


HEALTH BEHAVIORS AND BARRIERS TO TREATMENT ADHERENCE IN HEMODIALYSIS PATIENTS: AN INTEGRATIVE REVIEW

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ABSTRACT

Introduction: Chronic Kidney Disease (CKD) affects about 10% of the world's population, with hemodialysis (HD) being the most commonly used treatment. Although HD contributes to survival, it also brings negative impacts, such as frailties and both physical and emotional changes, requiring constant care and causing patients to face various vulnerabilities in their daily lives. **Objective:** This study aims to identify, in the national and international scientific literature, the health behavior of people who are under hemodialysis therapy.

Methodology: An integrative review was carried out, with consultations to the Virtual Health Library (VHL). Articles published in the last five years in Portuguese, English and Spanish were included, while theses, dissertations and letters to the reader were excluded. The descriptors used were: Renal Dialysis AND Health-Related Behaviors (15 studies); Renal Dialysis AND Health-Related Conducts (15 studies); Health Behaviour AND Renal Dialysis (29 studies). **Results and discussion:** After reading and analyzing the selected articles, a final sample of 11 studies was obtained. The survey showed that individuals reported feelings of hurt, worthlessness and powerlessness. To face these challenges, they adopted

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coping practices, such as adherence to the hospital schedule, the adoption of healthy eating habits, the correct use of medications, the reduction of exposure to external people, and the search for comfort in religious beliefs to relieve the pain and burden of chronic disease. A deficit of knowledge about the disease was also identified, which contributes to inappropriate self-care behaviors. **Conclusion:** Hemodialysis patients often deal with emotional and social issues, needing awareness and psychological support to face their feelings and ensure treatment adherence.

Keywords: Renal Failure. Chronic. Renal dialysis. Health Behaviors. Self-care.

INTRODUCTION

Affecting 10% of the world's population, Chronic Non-Communicable Diseases (NCDs) are considered a major public health problem. They can be defined as anomalies present in the renal structure or function, with recurrent episodes in a period of three months, interfering with the individual's quality of life. According to the World Health Organization (WHO), NCDs represent a challenge to health systems due to the high number of carriers, reinforcing the idea that no country is free from its social and economic impacts (Ávila *et al.*, 2024; Barros Neto *et al.*, 2024; WHO, 2023).

Chronic Renal Failure (CRF) is defined as the loss of the kidneys' ability to perform most of their functions, causing a hydroelectrolyte imbalance for its carrier, making it necessary to start treatment through Renal Replacement Therapy (RRT), which includes peritoneal dialysis, hemodialysis and kidney transplantation that replace kidney function. One of the most commonly used methods is Hemodialysis (HD), its process consists of the patient being connected to a machine so that it filters the blood, extracting impurities and excess liquids (Ávila *et al.*, 2024; Brook; De Oliveira; De Sena, 2020).

According to the Brazilian Society of Nephrology (SBN), the estimated total number of patients on dialysis in 2022 was 153,831, of which 95.3% were using HD, being composed mostly of elderly people, with a predominance of males. It is noteworthy that due to the weaknesses imposed by the disease and associated comorbidities, most patients need constant care, triggering negative feelings about the treatment. The presence of this feeling is due to the vulnerability of the role of men as dominant and women as caregivers of the home and family, in view of the gender stereotypes rooted in society based on beliefs and values regarding the role of men and women, which directly influence care practice and exposure to risk situations (Nerbass *et al.*, 2023; Gomes *et al.*, 2018).

Furthermore, taking into account the numerous limitations that individuals need to learn to live with, it is observed that hemodialysis treatment goes beyond the outpatient treatment, also permeating the work and home environment. Soon after the start of RRT, there is a constant concern about what can or cannot be done, which contributes to the emergence of emotional disorders in the patient. The process of change has significant repercussions on their lifestyle, resulting in the adoption of a specific diet, water restrictions, changes in body appearance, and physical, sexual, and psychological limitations (Da Silva, Flores, 2023).

