ABSTRACT

Objective: To know, be aware of, the Basic Human Needs of chronic renal patients on hemodialysis, according to Wanda Horta’s Theory. Methods: exploratory and descriptive research of qualitative approach, conducted from interviews with 10 patients followed in a hemodialysis clinic located in a city in the interior of Bahia, Brazil. Data were categorized according to Bardin’s Content Analysis technique and discussed from the perspective of Wanda Horta’s Basic Human Needs Theory. Results: Three categories emerged themes that highlight the basic human needs affected in the lives of patients with chronic renal failure and on hemodialysis treatment, highlighting: Nutrition and hydration changes; Changes in sleep and rest; and Deprivation of freedom, leisure and sociability. Final considerations: there was a predominance of psychobiological needs, namely: hydration, nutrition, locomotion, sleep, rest and body mechanics. As for psychosocial NHB, it was possible to observe those related to recreation, leisure, freedom, participation, gregarious, of self-esteem and self-realization. No NHB affections regarding the psycho-spiritual domain emerged.

Keywords: Nephrology nursing, Nursing theory, Renal insufficiency chronic. Quality of life. Nursing care.

INTRODUCTION

The Chronic Renal Failure (CRF) is a disease with high morbi-mortality whose incidence and prevalence have increased steadily in Brazil and in the world, being considered a public health problem. It is a clinical condition resulting from the presence of kidney damage, which affects all age groups, with gradual loss of renal excretory capacity and the ability to maintain the metabolic and hydroelectrolytic balance, but its progression can be prevented or delayed. The treatment of CRF comprises the conventional (drug and dietary therapy) and renal replacement therapy that is necessary in the last stage of evolution, which may be hemodialysis, peritoneal dialysis or kidney transplantation. Hemodialysis requires the patient to depend on a machine and make changes in their routine and lifestyle, which limits freedom, causes physical, sexual, psychological, family and social limitations, often affecting the families/relatives of these individuals.

Despite technological advances in dialysis treatment and increased survival of patients, their quality of life is still below that presented by the general population. Treatment has a daily impact on patients’ lives, implying body changes and activities of daily living, which causes physical, sexual, psychological, family and social limitations, often affecting the families/relatives of these individuals.

Considering these aspects, the question arises as to what are the real Basic Human Needs that are affected in people's lives from the diagnosis of a CRF and the beginning of treatment with hemodialysis. It is assumed that knowledge of these needs can contribute to a better direction in nursing care planning. The Basic Human Needs (BHN) were hierarchized by Maslow, turning them into an important study tool. Subsequently, Wanda de...
Aguiar Horta, based on the studies by Maslow and João Mohana, developed the Theory of Basic Human Needs\(^6\) as a theoretical framework applied in the context of Brazilian Nursing.

The theoretical model proposed by Horta is based on the laws of equilibrium (homeostasis), adaptation and holism, and focuses on the manifestations of BHN that reveal themselves as states of homeostatic imbalances. These needs are flexible, cyclical, interrelated and universal to all human beings, but the way to meet them is manifested individually in each being\(^6\).

In this sense, taking into account that the nurse needs to recognize the problems that represent the phenomena of interest in Nursing and so I took them as nursing diagnosis, there has as guiding question of the study: which BHN affected in chronic renal failure patients on hemodialysis? And as an object of study the Basic Human Needs of people with CRF.

Finally, the objective of the study was to know the basic human needs of chronic renal patients on hemodialysis, according to Wanda Horta's theory.

**METHODS**

This is an exploratory and descriptive research with a qualitative approach, conducted from December 2016 to January 2017, in a Nephrology Clinic, in a city in the interior of Bahia, in the Piedmont Region of Itapicuru, where patients attend the unit for hemodialysis sessions three times a week on alternate days (Monday, Wednesday and Friday or Tuesday, Thursday and Saturday).

Ten patients who met the inclusion criteria participated in the study: having CRF of any etiology; being on hemodialysis treatment for at least three months; have preserved comprehension skills; both sexes; and age over 18 years. And were defined as exclusion criteria: patients with Acute Renal Failure and / or using peritoneal dialysis.

