

STRATEGIES IMPLEMENTED BY NURSES FOR LEARNING KIDNEY TRANSPLANT IMMUNOSUPPRESSION

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ABSTRACT

To describe an experience by nurses in the implementation of learning strategies in immunosuppression for kidney transplants. Characterized as a qualitative, descriptive study using the theoretical framework of convergent care research, performed in a kidney transplant unit. To obtain the data, we used interviews and thematic workshops. Learning strategies were developed for three workshops with groups of kidney transplant patients: patients without cognitive impairment - discursive strategy, with visuals; patients with cognitive impairment - repetitive speech strategy, with visuals; patients with visual deficits - auditory and tactile resources. The strategies adopted for the transplant with cognitive and visual impairment ordered adaptations, although at discharge patients demonstrated capacity for self-care and acquisition of immunosuppressive drugs. The experience made it possible for nurse planning, implementation and use of learning strategies that favored the emancipation of self-care, influencing treatment adherence and quality of life of the transplant patient.

Keywords: Nursing. Education. Transplant.

INTRODUCTION

From the clinical, social and economic point of view, renal transplantation is the best therapeutic modality to offer quality of life for patients with chronic renal failure, contributing to reduce hospital costs and mortality⁽¹⁾. It has become an effective treatment from the 1960s, with the adoption of clinical practice associated with the use of corticosteroids and azathioprine (antiproliferative immunosuppressant). With recent advances in clinical and surgical management, the introduction of more powerful immunosuppressant drugs and more efficient preservation solutions also have contributed to improve transplant results with progressive improvement in quality of life⁽²⁾. Immunosuppressive drugs are used to inhibit the subsequent immune response to organ transplantation⁽³⁾. They are indispensable to maintain a functioning graft and generate adaptive changes to the new lifestyle of transplanted patients.

With regard to the nurses' priority activities in a renal transplantation unit, the promotion of receptors' greater adherence to treatment is key, and it provides empowerment for self-care. For this end, nurses must adopt adequate learning strategies and resources that facilitate the understanding and need for using immunosuppressants by each kidney transplant patient, aiming at their autonomy, safety and adherence to treatment⁽⁴⁾.

The learning strategies relate to all actions or activities performed in health education and include the use of various resources. The learning process is an integral part of nurses' actions in the care for patients within the health education context, and the provision of systematic information is its essence⁽⁵⁾.

Considering particularly the educational level and cognitive difficulties of patients undergoing kidney transplantation, emerged the need to implement educational actions targeted to the intervention and expansion of learning strategies and resources in order to learn the safe use of immunosuppressants. In this sense, this study has

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the objective to describe the experience lived by nurses when developing learning strategies and resources in immunosuppression for kidney transplant patients, aiming at adherence to drug therapy and empowerment for self-care.

METHODOLOGY

The performance of the study followed a qualitative approach of descriptive character using the Care Convergent *Research (PCA – Pesquisa Convergente Assistencial)* as methodological theoretical framework. It allows the active participation of study subjects and is characterized by the proximity and distance of the knowledge to provide care⁽⁶⁾.

For the development of PCA were conducted an interview, workshops and a new interview after the workshops. The study was performed in a renal transplant unit of a teaching hospital of the Universidade Federal do Maranhão in the period from May to June 2015. The study was approved by the Ethics Committee of the institution under protocol number 000941/2015-30 and had the Certificate for Ethics Presentation CAAE: 43541215.8.0000.5086.

The characterization of clients for the study took into consideration the treatment needs and knowledge expressed by each patient in the postoperative period of renal transplantation.

All kidney transplant patients from January 2011 to April 2015 experienced the educational process, since preparing patients for hospital discharge is part of the nursing care routine. Thus, nurses used the development of workshops as educational strategies for these patients to facilitate this process. These educational workshops were developed with 151 kidney transplant patients. All information was collected through interviews with patients, their medical history and evolution of nursing in the medical records.

The nurses planned the workshops with learning strategies and resources from the needs presented by patients, especially in relation to comprehending the names and doses of immunosuppressants, aiming at meeting these needs. Three types of workshops were prepared, corresponding to nursing diagnoses and the patients' educational level.

Workshop for group 1 (G1) – Participation of 74 patients without cognitive impairment, education level between complete primary education, secondary education and higher education. Patients in this group expressed sufficient knowledge to understand care and immunosuppressant information, with autonomy for self-care. The strategy was discursive, with visual resources and confection of a paper form (A4 paper size) with the names of immunosuppressant drugs and other drugs (anti-hypertensives, diuretics, and statins), and their respective doses and times. This form is always provided on the third day after transplantation surgery.

Workshop for group 2 (G2) – Participation of 60 patients with cognitive impairment and incomplete primary education. Given the knowledge deficit, their understanding of information about the use of drugs was limited, and they were unable for self-care. The strategy was repetitive speech with visual resources and illustrations. The same form used for G1 had another presentation in this group. The A4 paper has the times of drugs, with pictures of the sun (day) and the moon (evening). In the spaces of each time zone was displayed the number of capsules/tablets/dragees corresponding to the dose, type of immunosuppressant or other drugs in use. The educational activity through repetitive speech begins on the third postoperative day of transplantation until patients' discharge, when they recognize themselves as able for self-care.

