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REVIEW

Self-care of renal patients under conservative treatment: an integrative review

O autocuidado de doentes renais em tratamento conservador: uma revisão integrativa

El autocuidado de enfermos renales en tratamiento conservador: una revisión integradora

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ABSTRACT

Objective: The objective of the following research was to identify scientific studies related to self-care of renal patients under conservative treatment. **Method:** This is an integrative literature review carried out by using literature through searched on the databases LILACS, BDNF, and MEDLINE, in May 2010, using as descriptors: chronic renal failure and self-care, and the keyword nursing. Sixteen productions have selected, comprising the study sample. **Results:** The results point to two main perspectives: health promotion as a factor making slow the dialysis in chronic kidney disease and health education as self-care practice in the conservative treatment. **Conclusion:** It has concluded that the majority of the studies address the clinical aspects and drug therapy, without giving emphasis to preventive programs, prevention of complications and slowing of renal disease. **Descriptors:** Renal Insufficiency chronic, Self-care, Nursing.

RESUMO

Objetivo: O objetivo do estudo foi identificar as produções científicas relacionadas ao autocuidado de doentes renais em tratamento conservador. **Método:** Trata-se de uma revisão integrativa da literatura realizada por meio de levantamento bibliográfico junto às bases de dados LILACS, BDNF e MEDLINE, no mês de maio de 2010, utilizando como descritores: insuficiência renal crônica e autocuidado, e a palavra-chave enfermagem. Foram selecionadas 16 produções que compuseram a amostra do estudo. **Resultados:** Os resultados apontaram para dois eixos de análise: promoção da saúde como fator lentificador para fase dialítica na doença renal crônica e educação em saúde como prática do autocuidado no tratamento conservador. **Conclusão:** Conclui-se que a maioria dos estudos analisados aborda os aspectos clínicos e o tratamento medicamentoso, sem dar ênfase aos programas preventivos, a prevenção de complicações e a lentificação da doença renal. **Descritores:** Insuficiência Renal Crônica, Autocuidado, Enfermagem.

RESUMEN

Objetivo: El objetivo del estudio fue identificar las producciones científicas relacionadas al autocuidado de enfermos renales en tratamiento conservador. **Método:** Se trata de una revisión integradora de la literatura, llevada a cabo por medio del levantamiento bibliográfico por las bases de datos LILACS, BDNF y MEDLINE, en el mes de mayo de 2010, siendo descriptores: Insuficiencia renal crónica y autocuidado, y la palabra clave enfermería. Se seleccionaron 16 producciones, que formaron la muestra del estudio. **Resultados:** Los resultados apuntaron hacia dos ejes de análisis: Impulso de la salud como elemento lentificado para el estadio dialítico en la enfermedad renal crónica y educación en salud como práctica de autocuidado en el tratamiento conservador. **Conclusión:** Se concluye que la mayoría de los estudios versa sobre los aspectos clínicos y el tratamiento medicamentoso, sin enfatizar los programas preventivos, la prevención de complicaciones y la lentificación de la enfermedad renal. **Descritores:** Insuficiencia renal crónica, Autocuidado, Enfermería.

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INTRODUCTION

Chronic kidney disease (CKD) has affected an alarming number of individuals throughout the world. According to data from the *United States Renal Data System*, the incidence of people with kidney failure is increasing significantly. This is an issue relevant to public health, because the higher incidence of CKD related to people with a diagnosis of diabetes mellitus (DM) and hypertension (SAH).¹

In Brazil, the public health system does not provide efficient results preventive care of this population. Among the factors justifying the low resolution at that level of attention, one can highlight the late demand for healthcare services, access hampered, delayed and long waiting time for scheduling appointments, in that a large part of the population with chronic diseases treatment search when they are in advanced stages, often showing irreversible damage.

