client waits for a transplant. The outpatient setting is the gateway to the client who has indication for liver transplantation, as well as for their follow-up after hospital discharge.

The speeches showed that the activities at the clinic were related to the reception, reception, screening, interaction with the multidisciplinary team, the guidelines, the teaching and research, the care procedures and management of human and material resources in general.

The patient who comes here for the first time is the host, it is oriented towards the service of transplantation and with respect to what is the medical screening, where it is decided whether it is a candidate to liver transplant or if it can be accompanied by other services (1E).

The [nurse] functions are of assistance, coordination, teaching and research and people management (3E).

Subjects specified the various actions taken by the nurse in the outpatient setting, in order to provide all necessary conditions for the success of transplantation. This dimension assignments in development work increases the complexity of acting, considering the activities contingent.

By correlating the speeches with the observation made in the scenario of practices it was found the universe of administrative/managerial skills to be performed by the professional. However, there was concern to reconcile the management activities of the care process/direct care with the administrative process/indirect care, aiming to meet customer needs.

For what it is for me? You manage information for the National System of Transplantation daily, so you can not I get there [direct care], but it is up to me to talk, every Wednesday, patients stay with me. If I have no nurse there? So I get what I'm doing [indirect care] and am I going to

Liver transplant in reference hospital: nursing...

guide. Here do not have it, we do not leave the patient unattended (3E).

Understand is how assistive nature of work process care actions direct to the customer and the administrative indirect care activities, ie, the management of nursing care that is through coordination, supervision, communication, observation and delegation. Thus, the actions of management of nursing care refers to direct care actions and indirect care, instrumental and expressive character performed by nurses in an integrated and coordinated manner, whose purpose is to provide a systematic and quality care to customers/users of nursing services.⁷

In this context, it is important to differentiate the functions of the nurse coordinator and assistance. The care nurse assumes the function of promoting nursing care to transplant candidates and patients undergoing the procedure, in addition to providing care for the donor alive and dead bodies. The transplant coordinator manages the transplant program, coordinating the various stages throughout the perioperative period, as well as participate in the direct care to patients when necessary.²

Although there is concern not occur dichotomy between care direct and indirect demand for specific administrative tasks of outpatient transplant requires that nurses make available part of their time devoted to the activities of indirect care, requiring that tasks are shared.

Besides all this [direct care], we have several reports to prepare. We have to make the calculation of the MELD that gives the gravity, we have to be very careful, a wrong number will harm the patient (2E).

The speech showed that the nurse's practice when performing indirect care, such as the Model calculation for End-stage Liver Disease (MELD), was centered on customer safe care because any error in this administrative process negatively influences the continuity of assistance and causes risk to the customer.

The MELD scoring system is used to determine the severity of liver disease and define the position of the patient on the waiting list for transplants.⁸ Thus, even when it is not present in the direct care, the nurse provides indirect customer care, in planning and delegation of shares in forecasting and provision of resources in training their staff, always aiming at achieving and improvements in care.⁹

The subjects exercised care activities individually and collectively involving the client and family, valuing the practice of

Negreiros FDS, Marinho AMCP, Garcia JH et al.

therapeutic communication, through lectures and nursing consultations performed.

Always in the lecture and nursing consultation has to be the patient and a companion, so that the person who will take care of it also be aware of everything. We advice on the transplant regulations, perioperative procedures, consent, we also let them and the will to ask, ask questions (2E).

Thus, it is effective to open communication skills between professional and client that promotes respect, trust and reduces errors. This skill is exercised immediately upon admission/client receiving the unit, mentioned by respondents as host, and remains throughout the preparation period for transplantation, ensuring solid and humanitarian relationship between professional, client and family.

Communication is pointed in studies as one of the managerial competencies which constitutes knowledge needed in nursing education.¹⁰

Researchers report that the appropriate involvement of family and companions in the learning process can help ease anxiety and improve the relationship with the client's health status.¹¹

In the outpatient setting, it was observed that customers, when they were listed for transplant, performed several laboratory and imaging tests, as shown in the statement:

Having indication, this patient is referred to the pre-transplant clinic. Many exams will be requested: ECG, X-ray, ultrasound, blood tests, serology. We will guide him on how to proceed to perform these tests. There are lot of first query patients that comes from outside, from other states, demand more from us, be guiding all (2E).