Workshop for group 3 (G3) – This group included 17 patients with total or partial visual impairment and uneducated. The learning strategy was developed with auditory and tactile resources. Plastic containers of different sizes were used, and each lid had a sticker with information about the quantity of capsules/tablets/dragees corresponding to the dose. Thus, by the tactile sense, the kidney transplanted patients identified the container, the medication and dosage, and received alerts by their mobiles to meet the schedule. A family member/caregiver was asked to replace the drugs in the respective containers.

From the comprehension difficulties reported by patients, the two last workshops (G2 and G3) had adaptations to meet the needs of these groups satisfactorily, focused on self-care and the

understanding of immunosuppressant drugs. In G2, the cognitive deficit related to educational level caused difficulty to understand the guidance provided in the forms. Since this group of patients recognized only the numbers and pictures used in the forms, we improved their presentation by adding the sticker of capsules/tablets/dragees corresponding to the names of medicines. In G3, the visual deficit and illiteracy led us to improve the strategy used, that is, we used plastic containers of different sizes and shapes (rectangular, square, circular), which made the tactile understanding of patients more accurate, and the drug identification easier.

RESULTS AND DISCUSSION

The study participants were characterized in relation to gender, age and educational level in the interview, corresponding to 57% of males and 43% of females. The average age of patients transplanted from January 2011 to April 2015 (total of 151) was 41.4 years. Regarding educational level, 11.3% were illiterate, 43.7% had primary education, 34.4% completed high school and 10.6% had higher education.

During the process of planning, construction and implementation of educational workshops, patients from G2 and G3 showed limitations in the use of educational strategy, and difficulty in presenting the expected results in hospital discharge. However, such difficulties were discussed between the nurse and the patient, seeking to facilitate the patient's understanding. While using the restructured strategies, this attitude gave way to a pleasant and safe construction of great importance to the educational work of nurses and safety of patients regarding drug therapy.

In the process of evaluating the learning of drug therapy, was found a better performance of immunosuppressant management. The kidney transplant patients started to understand the schedules, doses and the names of immunosuppressants more easily and there were reports of patients involved in the self-care process. These learning strategies in immunosuppression were also deemed essential and highly valuable for the necessary understanding of immunosuppressants and a good performance after renal transplantation, and

consequently for medication adherence and preparation for hospital discharge. In this sense, the knowledge and practice in nursing are closely linked, and are actions that should be worked in the care process. They are considered the true sense of the nurses' work in professional practice.

Since the planning of activities, development of learning resources and implementation of strategies that could meet the patients' needs, nurses have worked with different transplant groups in relation to the level of cognition, need and education. Three categories emerged from the experience lived in the workshops, namely: nursing in the educational process, medication adherence and empowerment for self-care.

Nursing in the educational process

The understanding and implementation of educational health activities in the hospital setting is part of the nursing care process and considered one of the main responsibilities of nurses⁽⁷⁾.

In their role as educator agents for transformation and empowerment, nurses respect and value the social knowledge built by clients in their environment, and associate it with the new knowledge acquired during the educational process involved in nursing consultations. Thus, teaching should be a critical and reflective practice associated with the learners' experience and the educator's knowledge, aiming at a transforming learning, and consequently generating behavior change, turning patients into self-care agents⁽⁸⁾.

In face of patient education and systematization of care, some actions are key to the nurses' work, such as: the history, the identification of diagnostic and implementation of interventions with the aim to maintain and improve the biopsychosocial health of kidney transplant patients⁽⁹⁾.

In this sense, the learning strategies developed for kidney transplant patients are educational activities designed from the knowledge in nursing, and its applicability is put into practice through the nurses' performance. In the care process, there must be the perspective that nurses have to establish an educational connection too. In this study with kidney transplant patients, the actions were based on safety measures for the apprehension and understanding of

immunosuppressants and the independence of patients in their self-care.

Medication adherence

The World Health Organization (WHO) emphasizes that adherence to treatment of patients with chronic disease in developed countries is approximately 50%. In developing countries, the magnitude and impact of the poor adherence is even greater given the scarcity of resources and inequalities in access to health care. The impact of poor adherence grows as chronic diseases also grow. Even in a country like Brazil, where all immunosuppressants are provided by the public health system, there is still non-adherence to immunosuppressive therapy⁽¹⁰⁾.

The goal of educational programs offered to kidney transplant patients is to reduce non-adherence. Some aspects should be strengthened in all medical and nursing consultations, such as ensuring that kidney transplant patients identify their medicines by name, know the dose and the reason for prescription. It is important to inform them about the adverse effects of drugs and provide written instructions for each change in prescription, hence ensuring the understanding of kidney transplant patients about the need to use immunosuppressive agents to maintain a functioning kidney graft⁽¹¹⁾.