The last census of the Brazilian society of Nephrology, in 2009, pointed to a decline in the number of cases of patients with CKD across the country, diverging trend world increase these rates, which probably is due to the imprecision of the previous year's census, in which only 50% of dialysis Centers answered the requested information. In 2005, 65,121 people were doing dialysis that number increased to 87,044 in 2008. Of the dialysates people in 2009, 86.7% served by the single health system (SUS) and 34.5% of new patients each year have the diagnosis of DM.²

The DRC characterized by six stages of reduced kidney function. These range from stage 0 (zero) when the glomerular filtration is > 90 ml/min, with absence of glomerular injury, until the stage 5 (five), in which the glomerular filtration is < 15 ml/min, characterized by terminal renal insufficiency or dialytic.³

Early detection of CKD associated guidance programs for people with diabetes and hypertension can reduce the number of individuals who enter the renal replacement therapies by keeping them in conservative treatment. The trace of kidney disease can be performed initially in basic health units, the identification of high-risk groups, changes in urinary sediment (micro albuminuria, proteinuria, hematuria and leucocitúria) and estimation of creatinine levels. The prevention of kidney disease must extend beyond the groups of hypertension and diabetes (HIPERDIA), which requires more prevention policies, capacity building, training and integration between core network and specialties. Subsequently, the DRC can be accompanied, the outpatient level by the nephrologist by verifying the glomerular filtration rate, serum creatinine, using as the sex and age variables.⁴

The conservative treatment consists of several components of a program that include: health promotion and primary prevention with high-risk groups; early identification and detection of renal dysfunction; correction of reversible causes of kidney disease; etiological diagnosis; definition and staging of renal dysfunction; institution of interventions to slow the progression of CKD; Prevention of complications of kidney disease; modification of common Comorbidities these patients and early planning of renal replacement therapies (TSR).³ as well as allows the individual improvement in biochemical profile, on the quality of life and reduction of hospitalizations.⁵

The conservative treatment or pré-dialectic is comprised of a set of measures and/or actions that seek to decrease the rate of progression of kidney disease, assisting in the improvement of clinical conditions, psychological and physical people with CKD. This can be accomplished in clinics of uremia, specialized clinics or in basic health units, doctors, nurses, nursing assistants and community health agents. The multidisciplinary team, with the insertion of professional nutritionists, social workers,

psychologists, among others, seen as enriching for the importance of interdisciplinary action in the prevention of risk factors.⁴

People affected by CKD present specificities of different care, as control of the intake of salt in food, performing periodic lab tests, including regular physical activities, directly related to the process of loss of kidney function.⁶ study points out that people create coping strategies of the disease through its adaptation to new health-disease condition, seeking to harmonize the fluctuation of the feelings, concerns and seeking motivation to face the relations of interdependence between patients and their families.

With the advance of the stages of CKD, the person can begin to present physical difficulties, such as backache, weakness, tremors, cardiovascular changes, edema, nausea, among other symptoms that prevent to perform independently their commitments and assume, demanding help and dedication of the family in different situations.^{7,8} this condition faced by people with CKD, she will need to review the Organization of their daily lives, their routines and expectations regarding their future on the basis of their disease.^{6,8}

Considering the scenario above, this study is justified by the need to work with the issues pertaining to the renal patient self-care in conservative treatment. It understood that the self-care of the person with CKD could develop skills for health promotion, collaborating on treatment adherence and better living conditions.

Thus, an integrative review listing-if the following question: what is the knowledge that has produced on self-care of kidney patients in conservative treatment? To answer this question formulated the aim of the study was to identify scientific production related to self-care of renal patients in conservative treatment.

METHODOLOGY

To achieve the objective, we opted for the integrative review, which makes it possible to summarize research already completed and obtain conclusions from a topic of interest, with the same standards of rigor, clarity and replication of the primary studies.⁹ the integrative review presents steps that require strict methodological adjustments. This review using the following steps: identification of the theme and elaboration of the research question; establishment of selection criteria of the studies; categorization of studies; assessment of studies included in the integrative review; interpretation of results and presentation of the review.⁹

The bibliographic survey conducted in the Virtual Health Library (VHL) in databases Latin American literature and Caribbean Health Sciences (LILACS), database in nursing (BDENF) and Virtual and *Medical Literature Analysis and Retrieval System online* (MEDLINE). The search of the material was in the month of May 2010, using descriptors like "*chronic kidney failure*" and "*self-care*" and the keyword "*nursing*" in MEDLINE database, not being determined timeframe.

In the search found 105 productions related to the topic: sixteen (16) works in the database LILACS, eight (08) works in database BDENF and eighty-two (82) in the MEDLINE database.

The criteria used for selection of the studies published in journals: available online, which approached the chronic renal patient self-care theme in conservative treatment journals indexed in the database LILACS, MEDLINE, and published until BDENF the month of May 2010, regardless of the method of research used. Excluded from the study the books, chapters of books, manuals, abstracts of conference proceedings, abstracts were not productions and those repeated. After the search was

conducted the reading of titles and abstracts found and have therefore not been analyzed and selected surveys of interest to this study.