For Ribeiro *et al.* (2020), most patients undergoing treatment show transformations in their behavior, such as: sadness, anguish, isolation, fear and neediness, triggering the feeling of loss of autonomy and disillusionment, causing them to find it difficult to live with

quality of life. Such sudden changes corroborate the abandonment of treatment, and it is of paramount importance to encourage their skills, capacities, and potential, so that they can adapt positively to this new lifestyle and become the protagonist of their treatment (Ribeiro *et al.*, 2020).

RRT has increased the survival of numerous patients, however the presence of some negative aspects is notorious. The treatment for kidney patients results in great fragility, which can cause physical and emotional changes that affect the daily life of patients. In view of the above, it is relevant to monitor the behavior of people who undergo hemodialysis and their perspectives regarding treatment. This research aims to identify in the national and international scientific literature the behavior of people on hemodialysis and barriers found in treatment adherence.

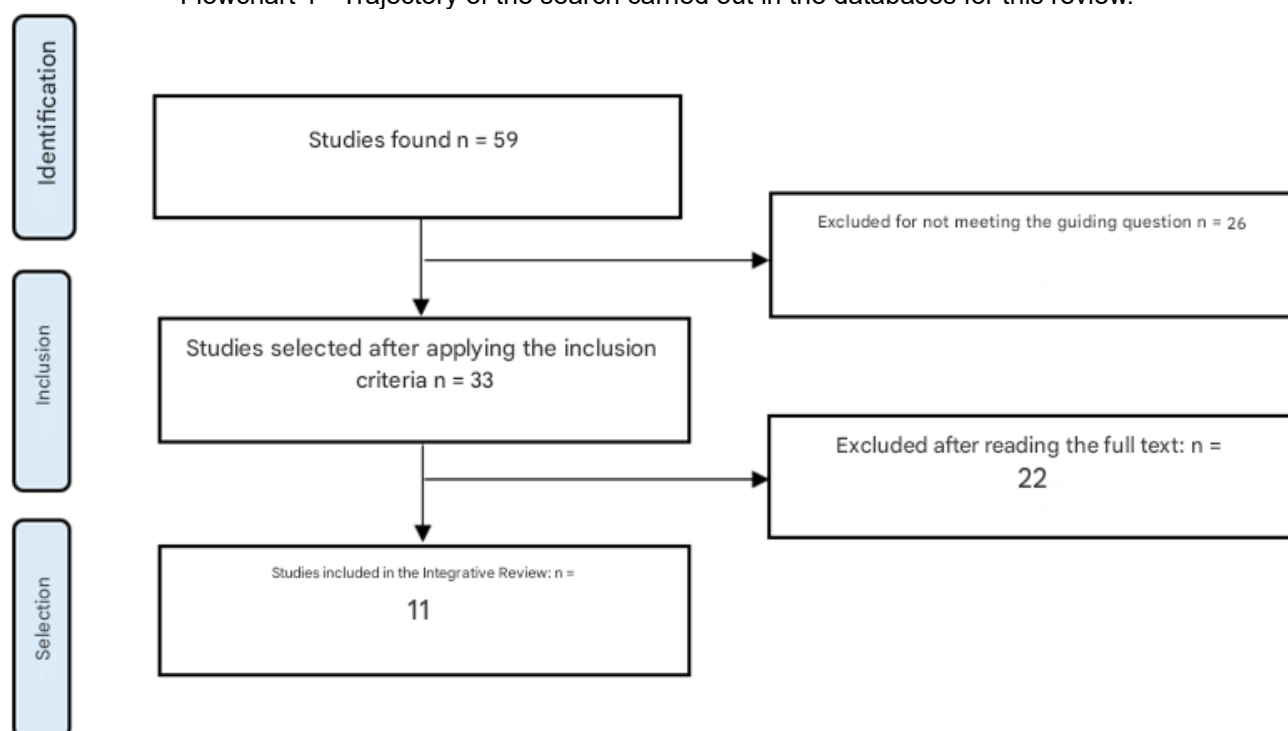
METHODOLOGY

It is an Integrative Literature Review, developed with the help of material already prepared, consisting mainly of scientific articles. The review was carried out through 6 stages: 1) Formulation of the review question; 2) Definition of tools for data collection or literature research; 3) Recruitment of studies from various sources of information; 4) Representation of the characteristics of the studies and organization of data for categorization; 5) Analysis and discussion of the data collected; 6) Public presentation or synthesis of the review (Dantas *et al.*, 2022).

To search and select the articles, the Virtual Health Library (VHL) was used, in the following information base: Latin American and Caribbean Literature on Health Sciences (LILACS); Nursing Database (BDENF) and Online System for Search and Analysis of Medical Literature (MEDLINE). In addition, the Health Sciences Descriptors (DeCs) were used, namely: Renal Dialysis AND Health-Related Behaviors (15 studies); Renal Dialysis AND Health-Related Conducts (15 studies); Health Behaviour AND Renal Dialysis (29 studies).

For sample selection, the inclusion criteria used were scientific articles that were published between the years 2019 and 2024, the guiding question is answered, to be indexed in the selected databases, available in full and in the following languages: Portuguese, English and Spanish. Subsequently, the titles and abstracts were read, and duplicates that did not meet the objective of the research, represented in **flowchart 1, were excluded**.

Flowchart 1 - Trajectory of the search carried out in the databases for this review.



Source: authorship, 2024.

RESULTS AND DISCUSSIONS