The researchers made prior contact with the institution to schedule the collection and the patients were approached at the end of the hemodialysis session, being advised as to the purpose of the study. Participation was voluntary and authorized by signing the Informed Consent Form (ICF). The privacy of the participants was preserved, since the collection took place in a private and quiet place. The identification of the participants was characterized by the letter “P” followed by the sequence number of the interviews (P1 ... P10).

Data collection was terminated when they showed signs of saturation, i.e., the manifest content was considered sufficient to allow the deepening, comprehensiveness and diversity of the comprehension process of the studied object\(^7\).

From the recorded and transcribed interviews, the data analysis began, being organized and categorized based on the Bardin Thematic Content Analysis Technique, which is defined as a set of communication analysis techniques that use orderly procedures and objectives of exposure of message content\(^8\). Therefore, the research corpus underwent a structuring and analysis process comprised in three stages, namely: 1) Pre-analysis, which comprised a fluent reading of the speech of the study participants; 2) Exploration of the material, at this stage, the researchers cut out the interviews in units of records, which were classified and coded, and finally grouped, based on convergences, in units of meaning; 3) Treatment of the results, when inferences and interpretations were used considering the object of study, which allowed the discussion according to the theoretical framework, based on Wanda Horta's Theory of Basic Human Needs\(^6\).

Regarding the theoretical framework, it is noteworthy that the Theory of Basic Human Needs proposed by Horta\(^6\) is based on the laws of balance, adaptation and holism, assuming as affected BHN the states of tensions, whether conscious or unconscious, which resulted in a hemodynamic imbalance in order to influence vital phenomena in their multidimensionality - bio-psycho-socio-spiritual. The selection of this referential was due to its comprehensiveness and detail of the needs of patients with CRF in hemodialysis therapy from the NHB hierarchy.

The research was approved by the Research Ethics Committee of the State University of Bahia, based on the opinion issued by the rapporteur of the CAAE case 56324816.9.0000.0057, and followed the recommendations of Resolution 466/12 of the
RESULTS AND DISCUSSION

Of the ten study participants, six were female and four, male. The age ranged between 31 and 65 years and the minimum and maximum duration of treatment was four months and 11 years, respectively.

All patients lived in the northern Piemont region of Itapicuru, in different cities in the interior of the state of Bahia and mostly professed belonging/adherents to a Catholic religion. Regarding the level of education, a low level of education predominated, considering that most completed only elementary school. Regarding the monthly family income, the participants reported receiving less than one minimum wage.

From the analysis of the transcribed interviews, it was possible to infer that the patient with CRF on hemodialysis experiences several changes in his life routine when he finds himself a carrier of the disease, thus affecting his BHN. Thus, three thematic categories emerged: 1) Nutrition and hydration changes; 2) Changes in sleep and rest; and 3) Deprivation of freedom, leisure and sociability.

Category 01. Nutrition and hydration changes

Every chronic disease causes changes in the person's daily life, either due to the symptoms inherent in the pathophysiology or due to the treatment instituted. From this perspective, it was possible to infer that the patient with CRF on hemodialysis experiences several changes in his life routine when he finds himself a carrier of the disease, thus affecting his BHN. Thus, three thematic categories emerged: 1) Nutrition and hydration changes; 2) Changes in sleep and rest; and 3) Deprivation of freedom, leisure and sociability.

Because I can't drink water, that's what I find most absurd. Taking water from us is like taking life, we feel very thirsty, very, very, very much, it's so much that I got here today with 3 kg, and it's water, these 3 kg is water that I don't control, I do not control, anyone who says they control it is lying, because the thirst is too much you feel the dry lips (P09).

I don't feel well, because there is a lot we want to eat and can't do anymore. We want to eat just like others and can't, things that we can never again, and we have to comply with the treatment to live [...] Either follow it, or it gets worse (P10).