At the end of this stage were selected three (03) productions in LILACS database, one (01) on BDEF, twelve (12) in the database MEDLINE, published in the period between 1998 and 2010, sixteen (16) articles analyzed in their entirety.

The table below presents briefly the information of articles included in this sample review:

Table 1 - articles included for integrative review, second encoding and publishing data.

Study code	Title	Source	Authors	Location	Year
The ₁	The teaching of self-care in clients with chronic kidney disease in conservative treatment: epidemiological study and sociopoético	Rev. Nurses. UERJ	Pacheco, Gilvanice de Sousa	Rio de Janeiro-RJ	2005
The ₂	Take care of client in conservative treatment for chronic kidney disease: appropriation of Orem theory	Rev. Nurses. UERJ	Pacheco, Gilvanice de Sousa; Santos, Iraci of	Rio de Janeiro-RJ	2005
The ₃	Characteristics of clients with chronic kidney disease: evidence for the teaching of self-care	Rev. Nurses. UERJ	Pacheco, Gilvanice de Sousa; Santos, Iraci of; Bregman, Rachel	Rio de Janeiro-RJ	2006
The ₄	Orem's theory and chronic renal patient care	Rev. Nurses. UERJ	Ramos, Brett Costa; Chagas, Natalia Ramirez; Freitas, Maria Celia; Monteiro, Ana Ruth M; Leite, Ana Claudia de Souza	Rio de Janeiro-RJ	2007
The ₅	Daily life of patients with chronic renal failure receiving hemodialysis treatment	Rev Lat Am Nursing.	Baloch KV, Saints JL	Ribeirão Preto-SP	2008
The ₆	Daily life and work: conceptions of individuals with chronic renal failure and their families	Rev Lat Am Nursing.	Career L, Marcon SS	Maringá-PR	2003
The ₇	The self-management experience of people with mild to moderate chronic kidney disease	Nurs J Nephrol.	Costantini L., Beanlands H, McCay And Cattran D, Hladunewich M, Francis D	Canada	2008
The ₈	Hypertension and chronic kidney disease: the role of lifestyle modification and medication management	Nurs J Nephrol.	Eskridge MS	Canada	2010
The ₉	The impact of education on chronic kidney disease patients' plans to initiate dialysis with self-care dialysis: a randomized trial	Kidney Int.	Manns BJ, Taub K, Vanderstraeten C, Jones H, Mills C, Visser M, McLaughlin K	Canada	2005
The ₁₀	Coping with chronic renal failure in Hong Kong	Int J Nurs Stud.	Mok And Lai C, Zhang ZX	Hong Kong	2004
The ₁₁	Learning from stories of people with chronic kidney disease	Nurs J Nephrol.	Molzahn AE, Bruce A, Shields L	Canada	2008

The ₁₂	Continuing Education article. Patient management in CKD stages 1 TO 3	J Ren Care.	Murphy F, Jenkins K, Chamney M, McCann M, Sedgewick J.	London	2008
The ₁₃	Information topics important to chronic kidney disease patients: a systematic review	J Ren Care.	Ormandy P	London	2008
The ₁₄	Delivery of multifactorial interventions by nurse and dietitian teams in a community setting to prevent diabetic complications: the quality-improvement report	Am J Kidney Dis.	Senior PA, MacNair L, Jindal K	Canada	2008
The ₁₅	The patient with diabetic producing in the hospital	EDTNA APP. J.	Thanasa G, Afthentopoulos IE	Greece	1999
The ₁₆	Development of a self-management package for people with diabetes at risk of chronic kidney disease (CKD)	J Ren Care.	Thomas N, Bryar R, Makanjuola	London	2008

Of possession of material for analysis, were built frames that allow a better visualization of the data, as the period of publication, location, search approach, data collection methodology, study subjects, professional subject area, data analysis, results and discussion, conclusions and interests for nursing. The items found numbered according to the order of virtual access, and data analyzed according to their content.