After the analysis of the chosen articles, a final sample of 11 studies was obtained for the elaboration of this literature review. These were read in full, being pondered, interpreted, debated and confronted about the theme in question. After the reflective reading, two categories emerged: Psychosocial well-being and Self-care, which are discussed below:

PSYCHOSOCIAL WELL-BEING:

According to a study conducted by Bulathwatta, Rudnik and Bidzan (2024) regarding the psychosocial experiences of individuals with CKD, it was identified that the quality of life of patients is directly related to work, family and aspects of daily life. Many referred to dialysis as an obstacle to the maintenance of professional ties and contributing to the distance from family and friends. The investigation revealed that, to face these challenges, many individuals resort to practical solutions, such as adherence to the hospital schedule, the adoption of healthy eating habits, the appropriate use of medications, and the reduction of exposure to external people. There are also reports that mention religious beliefs, cultural practices, and personal meanings, since it is considered that attention dedicated to religious thoughts can mitigate pain and provide relief from the burdens imposed by chronic illness (Bulathwatta; Rudnik; Bidzan, 2024).

A study carried out with hemodialysis patients at the Nephrology Center of Rio Grande do Norte, revealed that sources of support are essential to favor actions and

behaviors in the face of overcoming the disease and treatment. The need for continuous care causes the signs to experience feelings of hurt, uselessness and impotence, resulting from changes in the routine of the renal patient, focused entirely on medical consultations and hemodialysis sessions, impairing the establishment of life goals, restricting places to be visited and making travel unfeasible, being kept entirely in a domestic environment, bringing the feeling of limitation of their freedom. The reduction in autonomy directly impacts physical exhaustion and emotional destructuring (Borges *et al.*, 2023).

According to Wilkinson *et al.* (2019), the practice of physical activity, has several benefits for the physical and psychological health of people with kidney disease. According to the study, individuals with lower levels of physical activity report reduced neuromuscular and cardiorespiratory functioning and lower quality of life. It found that men on HD were three times more likely to be active than women. The study also showed that despite the evidence about the importance of physical practice, inactivity was highly prevalent in all stages of CKD. Most participants mentioned the presence of uremia, fatigue, comorbidity burden, anemia, depression, concerns about the development of hernias and leaks as causes for physical inactivity (Wilkinson *et al.*, 2019).

