Kidney transplantation and the importance of the team in postoperative care: an integrative review

Transplante renal e a importância da equipe nos cuidados destinados ao pósoperatório: uma revisão integrativa

El trasplante de riñón y la importancia del equipo en el postoperatorio: una revisión integradora

Maria Isabela Schadt Ferreira¹, Maria Isabella Heck Lara², Raquel Melchior Cazalini³, Rebeca Evangelista de Figueiredo⁴, Camila Cristine Antonietti⁵ **How to cite:** Ferreira MIS, Lara MIH, Cazalini RM, Figueiredo RE, Antonietti CC. Kidney transplantation and the importance of the team in postoperative care: an integrative review. REVISA. 2021; 10(Esp.2): 817-25. Doi: https://doi.org/10.36239/revisa.v10.nEsp2.p817a825



- 1. Universidade Anhembi Morumbi, Health Sciences School. Sao Paulo, Sao Paulo, Brazil.
- https://orcid.org/0000-0002-1724-8913
- 2. Universidade Anhembi Morumbi, Health Sciences School. Sao Paulo, Sao Paulo, Brazil.

https://orcid.org/0000-0001-5727-0122

- 3. Universidade Anhembi Morumbi, Health Sciences School. Sao Paulo, Sao Paulo, Brazil.
- https://orcid.org/0000-0003-4017-2555
- 4. Universidade Anhembi Morumbi, Health Sciences School. Sao Paulo, Sao Paulo, Brazil.

https://orcid.org/0000-0003-3965-6114

5. Universidade Anhembi Morumbi, Health Sciences School. Sao Paulo, Sao Paulo, Brazil.

https://orcid.org/0000-0002-3542-7691

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RESUMO

Objetivo: Sob os preceitos da enfermagem na efetivação destes na tomada de decisões acerca de cuidados prescritos ao paciente, torna-se preponderante levantar na literatura os estudos científicos que versavam sobre aspectos da relevância do profissional da enfermagem, no processo de preparo e pós-cirúrgico dos pacientes em terapia renal de substituição. Método: Assim, foi realizada revisão integrativa de artigos científicos, para identificar os que versam sobre a importância do enfermeiro nos cuidados pós-operatórios do transplante renal. Resultados: Foram selecionadas 10 publicações entre 2015 e 2020. Conclusão: Com aproximadamente mais de cinco mil transplantes renais realizados anualmente e baseado na legislação nacional, o Brasil, está no topo dos países que realizam a terapia definitiva para a doença renal crônica. Entretanto, apesar de ser um importante recurso terapêutico, não significa que a cura foi alcançada, mas sim uma nova perspectiva de qualidade de vida.

Descritores: Enfermagem; Transplante; Assistência de enfermagem; Insuficiência Renal Crônica; Transplantados.

ABSTRACT

Objective: Under the precepts of nursing in its effectiveness in making decisions about prescribed care to the patient, it becomes important to bring the literature of scientific studies that dealt with aspects of the relevance of the nursing professional in the process of preparing and post-surgical patients in renal replacement therapy. **Method:** It was made an integrative review of scientific articles, to identify those dealing with the importance of nurses in post-surgical care for kidney transplantation. **Results:** 10 publications were selected between the years of 2015 and 2020.**Conclusion:** With approximately more than five thousand kidney transplants performed annually and based on the national legislation, Brazil is at the top of the countries that perform the definitive therapy for chronic kidney disease. However, despite being an important therapeutic resource, it does not mean that a cure has been achieved, but a new perspective on quality of life.