Thus, we highlight the nurse as a key element of the multidisciplinary team, directly and actively involved with the client preparation, ensuring that the guidelines on treatment, testing and service routines were made clearly, through talks and consultation nursing, respecting the culture and the intellectual level of each client and family, since the service also receives clients from other states to transplant. Thus, clients and family nurture a relationship of trust, respect and greater freedom to share their troubles and fears with nurses, as the process of waiting for the transplant can last a long time.

In the patient's initial assessment, the nurse performs medical history, physical examination and health education actions directed to prepare for surgery, including guidelines for exams, post-surgical care and

Liver transplant in reference hospital: nursing...

signature of the formal consent of the surgery. The patient is subjected to laboratory tests, radiological imaging and, in some cases, liver biopsy; endoscopic examination of the gastrointestinal tract; Identification of complications of cirrhosis, by monitoring blood gases, liver imaging, serum alpha-fetoprotein, CA19-9 (tumor marker), Doppler ultrasound, upper digestive endoscopy, bone densitometry and neuropsychological testing; psychosocial assessment; beyond contraindications research to transplant.¹²

In the preoperative phase, care should also be directed to interventions that help the lifestyle changes, including changes in dietary, fluid restriction, identification of signs and symptoms that require immediate assessment and provide ongoing support to candidates and family during the waiting period for transplantation.¹³

Among the duties of nurse, respondents highlight the link establishment between the client and the multidisciplinary team. When the customer needs care social worker, psychological, nutritionist, physical therapist or other specialists, he is referred to support services related to their real needs and according to their position on the waiting list for transplants.

Those who will be listed need to go to the psychologist, the social worker and nursing lecture. When he goes to the beginning of the queue he will go to the anesthetist, to the surgeon, to the physiotherapy, as are other preparations. There goes the new nurse because she will make referrals to the dentist, for vaccines, to phenotyping (2E).

Even though there is need for the client to be assessed by any multi-team during the preoperative period, there are some urgency indications for transplantation, in which it can not follow the protocol of the service, for example, in the case of fulminant hepatitis, a condition that the patient becomes a priority on the transplant list, as shown in the speech:

It turns out that sometimes as there is fulminant hepatitis, as there are urgencies, sometimes you can not pass all the professionals (2E).

It is noticed that comprehensiveness in health team's actions are effectively present in the outpatient unit, providing holistic customer service. In this context, it is considered that "team work represents one of the main pillars for a full and impartial assistance in health".^{14: 141}

On the client preparation period to undergo the transplant, it is often accompanied by the doctor at the clinic, it is evaluated by nurses

Negreiros FDS, Marinho AMCP, Garcia JH et al.

and other professionals, such as social worker, nutritionist, psychologist and physiotherapist.¹

To maintain a comprehensive and holistic customer support, nurses participate in the meetings of the multidisciplinary team to discuss the compliance with the criteria for inclusion on the waiting list and characteristics of treatment and customer follow-up, as evidenced in the speech:

This [multiprofessional] meeting all those cases are discussed to list and all other cases that are to discuss, pre- or postoperatively. We work a lot with the multidisciplinary team (2E).

In observation of the scene of the professional practice, it was found that the nurse when attending the multidisciplinary meeting, is responsible for directing the clinical disputes that will be discussed during the meeting, participating in the decision-making together with the group and provide feedback on monitoring customer health team, facilitating the continuity of collective intervention. Thus, the nurse shall exercise the power of knowledge and of acquaintanceship, to establish communication strategies and interact with other team members, respecting differences and recognizing the other's capabilities and values in the collective client care.