The restrictions imposed by the CRF and, consequently, their treatment are strict. There is a need for changes in eating habits and water intake, requiring greater control on the part of the individual to avoid complications. Non-effective adherence to dietary restrictions, referring to the restricted consumption of liquids and proteins, in addition to strict control of sodium and potassium electrolytes, appears as a decisive factor in weight gain between hemodialysis sessions, resulting in the imbalance of the already mentioned BHNs of these individuals.

The difficulty to maintain a regulated diet, in addition to the need for a restrictive fluid intake, creates suffering in the lives of these people, especially as they begin to realize that this is a change that will be seen as a normal standard on the transition from a healthy life for living with CRF, so that if these people do not adopt such changes can contribute to a clinical worsening.

The human being is defined by the theoretical as an integral part of the dynamic universe, endowed with the capacity for reflection, imagination, with particularities, authenticity and influence of the environment in which he lives. Thus, it is capable of modifications that induce it to the state of equilibrium and/or imbalance. The critical and reflective power of the person puts them in situations of psychic suffering, which goes far beyond the physical. Individual factors such as beliefs and the way the patient confronts the disease and his health problems directly influence the levels of adherence to diet and water intake.

Thus, it is understood that it is a problem in the lives of these people, when they see their BHN affected, considering that if it were not the
health problem, they could have their needs met, taking into account their singularities. However, due to their state of illness, they need help from the interdisciplinary health team in finding balance strategies. It is worth highlighting the importance of the team considering that the individual is the main manager of their health\textsuperscript{(11)}.

The nursing staff plays an important role in health education for these patients in decision-making in favor of self-care through guidance and clarification. It is possible to identify speeches of patients who already have greater control over such affected BHN, as can be seen in the following speech:

> Just changed a few things in fruits and balanced food. It's not very potassium-filled food, these things, phosphorus, are balanced. But I eat everything moderated (P07)

The context units that allowed to emerge this category have in its entirety five or more years of treatment and it is perceivable, regarding that, that the treatment time does not interfere much in the issue of control of food intake. However long the treatment, this is still a factor that makes it difficult to control for some patients due to the need for hydration.

**Category 02. Changes in sleep and rest**

Sleep was another affected BHN in the lives of these patients, considering that this is a complex process that occurs daily in humans without which it is not possible to live. It was possible to infer from the context units that, when starting treatment, patients had sleep difficulties, needing even to resort to inducing drugs Sleep to have your NHB under control, as shown in the following fragments:

> At night when I stay at home I do not sleep well [...] yeah, I don’t sleep [...] (P03).

> I sleep through pills, I take Diazepam, because I can't sleep, before I started treatment I already had problems and after treatment it helped more (P09).

> Now I'm sleeping a little, but at first it had to be pills, the doctor assign me pills and now I don’t take it anymore, I already sleep (P10).

According to definitions from the BHN Theory, to be healthy is to have the needs of sleep and rest dynamically balanced in time and space\textsuperscript{(6)}. The discovery of a chronic illness alters this individual's balance state, both because of physical as well as the adaptive process in search of a balance.

CRF is known to have a close relationship of consequence leading to sleep disturbance, which may possibly be attributed to the clinical picture of uremia, fluid overload, either isolated or in association\textsuperscript{(12)}. Very common symptoms at the beginning of treatment, when it changes the sleep pattern\textsuperscript{(13)}.

Sleep deprivation can have physical and mental consequences, such as loss of concentration, tiredness, fatigue, increased pain, loss of appetite, change in blood pressure, and negatively affect feelings, ideas and motivations of the individual\textsuperscript{(14)}.

In patients with CRF, anxiety and difficulty to sleep are intertwined, especially, because the patient has doubts about the future before the changes brought by the disease process. In addition, sleep may also be affected by impairment of other physical factors, such as excessive fluid volume, pain and fatigue, which tends to further intensify insecurity, generating anxiety and sleep disturbances\textsuperscript{(15)}.