The most frequently used drugs in outpatient post-transplant treatment are the immunosuppressants, prescribed to 100% of patients, of which 51.7% used antihypertensives⁽¹²⁾. Diuretics, antibiotics, vitamins and antacids are also prescribed. The commonly used immunosuppressants are cyclosporine, azathioprine, prednisone, tacrolimus, mycophenolate mofetil and rapamycin⁽¹³⁾.

Empowerment for self-care

Self-care is understood from the theory of Dorothea Orem. Its aim is to meet the human needs through self-care in the health-disease context, and is understood as the practice and performance of activities by individuals on their own favor to maintain life, health and well-being⁽⁷⁾.

Emancipation for self-care is addressed since the pre-transplant period through the perioperative period, until discharge and post-

transplant outpatient follow up. However, actions are concretely implemented in the perioperative period during between seven to fifteen days. Initially, developing educational activities for immunosuppressed patients with the objective of empowerment for self-care is a challenge for nurses.

The guidelines are provided in the daily routine of nurses, when patients are taught to maintain the room environment organized, about proper bed preparation, shower procedures, washing hands before handling medication and after the physiological needs, tooth brushing, and understanding their post-renal transplant drug therapy. Nurses also empower patients to recognize possible side effects of medications used, observe changes in urinary volume, and signs of infection and rejection⁽¹⁴⁾. The understanding of this information by patients can facilitate clinical management in a possible rehospitalization.

With the focus on emancipation for the care, in the experience were presented three learning techniques that showed more appropriate results to the reality of patients. The technique used for patients with cognitive impairment and visual needs demanded adjustments with other materials. In hospital discharge, kidney transplant patients were able to identify all their medicines with the support of a family member/caregiver.

FINAL CONSIDERATIONS

The study showed the importance of nurses as educators, bearing in mind the elaboration and adaptation of strategies and learning resources that enabled a process of interaction and integration in the nurse-patient relationship mediated by health education actions.

The implementation of educational activities in health awoke a most effective exercise for self-care activities in kidney transplant patients, through the reflection about the attitudes related to their health and wellbeing, promoting a better quality of life.

The self-care of people with cognitive and visual needs requires attention and sensitivity of professionals to learn the drug therapy safely and perform self-care effectively. The planning and implementation of learning strategies and resources seek to encourage the promotion of

greater independence, influencing a better quality of life.

ESTRATÉGIAS IMPLEMENTADAS PELO ENFERMEIRO PARA APRENDIZAGEM DO TRANSPLANTADO RENAL EM IMUNOSSUPRESSÃO

RESUMO

Descrever a vivência da enfermagem na implementação de estratégias de aprendizagem em imunossupressão para transplantados renais. Caracteriza-se como um estudo qualitativo, descritivo, que utiliza o referencial teórico da pesquisa convergente assistencial, realizado em uma unidade de transplante renal. Para a obtenção dos dados, utilizou-se de entrevistas e oficinas temáticas. Foram desenvolvidas estratégias de aprendizagem para três oficinas com grupos de transplantados renais: pacientes sem déficit cognitivo - estratégia discursiva, com recursos visuais; pacientes com déficit cognitivo - estratégia do discurso repetitivo com recursos visuais; pacientes com déficit visual - recursos auditivos e táteis. As estratégias adotadas para os transplantados na oficina com déficit cognitivo e visual requisitaram adaptações, mas na alta hospitalar os pacientes demonstraram capacidade para o autocuidado e a apreensão dos imunossupressores. A vivência possibilitou ao enfermeiro o planejamento, a implementação e a utilização de estratégias de aprendizagem que favoreceram a emancipação do autocuidado, influenciando na adesão ao tratamento e na qualidade de vida do transplantado.

Palavras-chave: Enfermagem. Educação. Transplante.

ESTRATEGIAS IMPLEMENTADAS POR ENFERMEROS PARA EL APRENDIZAJE EN INMUNOSUPRESIÓN PARA TRASPLANTADOS RENALES

RESUMEN

Describir la experiencia de la enfermería en la implementación de estrategias de aprendizaje en inmunosupresión para trasplantados renales. Se caracteriza como un estudio cualitativo y descriptivo que utiliza el marco teórico de la investigación convergente asistencial, realizado en una unidad de trasplante de riñón. Para obtener los datos, se utilizaron entrevistas y talleres temáticos. Las estrategias de aprendizaje se desarrollaron en el transcurso de tres talleres con grupos de trasplantados renales: pacientes sin deterioro cognitivo - estrategia discursiva, con efectos visuales; pacientes con deterioro cognitivo - estrategia de discurso repetitivo, con efectos visuales; pacientes con deterioros visuales - recursos auditivos y táctiles. Las estrategias adoptadas para los trasplantados en el taller con deterioro cognitivo y visual requirieron adaptaciones, pero en el alta hospitalaria los pacientes demostraron capacidad para el autocuidado y la adquisición de los inmunosupresores. La experiencia permitió que el enfermo planifique, implemente y utilice estrategias de aprendizaje que favorecieron la emancipación del autocuidado, influyendo en la adhesión al tratamiento y en la calidad de vida del trasplantado.

Palabras clave: Enfermería. Educación. Trasplante.

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