RESULTS AND DISCUSSION

Initially presented and analyzed the data relating to the characterization of the studies included in the sample. As for the year of publication, we highlight the year 2008 with seven (07) and 2005 with three (03) publications. In the years 1999, 2003, 2004, 2006, 2007 and 2010 was obtained a (01) publication per year. In the year 2001, Brazil, through the Ministry of health, launched the plan of reorganization of the attention to arterial hypertension and diabetes mellitus, which reflected at the national level in the prevention of cardiovascular disease, cerebrovascular disease and kidney,⁴ that may justify the subsequent publications this year.

With regard to the origin of the publications, predominated at nationals, which include six (06) in Brazil, five (05) in Canada, three (03) in London, one (01) in Hong Kong and one (01) in Greece. The number of people who have CKD in advanced stages is alarming, it was found that 13.1% of the population of the United States fit this profile¹⁰ proving to be this a problematic world reflecting the need for studies on this theme.

The Brazil presented six (06) publications, whose regional concentration occurred predominantly in the Southeast (05), followed by the northeast (01). These productions published exclusively in the last decade. From 2000, the number of people on dialysis treatment in Brazil has doubled, rising from 42,695 to 87,044 in 2008. These data reflect the significant increase in demand for care and highlights the need for actions under preventive and health promotion, also aiming to stimulate self-care for part of this clientele. Thus emphasizes that people with chronic diseases and early history of kidney disease in the family, must tracked through the screening carried out from urine tests and dosage of serum creatinine, due to the potential for development of renal injury.²

Regarding methodological nature used in sixteen publications, qualitative research prevailed with 11 publications, while the quantitative approach used in three and quantitative approach in two productions. The qualitative approach generates knowledge about subjective phenomena and the most appropriate way to outline the type of conduct of research is through the nature of the problem, thus justifying the choice, in most studies, the qualitative approach, according to the nature of the studies.

For data collection, the method most used in the studies was respectively: the analysis of documents associated with the interview (04), only the document analysis (03), interview (03), form (02), observation (02), interview with note (01) and questionnaire (01). The impact on employment of the method of analysis of documents due to the importance of laboratory data acquisition, control of blood pressure, weight, habits, among other information of people in treatment, for the evaluation of renal function.

As for the subject of studies, predominated people with CKD, on 15, followed by publications of health professionals in a study. This strengthens the need for studies in search of better living conditions for people with CKD and the investment in research with healthcare professionals.

The development of research was the hospital. In this scenario, eight studies developed in clinics of uremia, four in Gamba units and two studies did not specify the unit investigated. It should note that the monitoring of people with CKD installed or the so-called risk group can also be performed in basic health units, however with queries to the nephrologist for patients in stages 4 and 5 of the renal dysfunction. This is a situation still not observed in the Brazilian reality, what can justify the increasing of the population with CKD.

As for the journals in which they published, 10 productions were field of nursing, multiprofessional and five were a medicine area. The theme of the DRC in nursing and the importance of scientific productions by health professionals, strengthening the exchange of experiences and quality of care.

From the resemblance of the studies concerning self-care of people with CKD in conservative treatment, emerged two axes of analysis: *health promotion as a lenticador factor to dialytic phase in chronic kidney disease* and *health education as the practice of self-care in the conservative treatment*.

Health promotion as a lenticador factor to dialytic phase in chronic kidney disease

The role of the nurse in the prevention and progression of CKD occurs according to the real needs of the population, with greater emphasis on groups at risk. The evaluation of renal function is essential in groups of people with the disease or installed in high-risk groups, such as in diabetics with hypertension, cardiovascular diseases, cerebrovascular and, in that the reduction in kidney function is progressive and irreversible, which is classified according to the glomerular filtration rate.¹¹

Conservative treatment usually accomplished in clinics of uremia, contributing in reducing high costs with dialysis for referrals or ignorance of the disease later.¹² study shows that the participation of a multidisciplinary team in attendance of the population is extremely beneficial because it allows a full assistance, minimizing the ignorance of people about kidney disease and increasing their treatment adherence.

There is still a lack of guidance programs and early detection of CKD that may significantly reduce the ticket on renal replacement therapies and, consequently, the discomfort. Existing programs offer guidance, information and subsidies for the maintenance of your health condition, as well as on ways of renal replacement therapies available. Thereby, ensuring education for self-care preparing these people to the clinical manifestations that the pathology evidence.⁵

Health promotion measures of the DRC, such as: the adoption of healthy eating habits and suitable; smoking cessation; practice of regular physical activity; blood pressure control; management of dyslipidemias; prophylactic use of some drugs; are interventions that aim to reduce the rate of disease progression, the control of diabetes mellitus and hypertension, as well as, research and monitoring of renal function.¹¹ Study¹³ demonstrates that the ideal control of blood pressure can decrease the rate of impairment of renal function, including changes in lifestyle with preventive measures.