**Category 03. Deprivation of freedom, leisure and sociability**

The BHN of recreation and leisure was marked as one of the affected needs in these people's lives. Changes resulting from the restrictions imposed by the hemodialysis treatment itself and the disease. A condition that eventually interferes with other needs such as love, gregariousness and self-esteem. Moreover, the physical discomfort, determined by the clinical manifestations of the disease and treatment, was marked in units of meaning, demonstrating that this condition can interfere with the satisfaction of needs mentioned above as well as in the physical character, such as physical exercises and activities, and of body mechanics.

The obligation to perform the hemodialysis sessions two to three times a week, lasting three to four hours per session, and the physical consequences of the treatment influence the opportunities to carry out leisure activities. Patients often reported the impossibility of
travelling due to the frequency of treatment and the difficulty of performing it in another city:

It's [...] just got bad because now I can't because now I can't go to the pillar to see my son weekend ... I was going to spend the weekend with him, but now I'm not going anymore [...] (P02).

I had fun, I liked to travel, I lived in Brasilia, Sao Paulo I worked abroad. Then I was like this. I started to feel bad, then that was the fact that I came here [...] I would like to have a beer [...] I can't do any of that anymore (P03).

Leisure activity I do sometimes too. Because there are days when we are not in the mood to go. Feels more tired and not in the mood either. I always go out every month once in a while. At the time I feel normal, but then I feel tired (P05).

The hemodialysis patient faces several difficulties, one of which is the weekly commitment to the sessions, which changes the routine planning. A study conducted in Rio Grande do Sul, Brazil, showed that patients who follow treatment in this modality have a feeling of powerlessness regarding the BHN of locomotion, from the moment they lose their freedom to come and go and of their loss of control over their own routine. They refer to the loss of freedom in the execution of post-retirement or vacation plans, since as the desire to travel without worries became impossible after starting hemodialysis treatment. This deprivation of liberty is a negative factor that may interfere with the acceptance of therapy(16).

Changes in the way of life and physical limitations of patients eventually prevent the performance of leisure activities and lead patients away from social life, limiting them and interfering with quality of life(17,18). Moreover, it may occur prioritizing the satisfaction of other needs essential to survival over, and in detriment of, social activities(19). It is important to recognize that the BHN are inherent to every human being in its entirety, but the manifestation of these varies from person to person, both in how they are recognized as present or absent as well as in how they are met and satisfied. BHN are hardly dissociated and may be influenced by individuality, age, gender, culture, education, socioeconomic factors, illness and physical environment(6).

As delimited in the core of the BHN Theories(6), comprehensive care should be the basis of nursing care planning with a view to supplying not only the psychobiological domain, but aiming to address the other psychosocial and psycho-spiritual domains, although it has not been evidenced in the context units manifestations regarding the psycho-spiritual needs.

Thus, it is worth emphasizing the importance that the nursing staff, especially the nurse who is responsible for the elaboration of the care plan, is not limited to a care practice directed almost exclusively to the visible in the body, but to understand what it is beyond the biological, thus meeting the other dimensions and the integrity of being(20).

In this sense, the nurse has a relevant and ethical and legal role in the planning of nursing care, taking into account the acceptance of the restrictions imposed by the disease and in the elaboration of care, as well as the individuality of each patient, providing support, emotional and therapeutic listening, besides recognizing the need to include family members in the care process.

FINAL CONSIDERATIONS

The results converge to the process of knowing and meeting to the main BHN of chronic renal patients hemodiális which have been affected due to the CRF and the hemodialysis therapy. According to the theory of NHB, second Wanda Horta, it was possible to observe a predominantly psychobiological necessities, namely: hydration, nutrition, mobility, sleep, rest and body mechanics.

Regarding the BHNs in the psychosocial domain, it was possible to observe a predominantly psychobiological necessities, namely: hydration, nutrition, mobility, sleep, rest and body mechanics.

The possibility of inferences that are linked to the BHNs in the psycho-spiritual domain did not emerge from the context units, which we may have as health professionals neglecting attention to this field.