Daily experience with HD represents a great threat to the patient's self-sufficiency, due to the complexity of the disease and changes in functional status. Negative feelings associated with mental and physical stresses, powerlessness and fear of death can trigger anxiety, depression, limitation of physical activity, restriction of transportation, suicide and sexual dysfunction, due to potential losses and changes in behavior and lifestyle. For Alizadeh *et al.* (2020), most individuals consider themselves sensitive to stress-related complications, with the main concern being the complications that dialysis treatment could bring, causing increased irritability, feelings of overload, and social isolation (Alizadeh *et al.*, 2020).

According to the outpatient clinic teams, recognizing emotional distress in hemodialysis patients is one of the great difficulties faced by health professionals. Providing emotional support supports high-quality care. However, most professionals do not have essential training to identify signs of distress or changes in behavior, or strive to repress them. During the study, patients revealed that many are not necessarily looking for a solution, but just want to be heard empathetically. Accordingly, the support of friends, relatives, and the professional team contributes positively to overcoming difficulties and anxieties (Damery *et al.*, 2019; Jesus *et al.*, 2019).

SELF-CARE

A study dedicated to the analysis of self-care behavior in relation to arteriovenous fistula revealed that women have a higher self-care profile. Although recent data from 2020 indicate that the percentage of men with CKD on Hemodialysis is higher, women through the management of signs and symptoms and prevention of complications still stand out. This reality is influenced by a social construction that perceives man as an invulnerable being, which can lead this public to neglect their own health and expose themselves to risky situations. (Moura, 2022).

Lack of awareness about kidney disease has a significant impact on self-care during HD. A survey carried out with 15 patients, who undergo dialysis only in emergency cases, showed that 47% of the sample had not been informed until the day they had kidney failure. In addition, it was exposed that education about CKD occurred through health professionals only at the time of admission for dialysis, being fragmented over the time of therapy, when they were severely compromised. Participants also highlight the use of direct and facilitated language, about signs and symptoms, adverse events to therapy, and biopsychosocial support (Novick *et al.*, 2021).

Therefore, we can affirm that elderly patients with CKD have better self-care behavior, while younger patients have better knowledge about the disease. Therefore, the lack of knowledge about the disease contributes to an inappropriate self-care behavior, becoming a barrier to the efficient treatment of CKD. Tsai *et al.* (2021) analyzes and explains several phenotypes of self-care behavior associated with blood pressure, smoking, body mass index (BMI), eating habits, and physical activity. The relevance of educational activities to enhance the effectiveness of dialysis treatment is also highlighted (Tsai *et al.*, 2021).

For Stevenson *et al.* (2019), the promotion of self-care is related to the patient's healthy behavior. A study conducted by sending text messages to cell phones revealed that, using simple and accessible tools, it is possible to offer advice, information, motivation, and support that contribute to the improvement of the eating habits of individuals with CKD. Another way to promote health is through physical activity, which helps with physical strengthening, stress management, and emotional improvement (Stevenson *et al.*, 2019; Dashtidehkordi; Shahgholian; Atari, 2019).

CONCLUSION

It is concluded, therefore, that men undergoing hemodialysis often face significant emotional and social issues, such as stigmas associated with kidney disease, lifestyle



changes and the impact on their interpersonal relationships, directly influencing treatment adherence and quality of life. Awareness, psychological support and the practice of physical activities combined with a healthy diet are also highlighted, which are essential for overcoming negative feelings, stress control and improving adherence to hemodialysis.

In addition, to improve self-care, it is essential that health professionals are aware of the signs of emotional distress and make better clarification about Chronic Kidney Disease and Hemodialysis, considering that the greater the knowledge about the disease, the better the patient's self-care, thus providing more efficiency in dialysis treatment. Finally, during the research of articles related to the behaviors of men and women on hemodialysis, it was noted a lack of studies directed to this aspect, making it necessary to develop scientific research aimed at this group.

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