 $\textbf{Descriptors:} \ Transplant; \ Nursing; \ Nursing \ care; \ Chronic \ Kidney \ Failure; \ Transplanted.$

RESUMEN

Objetivo: Bajo los preceptos de la enfermería en su efectividad en la toma de decisiones sobre los cuidados prescritos al paciente, se torna preponderante suscitar en la literatura estudios científicos que aborden aspectos sobre la importancia del profesional de enfermería en el proceso de preparación y postoperatorio de pacientes en terapia de reemplazo renal. **Método:** Así, se realizó una revisión integradora de artículos científicos para identificar aquellos que tratan sobre la importancia del enfermero en el postoperatorio de trasplante renal. **Resultados:** se seleccionaron 10 publicaciones entre 2015 y 2020. **Conclusión:** Con aproximadamente más de 5.000 trasplantes de riñón realizados anualmente y con una base en la legislación nacional, Brasil está a la vanguardia de los países que realizan terapia definitiva para la enfermedad renal crónica. Sin embargo, a pesar de ser un recurso terapéutico importante, no significa que se haya logrado una cura, pero una nueva perspectiva sobre la calidad de vida no siempre es fácil para el paciente.

Descriptores: Trasplante; Enfermería; Cuidado de enfermera; Insuficiencia renal crónica; Trasplantado.

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Introduction

Chronic Kidney Disease, a serious public health problem, is characterized by the progressive and irreversible loss of the kidneys, which is relevant due to its incapacity in alterations of its organic, psychological and social function, being commonly silent, causing the excess of urea and creatinine in the blood.¹

Of the possible therapeutic possibilities, renal replacement therapy, which is considered the most effective method for hemodialysis or peritoneal dialysis. However, it is up to the multidisciplinary team to evaluate each patient individually respecting their wishes and limitations, choosing the treatment that improves their quality of life within the possible scope.²

Brazil performs approximately 5700 kidney transplants per year. In comparison with the rest of the world, it has one of the largest public health systems, in which the transplantation process and its maintenance are guaranteed by law to the whole society.³⁻⁴

Transplants are part of the budget of financial resources destined to the health sector according to current legislation, based on Law 9434 of 1997 and regulated by Decree No. 9,175, of 2017, consequently, Brazil boasts the largest public transplant system in the world through of the Unified Health System, with a single list of patients (CTU), post-transplant outpatient care, immunosuppressive medications distributed free of charge, dialysis, clinical follow-ups, diagnostic tests, as well as necessary hospitalizations.^{5,6}

The cataloging of potential recipients carried out by the public health system's unique list is based on the correlation between the donor's anthropometric, immunological, clinical and serological characteristics and the recipients included in the list. After locating a possible donor, the kidney transplant provides the patient with an opportunity to get rid of hemodialysis or peritoneal dialysis, and guarantees the execution of activities that were not previously possible, such as abundant water intake, approaching the family and autonomy gain.⁷⁻⁸

Kidney transplantation is a surgical technique for implanting a donated kidney, being a living or deceased donor, grafted in the lower abdominal region of the patient with the purpose of performing the functions of a non-sick kidney. Despite being an important therapeutic resource, it does not mean that a cure has been achieved, but rather a new quality of life perspective to be presented to patients with chronic kidney disease, therefore, it will be necessary to follow up with exams, use of medications and changes in health habits not always easy for the patient.^{8,9-10}

Based on this perspective, it is possible to understand the importance of the multidisciplinary team that accompanies the patient, and it is up to the nurse to know his behaviors and his daily routine, being able to create a care plan and guidelines for a greater benefit of kidney transplantation, based on the idea of a possible replacement therapy, educating, guiding and highlighting the possible changes in the patient's life habits, making it clear that, despite the probable insubmission to dialysis, the graft is a treatment and not the cure for CKD requiring care and continuous maintenance after the procedure.⁸

Thus, the guiding question of this investigation was: which aspects are more prevalent in national studies on the importance of nursing when determining postoperative care for kidney transplantation?

Under the influence of patient-centered care and the precepts of nursing in its effectiveness in making decisions about care prescribed to the patient, it is preponderant to raise in the literature the scientific studies that dealt with aspects of the relevance of the nursing professional in the preparation process and post-surgical treatment of patients undergoing renal replacement therapy.

In this sense, the objective of the study was to identify and analyze the existing evidence regarding the importance of nursing in relation to the care prescribed to the patient for a satisfactory post-kidney transplant.