The identification of these affected BHNs in the context of patients with CRF on hemodialysis therapy is expected to contribute to greater attention by the nephrology nursing team, directing the care plan to measures aimed at closing the gaps in the affected BHNs,
directed at the diagnosis and the actions/nursing interventions for a comprehensive care.

As a limitation of the study, we recognize the fact that BHNs are a personal and highly intersubjective phenomenon. Therefore, it is important to undertake efforts for new research that investigates and makes it possible to contribute to the knowledge of new needs, especially regarding the psycho-spiritual domain.

**NECESSIDADES HUMANAS BÁSICAS DE PESSOAS EM HEMODIÁLISE SOB À LUZ DA TEORIA DE WANDA HORTA**

**RESUMO**

**Objetivo:** conhecer as Necesidades Humanas Básicas de pacientes renais crónicos em hemodiálise, conforme a Teoria de Wanda Horta. **Métodos:** pesquisa exploratória e descritiva de abordagem qualitativa, realizada a partir de entrevistas com 10 pacientes acompanhados em uma clínica de hemodiálise localizada em uma cidade do interior da Bahia, Brasil. Os dados foram categorizados de acordo com a técnica de Análise de Conteúdo de Bardin e discutidos sob a ótica da Teoria das Necesidades Humanas Básicas de Wanda Horta. **Resultados:** surgiram três categorias temáticas que evidenciam as necessidades humanas básicas afetadas na vida dos pacientes com insuficiência renal crónica e em tratamento com hemodiálise, destacando-se: Mudanças nutricionais e de hidratação; Alterações no sono e repouso; e Privação da liberdade, lazer e sociabilidade. **Considerações finais:** observou-se o predominio das necessidades psicobiológicas, a saber: hidratação, nutrição, locomoção, sono, repouso e mecânica corporal. Quanto às NHB psicosociais, foi possível observar aquelas relacionadas à recreação, lazer, liberdade, participação, gregária, de autoestima e autorrealização. Não emergiram NHB afetas quanto ao domínio psicoespiritual.


**NECESIDADES HUMANAS BÁSICAS DE PERSONAS EN HEMODIÁLISIS A LA LUZ DE LA TEORÍA DE WANDA HORTA**

**RESUMEN**

**Objetivo:** conocer las Necesidades Humanas Básicas de pacientes renales crónicos en hemodiálisis, según la Teoría de Wanda Horta. **Métodos:** investigación exploratoria y descriptiva de abordaje cualitativo, realizada a partir de entrevistas con 10 pacientes acompañados en una clínica de hemodiálisis ubicada en una ciudad del interior de Bahía, Brasil. Los datos fueron categorizados de acuerdo con la técnica de Análisis de Contenido de Bardin y discutidos bajo la óptica de la Teoría de las Necesidades Humanas Básicas (NHB) de Wanda Horta. **Resultados:** surgieron tres categorías temáticas que evidencian las necesidades humanas básicas afectadas en la vida de los pacientes con insuficiencia renal crónica y en tratamiento con hemodiálisis, destacándose: Cambios nutricionales y de hidratación; Alteraciones en el sueño y reposo; y Privação da liberdade, lazer e sociabilidade. **Consideraciones finales:** se observó el predominio de las necesidades psicobiológicas, a saber: hidratación, nutrición, locomoción, sueño, reposo y mecánica corporal. En cuanto a las NHB psicosociales, fue posible observar aquellas relacionadas a la recreación, al ocio, la libertad, participación, gregaria, de autoestima y autorrealización. No aparecieron NHB afectadas en cuanto al dominio psicoespiritual.

Basic human need in persons in hemodialysis in the light of Wanda Horta’s theory


Corresponding author: Christielle Lidiianne Alencar Marinho. Endereço: Rod Lomanto Júnior, s/n km 127, Senhor do Bonfim, BA, Brasil. Fone: (087)99629-6477. christiellealencar@yahoo.com.br

Submitted: 09/05/2019
Accepted: 03/12/2019