It can be seen then, that one of the competencies of the study nurses is the performance of teaching and research function, for participating in conferences, training, scientific research, and also act as learning facilitators with students or people who are interested in the process of transplant, as related subjects:

The ABTO [Congress] we always participate [...] you have to learn that research is very important (2E).

We orient the resident nurses and anyone who is new to the service. I do the guidelines on our outpatient routine (3E).

The speeches showed that the exercise of jurisdiction to conduct continuing education activities is part of nursing practice, to participate and/or provide training in pursuit of the teaching-learning development continuously aiming at the quality of care.

The education of nurses in the transplant involves education itself, other health care providers and the general public. To teach others, nurses must constantly update knowledge, skills and attitudes, especially in this unstable and complex field that transplantation is.¹¹

Among nurses' competencies in the studied outpatient clinic, it's stood out, in particular, the uptake of liver for transplantation. The

Liver transplant in reference hospital: nursing...

nurses' work is very important for realization of the transplant because their duties are linked to contact with the hospital capture, verification of donor documentation, assembly table perfusion/Back Table, storage and transportation of the organ to the contact with the transplant hospital staff, as well as enables greater control, flexibility and security in the donation-transplantation process.

The organ procurement is decentralized, it is performed not only in the capital of Ceará, being the responsibility of Notification Center, Procurement and Distribution of Organs coordinating the logistics of the air service to transport interior organs to Fortaleza and even other states of Brazil, working 24 hours a day seven days a week, as referred to respondents:

We go to the hospital capture, here in Fortaleza, or in another state or in the state of Ceara. The plane, who provides is the Transplant Center, through the Notification Center, Procurement and Distribution of Organs. The capture material, we take a part in Pharmacy and elsewhere in the Material Center [...] When I get to the donor hospital, I'll go and see the donor documents and set the table perfusion [...] After perfusing, the doctor comes with the liver to the table, called the Back table, and will prepare the liver. The solution must be 4°C to preserve the liver [...] Then I take the liver donated to the transplant hospital (1E).

Learning to know and know-how they included in nursing work context, for its competent performance in the capture transplantation process. Nurses have demonstrated knowledge and skills on the packaging and preservation of the organ, basic procedures to maintain the liver able to be deployed and, thus, favoring the good post-surgical outcome to the client.

The literature suggests that the nurse assists the surgeon and is responsible for the preparation of the organ and its transport to the hospital where the receiver is, keeping it to a 4°C temperature. It adds further that one of the factors responsible for the success of the transplant is undoubtedly the organ preservation method. A proper conservation gives good quality to the graft, which quickly recovers its functions, while minimizing the occurrence of dysfunction and/or graft failure.¹

During the observation of outpatient setting, it was noticed that when there is confirmation of a potential donor, a nurse is directed to the hospital funding, while another tells the client and family about the

Negreiros FDS, Marinho AMCP, Garcia JH et al.

Liver transplant in reference hospital: nursing...

possible transplant, asking them to come to the transplant hospital, informing the ward nurses, operating room and postoperative intensive care unit (ICU) the receiver data. In addition, reports to support sectors such as pharmacy, laboratory, blood transfusion agency and other services about the likely transplantation, as shown in the report:

When we have a donor, we ask the patient to come to hospitalize. I call for transport to request an ambulance to the time of capture, to the laboratory, infirmary, concierge, operating room, recovery room, so that everyone is prepared (2E).

Finally, respondents revealed that the nurse assignments are heterogeneous, dynamic, autonomous and dialectics, in which learning to know, know-how, learning to be and knowing how to live are in permanent joint, requiring constant critical reflection and decision-making by this professional who seeks to answer the contradictions and tensions present in the workplace everyday, performing the management and assistential care effectively.

♦ Back to the clinic: customer empowerment on self-care

The activities of the nurse in the outpatient follow-up customer after the transplantation aim to help you achieve the highest welfare level possible through the empowerment of self-care.