Also known that the diabetic nephropathy leads to CKD in 30 to 40% of patients with diabetes mellitus.¹⁴ diabetes and hypertension account for 62.1% of primary diagnosis of people with CKD.^{4 14} Study demonstrates that by offering primary health care can slow the deterioration of renal function, through the control of blood pressure, blood glucose and nutrition.

Nursing has important role in the prevention and progression of renal disease, working in team training, nursing consultations, educational activities, development of strategies for adherence to treatment, examinations and forwarding request to doctor's appointments.⁴ the health team can help at all levels of the health care of people with CKD, according to the needs of the population, in order to detect high-risk groups, mentor and shows the way for coping and adaptation to new lifestyle and health condition.

Health education as the practice of self-care in conservative treatment

Health education actions seek to intervene in different situations of health-disease context, with orientation activities, supervision and care.¹⁵ health education, in the progression and prevention of CKD should occur jointly and constructively with the population, with effective measures in health promotion, seeking improvements in quality of life.^{3,11}

Health education activities can be performed from the primary to the tertiary level of health, in which the nurse has important role of caretaker and educator, in addition to the ethical and professional commitment that makes it one of the greatest responsible for systematizing and encourage self-care. Develop health-promoting activities of educational form reduces the incidence of CKD.¹¹

It is understood that people with CKD go through various physical, social and emotional limitations, in addition to the progressive loss of renal function, being necessary to evaluate the daily life, you will see the occupational performance, special diets, water restrictions and the family dynamics.^{8 7} Study demonstrates that in some bearers of the DRC, the daily changes according to the evolution of the disease, which is common feelings of disbelief and anger, considering that they are considered responsible for the struggle and search for better living conditions.

Adopting healthy eating habits and regular physical exercises practice corresponds to the primary implementation of health education for people who find themselves in conservative treatment. Secondary attention it brings together the control of blood pressure with medications, management of dyslipidemias and diabetes mellitus with blood sugar control and some pharmaceuticals. The tertiary health care level performs the follow-up of later stages of CKD, preparing people for the renal therapies instead.¹¹

The educational approach can clarify the disease and adoption of practices of self-management of the disease in an accessible and Dialogic with the participation of the patient, which understands and knows the ways of self-care without imposing methods or difficulties. It is relevant to consider the person as active agent with CKD and participant in the process of the educational program, assisting in the recovery and adaptation that the disease imposes.¹²

It should be noted that the programs of control of chronic diseases (diabetes mellitus and hypertension) still have some limitations on registration and attendance of this profile of clientele. One realizes so the nurse as a factor in spreading the prevention of CKD in which specific protocols for education on assistance to patients with risk factors or disease in phase of progression may be increasingly included in these public health policies.¹¹

It highlights the need to put the patient as being active for your treatment, being fundamental to implementation of preventive programs in the DRC, which targets the prevention of complications, the depressed renal disease and improves the quality of life. In this sense, one can consider the participation and the patient's perception regarding their ability of prevention related to their autonomy or self-determination in conservative treatment of CKD. Front of it believed to be essential to exploit the participation of nurses in the process of caring for and educating the health profile of clientele.

CONCLUSION

The approach of the studies about prevention as limiting factor for dialytic phase in chronic kidney disease is still quite restricted because few feature a detailed discussion on self-care of patients. We must stimulate the participation of the people in its treatment, with a view to the improvement in quality of life can significantly reduce the progression of the disease.

Given what has exposed, from the identification and analysis of scientific productions related to self-care of renal patients in conservative treatment is that the theme presented in the studies, is restricted to aspects of dialysis treatment. Highlights the importance of preventive phase and of health promotion for people of the so-called risk group, avoiding complications and the high number of people who join in overriding renal therapies each year.

In this perspective, it understood that studies of this nature might have great importance in the production of knowledge of professionals who take care of chronic renal patient's health, encouraging self-care and the stimulating treatment adherence. Provide subsidies so that health professionals can take care of these people without aborting their autonomy is one of the challenges of our profession.

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