Method

An integrative literature review was carried out. The following stages for the development of the research were delimited: the identification of the theme and selection of the research question; the establishment of criteria for inclusion and exclusion; the definition of the information to be extracted from the selected studies and; the evaluation of the studies included in the integrative review; interpretation of results, presentation of the review; and the synthesis of knowledge.¹¹⁻¹²

Studies on nursing communication in renal replacement therapy (kidney transplantation and the importance of the team in post-operative care: an integrative review.) Aimed to answer the following guiding question: What are the most prevalent aspects? in national studies on the importance of nursing when determining postoperative care for kidney transplantation? In the construction of the appropriate question for the resolution of the researched clinical question, the PICO strategy was used: "P" corresponds to the population (Patients with Chronic Kidney Disease indicated for transplantation); "I" to the intervention (research articles); "C" for comparison (not applicable, as this is not a comparative study) and "O" for the outcome (effective communication between nurse and patient with recommendation to be transplanted).¹³

Controlled descriptors identified in the Health Science Descriptors were used (DECs), Medical Subject Headings (MESH), e CINAHL Headings: "Transplante" (Transplant), "Transplantados" (Transplanted), "Enfermagem" (Nursing), "assistência de enfermagem" (nursing assistance), "Cuidado de enfermagem" (nursing care), "Atendimento de Enfermagem" (Nursing Attendance), "Insuficiência Renal Crônica" (Chronic Kidney Failure), "Doença Crónica Renal" (Chronic Kidney Disease), "Nefropatias Crônicas" (Chronic Nephropathies),

The search strategy using the Boolean AND operator was: Transplant AND nursing; Transplant AND nursing care; Transplant AND Chronic Kidney Failure; Transplant AND Chronic Kidney Diseases; Transplanted AND Chronic Kidney Disease; Transplant AND Nursing Care, and occurred in Portuguese and English, depending on the research base. Data collection took place between the months of September and October 2020. The databases searched were SCIELO® and other members of the Latin American and Caribbean Health Information Network (via Bireme®). Research was also carried out on the following bases of health sciences: Latin American

and Caribbean Literature on Health Sciences (LILACS) and Nursing Database (BDENF).

Original research articles, whose theme answered the guiding question, published in the last five years, in the Portuguese language, with Brazil as the country of origin, were included. Studies that did not have research methodology (case reports, reflections, recommendations), reviews, studies that focused on other topics were excluded. The studies were also included, considering the limitation in the number of studies with the studied population, in order to achieve the maximum information about this population. An exhaustive reading of the titles and abstracts was carried out, independently, between two authors, to ensure that the texts contemplated the guiding question of the review and met the established inclusion and exclusion criteria.

In case of doubt regarding the selection, it was decided to initially include the publication, and to decide on its selection only after reading its contents in full. The analysis of the data of the integrative review was elaborated in a descriptive way. A table, constructed by the authors, was used for the extraction and synthesis of data from each primary study included in the review, with the following information: article title, authors, objectives, method, main results and summary of conclusions. This table allowed the comparison and organization of data, according to their differences, similarities and the review question, which were critically analyzed and grouped into two categories (Chart 1).

Results

Using the descriptors DeCS Transplantation, Transplantation, Nursing, nursing care, Nursing care, Nursing Care, Chronic Kidney Disease, Chronic Kidney Disease, Chronic Kidney Disease, a total of 1001 articles were found, however, after excluding the repeated articles we have 142 articles left. After reading the title and abstract, it was restricted to 14 articles that fit the proposed objective. Therefore, 14 studies were read in full, where 1 was a duplicate publication and 3 others did not answer the proposed guiding question, finally having 10 articles. A table was created (Table 1) in which the following information from the remaining articles was added: article title, objectives, method, main results and summary of conclusions. At the end of the selection, the works were categorized as follows: Importance of the professional's communication with the patient; patients' perception about transplantation; Postoperative care.

Table 1- Distribution of selected articles according to title, objectives, methodology, results and conclusions.