Empowerment refers to the ability of people to gain knowledge and control over personal forces to act towards improving the living situation. Respect to increasing the capacity of individuals to feel influential in the processes that determine their lives.¹⁵

The practice of nurses in outpatient care is started with short screening, delegating tasks and organizing the flow of nursing care and other health professionals, such as doctor, nutritionist, social worker and psychologist, according to the need of post client transplant, according to the report:

As the coach is watching weight and pressure, the nurse is assessing the needs of those arriving. You need to take point? Because she already directs "Look, after consulting the Lord returns here in our nursing room to remove the stitches." It is a small screening we do there, because then you sit down and meets the transplanted calmly individually (3E).

The study showed the skills developed by nurses in the transplanted host, which require knowledge of customer priorities and service dynamics, skills to lead, communicate, delegate tasks and manage conflicts, as well as proactive and empathic attitudes.

To witness the care of post-transplant nursing, it was observed that both the client and the family / caregiver, in groups or individually, was prepared for the high and received educational information of different content, because the teaching was carried out according to the period postoperatively, considering cultural and psychosocial aspects of the transplanted.

The first visit took place as soon as the client was transferred from postoperative ICU to the ward, and the family clarified on care after transplantation. The second consultation took place on the eve of the hospital, and transmitted the most complex information involving the participation of an interdisciplinary team, and then the guidelines were made during the outpatient follow-up after discharge, in order to resolve the doubts and enhance self-care, as evidenced by the speeches:

Here at the clinic do after consultation within 30 days and post-immediate consultation. We will talk with patients before they leave high because if left to make high orientation on the day they are out is a lot of information (1E).

High we do in two stages, first as soon as the patient leaves the ICU to the ward, makes high guidance with the family and when it really comes home, we ask their presence [transplanted and family]. There are already well-targeted high-guidelines (3E).

Presumably offering adequate health education to the client and family/caregiver, taking advantage of the time of admission as an opportunity, while the nurse takes the direct and indirect care to the user process.¹⁶

Respondents mentioned that there was a large contingent of information that the client needed to learn in order to maximize post-transplant recovery and reintegration home. Because of this series of clarifications, the nurse gave written all directions, seeking greater assimilation of the guidelines by the client and family. The outpatient service had proper and adequate information printed for each nursing consultation, as expresses the following report:

The nurse guides the patient to when it is out of high, just go with the prescription in hand, with the request of the examinations, the registration in the pharmacy, the nutritionist of the menu, the pharmaceutical spreadsheet, a copy of your documents and guidelines printed we deliver (3E).

Thus, the hospital's transplant High involves multidisciplinary team and competence to carry out health education activities carried

Negreiros FDS, Marinho AMCP, Garcia JH et al.

out by contributing nurses to promote health, being characterized as an important tool for permanent and meaningful learning, to educate users about the importance of prevention and adaptation to new conditions of life and health.

The nurses who work in the transplant process collaborates with clients, families and other health professionals to encourage you to practice self-care through verbal directions as well as providing it with written instructions using simple terminologies that are easy to memorize and avoid unnecessary explanation to cause confusion.¹¹

The practice of professional nurse about the post-transplant care is directed to the prevention of complications and improve patient quality of life through customer education: monitoring of any significant change in their health status and entry in diary, recognition early signs of infection and rejection importance of immunosuppressive medications and adherence to treatment by attending the scheduled follow-up visits.¹¹

The preparation of the patient to hospital should incorporate guidance on situations that should be avoided, as the consumption of grape juice and oranges, vaccination with live attenuated, sunbathing (and should use sunscreen with a high protection factor); consumption of raw meat, fish and unpasteurized dairy products; as well as being informed about how to contact the transplant service in case of present health status changes.¹⁷

It is essential that the nurse has scientific basis and provide the implementation of effective strategies to promote changes in behavior, attitudes and customer lifestyles.¹⁸

In addition to the function as health educators, nurses' study clinic is responsible for carrying out procedures related to medication administration, removal of stitches, bandages, collection bag permutation, aiding the physician in specific procedures such as paracentesis and other complications from transplantation, as express the following lines:

It has the technical procedures: dressings, removal of stitches, medication administration (1E).

We are always taking care of the complications, we handle pre or post-transplant patients with complications (2E).

In order to keep updated records and facilitate scientific research, the nurses studied outpatient keep daily informed the internal and external services of the transplant procedures and filing documents in the service itself, as shown by the speeches:

Liver transplant in reference hospital: nursing...

Not only do transplants and capture, you also have to give an answer to the National Transplant System, the Brazilian Association of Organ Transplants, confirming and updating the activities you do (1E).

We have at the clinic one file of the transplant, which help in conducting research (2E).

Nurses working in tissue and organ transplantation should systematize standards related to the protection of donor health information and receivers, as well as follow the requirements of documentation in local, state and federal level. In addition, during the exercise of their function, must register, document and archive all care given at every stage of the transplant process, from donation to the receiver's hospital release.²

In general, the systematic observation of outpatient revealed that nurses mobilized a set of practical and theoretical knowledge, skills and attitudes, in an orderly manner and in accordance with the service, to achieve the desired objectives and planned in the work process. In this context of skills, realize the importance of the nurse's role as an educator in service as the practice of health education in a perspective of action-reflection-action dialogic and conscientizing, favors autonomy and empowerment of helping customers for self-care and acceptance of new lifestyle.

FINAL CONSIDERATIONS

This research allowed unveiling that the skills developed by the nurse in the outpatient service are central to the effectiveness of liver transplantation, because it is for that plan, organize, coordinate, implement and evaluate a number of technical and scientific procedures of nursing in direct care and indirect to client and family; hold records of nursing care; report data that support scientific and administrative investigations; conduct consultation and nursing lectures; and interact with the multidisciplinary team with interest to watch the real needs of the customer in an integrated manner.

The nurse uses open and accessible communication, through a relationship of empathy and trust during educational activities, aiming to improve customer understanding of their current state of health; adherence to therapeutic procedures; prevention of possible complications; increased satisfaction and quality of life; decreased anxiety, active participation of the client and family in matters relating to continuity of care in the home living; health promotion and customer empowerment for self-care.

It was noticed that the cooperation of nurses in the multidisciplinary team is essential for a favorable outcome in the transplant process. Therefore, it needs to promote safe and effective care to clients and their families.

Although research has been carried out with a small number of subjects, which can be considered a limitation of this study, the results may support the implementation of other investigations that broaden the discussion about the competencies required by nurses across its operations in the different stages that make liver transplantation.

One hopes that this study will contribute to disseminate knowledge about the practice experienced by nurses working in liver transplantation, and improve the skills required for activities aimed to patient safety and well-being.