Title	Goals	Methodology and Results	Conclusions
Communicat ion as an Educational Tool in the Mediato Preoperative of Kidney	communication	convergent study, with an approach qualitative. Data were	The nurse's responsibility in the communication process with the patient emerged from the importance of guiding him regarding health care. Communication should

Transplantati on	of the patient on hemodialysis therapy indicated for kidney transplantation.	with 9 nurses. Data collection was carried out during the first semester of 2013 using a script pre-established with subjective questions.	be effective, welcoming, attentive to the individualities of each one.
Strategy Implemented by the nurse for learning of renal transplant recipients in immunosupp ression	Describe the experience of nursing in the implementation of learning strategies in immunosuppression for kidney transplant recipients.	Qualitative, descriptive study that uses the theoretical framework convergent care research. Thematic interviews and workshops were used in a kidney transplant unit All information was collected through interviews with 151 patients, from the history and evolution of nursing recorded in their medical records.	The study demonstrated the importance of nurses as educators, with a view to developing and adapting strategies and learning resources.
It was / wasn't everything I thought: facilities and difficulties after kidney transplantati on	To know the facilities and difficulties that people with chronic kidney disease experience after kidney transplantation.	Qualitative and descriptive study, carried out with 20 kidney transplant patients from May to July 2013. Semistructured interviews were used, analyzed according to the technique critical incidents.	The facilities and difficulties depend on the experience of each person. Health professionals need to understand and promote health actions that favor the uniqueness and context of the kidney transplant patient.
Care performed by people with kidney transplantati on for organ maintenance	Identify the care performed by people with kidney transplantation to maintain the transplanted organ.	Descriptive, qualitative, experimental study with 20 people interviewed who underwent kidney transplantation and who met the inclusion criteria.	Performing a kidney transplant can cause changes in the behavior of the person with the CKD. Health professionals need to be attentive to the care taken. In this context, the role of Nursing becomes essential, especially in guiding the actions that permeate the life of the person with kidney transplantation, facilitating them to become protagonists in their treatment.
Knowledge and practices shared with renal clients to be transplanted: health education for self-care	Describe the knowledge and practices of the chronic renal client about self-care in the pre and post-transplant; analyze these knowledge and practices from the perspective of self-care and to elaborate an educational strategy based on the sharing of knowledge and practices customer and professional.	Study with a qualitative approach in which patients with chronic kidney disease who opted for kidney transplantation as replacement therapy. A sample of 17 customers was considered eligible to participate in the research but after the criterion exclusion left 11 patients to participate in the study.	It is concluded that the nursing consultation is not only necessary, but indispensable and must be conducted by trained professionals to share knowledge from the transplant process.

Kidney transplantati on: perceptions of transplanted patients and health professionals	identify the care provided by people with kidney transplantation for the maintenance of the transplanted organ.	Exploratory-descriptive qualitative research. The research subjects were 16 patients who underwent renal transplantation of and 14 health professionals who worked directly with these patients, totaling 30 people. The information obtained was grouped into three categories, namely: Changes resulting from kidney transplantation; Main difficulties encountered after the kidney transplantation; Adherence to treatment.	Demonstrates the need for establishment of a bond of trust between patients and professionals, as a way of to optimize the treatment adherence process.
Quality of life in kidney transplants	Show the quality of life of patients who have had a kidney transplant, and draw a sociodemographic profile.	Descriptive, cross-sectional and qualitative study. Twelve chronic renal patients who underwent kidney transplantation participated. They were divided into categories of time that had the transplant, tracing the sociodemographic profile.	The study showed reflections on the experiences and perceptions of patients who performed kidney transplantation. Emphasizing aspects, such as regaining health, freedom and autonomy
The meanings attributed to kidney transplantati on	To present the meaning of kidney transplantation to transplanted people.	Qualitative, descriptive study. Twenty people who underwent kidney transplantation were interviewed.	Kidney transplantation brought happiness and rebirth, citing new life and being good, compared with hemodialysis, for doing activities again and for having quality of life. There have also been reports of seeking information about treatment.
Quality of life of kidney transplant patients after a long period of transplantati on	To evaluate the quality of life of patients after kidney transplantation using a generic and specific protocol.	Cross-sectional study with a quantitative approach. During the study 55 kidney transplant patients were in side dish. With the exclusion criteria, at the end of the research only 24 patients were eligible for study.	The quality of life of kidney transplant patients after long-term transplantation is good in most domains, with marked impairment in the domains related to physical, mental and pain-related issues.
Dialogic relationship with the client about kidney transplantati on: Educational nursing care	Describe the knowledge of chronic renal patients about kidney transplantation and discuss the contributions of this knowledge in nursing educational care.	Qualitative research, with a convergent-care approach, carried out with 11 patients with chronic kidney disease qualified for transplantation.	The dialogue enabled reflection on the construction and reconstruction of knowledge and practices on kidney transplantation and revealed coresponsibility between professionals, clients and their families.

Discussion

Through the analyzed literature and the interpretation of the data, aiming to answer the proposed guiding question, we can categorize the works in 3 themes: Importance of the professional's communication with the patient; patients' perception about transplantation; postoperative care.

Importance of professional communication with the patient

The theme included 80% of the articles analyzed. Systematization is important for the patient to clearly understand the whole process of his treatment, and for the multidisciplinary team to have a good interaction focusing on the individual's well-being.

Among the preoperative care, the nurse has a relevant role in health education, informing the patient step by step about the procedure to be submitted, the immunosuppressive drugs that he will need to use throughout his life and its side effects, the necessary preparation on the day before surgery, the importance of family support, taking possible doubts and carrying out their physical evaluation, always maintaining a holistic view

The nursing team in the intraoperative period aims to assess, detect and intervene in possible complications.

Perception of patients about transplantation

The category defined 90% of the articles analyzed. A study carried out in a municipality in the south of Brazil from May to July 2013, aimed to identify the positive and negative factors about kidney transplantation, interviewing patients who underwent this treatment. It was identified that after the procedure, patients could return to perform activities that were impossible because of hemodialysis, such as housework, physical activities and leisure. It was noticed that the realization of these activities regains its autonomy. Kidney transplantation may be the best option for CKD, however, there are some limitations reported by the patients interviewed in the same study, which may interfere with their social life. They reported the need for some care, such as: protecting themselves from the cold, not exercising extreme force, from contact with people, especially if they have an infectious disease. This can be correlated to the use of immunosuppressants.

Postoperative care

This last subdivision included 40% of the articles analyzed. The best treatment option provided to patients with Chronic Kidney Disease (CKD) is renal replacement therapy, even though this is the best form of treatment, important changes occur in the daily habits of transplant patients who need to be taken into account.

The hemodynamic part of the patient in the first 24 hours after transplantation is extremely important for a successful procedure. In the postoperative period, the nursing team must be attentive to possible

complications, avoiding infections, being attentive to SSVV, controlling diuresis, water control and signs of pain, highlighting the patient's progress in relation to gastrointestinal functions and renal function.

For success in renal replacement therapy, it is important that all stages of systematization are completed.

Final considerations

Kidney transplantation is one of the best ways for the patient to return to normal life activities. But it requires a lot of care for the rest of the patient's life, considering mainly that the patient will not only suffer physical, but also psychological changes. Health professionals have an important role in ensuring a quality transplant. All the instructions given in the pre and postoperative period are important for the individual to clearly understand the whole process of their treatment. This whole phase shows the importance of a multidisciplinary team, so that the patient is taken care of as a whole, not just the part of his pathology. Health care has an extremely important role, since it will take care of the patient from the moment of discovering CKD until after receiving the kidney.

With the increase in the population with CKD, the researched literature reinforces the importance of actions through health education, citing the risk factors and the relevant guidelines about self-care, which these patients need to have throughout their lives. It is also present that the knowledge produced by this research can make health professionals improve their conduct towards a patient undergoing transplantation, given the importance of health education.

In the study carried out, there is a delimitation on the data obtained. Since these are based only on national data and within the past five years, then we propose further studies using also the international literature, to enter the topic so that the results reflect in professional practice.

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