REFERENCES

1. Pereira WA. Manual de Transplantes de Órgãos e Tecidos. 4th ed. Belo Horizonte: Coopmed; 2012.
2. Mendes KDS, Roza BA, Barbosa SFF, Schirmer J, Galvão CM. Organ and tissue transplantation: responsibilities of nurses. Texto contexto - enferm [Internet]. 2012 [cited 2015 Oct 15];21(4):945-53. Available from: <http://dx.doi.org/10.1590/S0104-07072012000400027>
3. Cónsul-Giribet M, Medina-Moya JL. Strengths and weaknesses of Problem Based Learning from the professional perspective of registered nurses. Rev Latino-Am Enfermagem [Internet]. 2014 [cited 2015 Oct 19];22(5):724-30. Available from: <http://dx.doi.org/10.1590/0104-1169.3236.2473>
4. Natco The Organization for Transplant Professionals. Core Competencies for the Clinical Transplant Nurse. Natco; 2010 [cited 2015 May 18]. Available from: <http://www.natco1.org/Professional-Development/competencies.asp>.
5. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 13a ed. São Paulo: Hucitec; 2013.
6. Ministério da Saúde (BR), Conselho Nacional de Saúde, Comissão Nacional de Ética em Pesquisa. Resolução n° 466, de 12 de dezembro de 2012: Aprova as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Brasília: MS; 2012.
7. Christovam BP, Porto IS, Oliveira DC. Nursing care management in hospital settings: the building of a construct. Rev esc enferm USP [Internet]. 2012 [cited 2015 Oct 13];46(3):734-41. Available from: <http://dx.doi.org/10.1590/S0080-62342012000300028>.
8. Grogan TA. Liver transplantation: issues and nursing care requirements. Crit Care Nurs Clin North Am [Internet]. 2011 [cited 2015 June 15];23(3):443-56. Available from: <http://www.sciencedirect.com/science/article/pii/S089958851100030X>
9. Silva DC, Alvim, NAT. Ambiente do Centro Cirúrgico e os elementos que o integram: implicações para os cuidados de enfermagem. Rev bras enferm [Internet]. 2010 [cited 2015 May 10]; 63(3):427-34. Available from: <http://dx.doi.org/10.1590/S0034-71672010000300013>.
10. Caveião C, Coelho ICMM, Zagonel IPS. The production of knowledge on nursing managerial skills: an integrative review. J Nurs UFPE on line [Internet]. 2013 [cited 2015 Aug 18];7(spe):910-8. Available from: http://www.revista.ufpe.br/revistaenfermage/index.php/revista/article/view/3261/pdf_2247
11. Ohler L, Cupples SA. Core Curriculum for Transplant Nurses. Philadelphia (US): Mosby Elsevier; 2013.
12. Koffron A, Stein JA. Liver Transplantation: Indications, Pretransplant Evaluation, Surgery, and Posttransplant Complications. Med Clin North Am [Internet]. 2008 [cited 2014 Mar 10]; 92(4):861-88. Available from: <http://www.sciencedirect.com/science/article/pii/S0025712508000424>
13. Mendes KDS, Rossin FM, Ziviani LC, Castro-e-Silva O, Galvão CM. Information needs of liver transplant candidates: the first step of the teaching-learning process. Rev Gaúcha Enferm [Internet]. 2012 [cited 2015 Oct 15]; 33(4):94-102. Available from: <http://dx.doi.org/10.1590/S1983-14472012000400012>
14. Viegas SMF; Penna CMM. A construção da integralidade no trabalho cotidiano da equipe saúde da família. Esc Anna Nery [Internet]. 2013 [cited 2015 Apr 10];17(1):133-41. Available from: <http://dx.doi.org/10.1590/S1414-81452013000100019>
15. Baquero RVA. A situação das Américas: democracia, capital social e empoderamento. Empoderamento: instrumento de emancipação social? - uma discussão conceitual. Rev Debates [Internet]. 2012 [cited 2015 Sept 24];6(1):7-8. Available from: <http://seer.ufrgs.br/index.php/debates/article/view/28218/17100>
16. Delatorre PG, Sá SPC, Valente GSC, Silvino ZR. Planning for hospital discharge as a

Negreiros FDS, Marinho AMCP, Garcia JH et al.

Liver transplant in reference hospital: nursing...

strategy for nursing care: integrative review. J Nurs UFPE online [Internet]. 2013 [cited 2015 Oct 01];7(spe): 7151-9. Available from: <file:///C:/Users/usuario/Downloads/3968-50930-1-PB.pdf>.

17. Fullwood D, Jones F, Lau-Walker M. Care of patients following liver transplantation. Nurs Standard [Internet]. 2011 [cited 2015 Oct 01];25(49):50-6. Available from: <http://dx.doi.org/10.7748/ns2011.08.25.49.50.c8653>

18. Mendes KDS, Silva JOC, Ziviani LC, Rossin FM, Zago MMF, Galvão CM. Educational intervention for liver transplantation candidates. Rev Latino-Am Enfermagem [Internet]. 2013 [cited 2015 Oct 15];21(1):419-25. Available from: http://www.scielo.br/pdf/rlae/v21n1/pt_v21n1a18.pdf.

Submission: 2015/07/08

Accepted: 2016/02/12

Published: 2016/04/15

Correspondence Address

Francisca Diana da Silva Negreiros
Avenida José Bastos, 3281
Bairro Damas
CEP 60426-095 – Fortaleza (CE), Brazil