



Lifestyle profile of patients with chronic renal disease in hemodialysis

Perfil de estilo de vida de pacientes com doença renal crônica em hemodiálise

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ABSTRACT

This study aimed to evaluate the lifestyle profile of patients with chronic kidney disease undergoing hemodialysis. This was a quantitative, cross-sectional, analytical and descriptive study. Data were collected at Baixo Amazonas Regional Hospital, in the municipality of Santarém, state of Pará. The participants answered a sociodemographic, associated factors questionnaire created by the authors, and for lifestyle analysis, the Individual Lifestyle Profile Instrument was used. Seventy chronic kidney patients, predominantly male and aged between 21 and 71 years, were evaluated. The average score of the global lifestyle questionnaire was 20.8 ± 7 points, 15.7% had a negative lifestyle rating, 72.2% regular and 8.5% positive. For 24.2%, the disease has an important impact on life. There was a prevalence of regular lifestyle, as well as self-report of important impact of chronic kidney disease on the patient's life, which can potentially be mitigated by components of a health-promoting lifestyle.

Keywords: Renal dialysis. Lifestyle. Renal insufficiency, chronic. Health profile.

RESUMO

O objetivo deste estudo foi avaliar o perfil de estilo de vida de pacientes com doença renal crônica em hemodiálise. Trata-se de investigação transversal de abordagem quantitativa, do tipo analítico-descritiva. A coleta de dados foi efetivada no Hospital Regional do Baixo Amazonas, no município de Santarém, Estado do Pará. Os participantes responderam questionário sociodemográfico e de fatores associados criado pelos autores da pesquisa, e para análise do estilo de vida utilizou-se o Instrumento Perfil de Estilo de Vida Individual. Foram avaliados 70 pacientes renais crônicos prevalentemente do sexo masculino e faixa etária entre 21 e 71 anos. A pontuação média do questionário de estilo de vida global foi $20,8 \pm 7$ pontos, 15,7% apresentaram classificação do estilo de vida negativo, 72,2% regular e 8,5% positivo. Para 24,2% a doença tem um impacto importante na vida. Concluiu-se que houve prevalência de estilo de vida classificado como regular, bem como autorrelato de impacto importante da doença renal crônica sobre a vida do paciente, o que pode ser potencialmente atenuado por componentes de um estilo de vida promotor de saúde.

Palavras-chave: Diálise renal. Estilo de vida. Insuficiência renal crônica. Perfil de saúde.

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INTRODUCTION

Renal failure is the condition in which the kidneys lose the ability to perform their basic functions, being classified as acute (when it occurs suddenly and quickly) or chronic. It is indicated by the World Health Organization (WHO) in its publication of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) under codes N17-N19.^{1,2}

In 2002, the National Kidney Foundation (NKF), in its document *Kidney Disease Outcomes Quality Initiative™ (KDOQI™)*, proposed to consider abnormalities of kidney structure or function for more than three months in duration under the general name of chronic kidney disease (CKD), regardless of the conditions that caused it.^{2,3} The main difference incorporated in the concept of CKD was in the inclusion of patients with normal functional status of the kidneys.⁴ The concept was quickly recognized in the world and in Brazil.^{4,5}

According to the Brazilian Guidelines for Chronic Kidney Disease, CKD is defined as “kidney damage and progressive and irreversible loss of kidney function (glomerular, tubular and endocrine).”⁶ Further analyses showed that albuminuria also has an important effect on its outcomes, leading the working group on disease assessment and management, which is called *Kidney Disease Improving Global Outcomes (KDIGO)*, to include albuminuria in the revised classification of 2012.⁷

Currently the best available indicator of global renal function is the glomerular filtration rate (GFR), which is equal to the total amount of liquid filtered through all functional nephrons per unit of time.⁸ When $GFR < 15\text{mL/minute by } 1.73\text{ m}$, the so-called renal function failure (FRF) is established, that is, the fifth and most advanced stage of progressive functional loss observed in CKD, also known as end-stage renal disease (ESRD).⁵ Given this situation, options for patients are renal replacement therapies (RRT) as dialysis or kidney transplantation, or conservative treatment (also called palliative or non-dialysis).⁸

It is noteworthy that ESRD is a complex and progressive condition, which results from infectious diseases, such as malaria, schistosomiasis, HIV and hepatitis, and also from the use of nephrotoxic herbal medicines, which contain aristolochic acid.^{7,9} CKD can be a risk multiplier for mortality associated with infectious disease, especially in developing countries, which face comparatively higher infectious disease loads.⁹

However, it has been indicated that the increase in CKD and its progression to ESRD worldwide are mainly a result of the growth of the global pandemic of other Non-Communicable Chronic Diseases (NCDs), such as diabetes mellitus (DM) and high blood pressure (AH), considered as modifiable risk factors for several diseases.^{9,10} Added to this scenario, the contribution of lifestyle components (LS) in the worsening or attenuation of the CKD patient's health status, such as nutrition, physical activity and consumption of tobacco and alcohol.¹¹

Classically, LS is defined by the WHO as “a set of habits and customs that are influenced, modified, encouraged or inhibited by the prolonged process of socialization [...] including the use of substances such as alcohol, tobacco, tea or coffee, dietary and exercise habits”.¹² Similarly, its concept is associated with the set of habitual actions that reflect the attitudes, values and opportunities in the subjects' lives.¹³

In relation to the development and management of CKD, LS plays a key role. Sedentary LS, physical inactivity, diet and obesity are all contributors to their development and progression, as well as to associated comorbidities, such as type 2 diabetes and cardiovascular disease. Intervention in LS for risk factors common to NCDs is important in preventing CKD. Several priority measures have been set to deal with the global NCD crisis, including accelerated tobacco control, reduced salt intake, encouraging healthy diets and physical activity, and reducing harmful alcohol consumption.¹⁴

Although the analysis of the disease burden in Brazil from 1990 to 2010 showed a 31% increase in CKD¹⁵, there seems to be few studies in Brazil related

to related LS components and health promoters, considered as protective and potentially mitigating factors.¹⁴ Therefore, this study aimed to evaluate the LS profile of patients with chronic kidney disease undergoing hemodialysis

METHOD

This was an exploratory, quantitative, cross-sectional, analytical and descriptive study. Adults

with CKD of both sexes, over 18 years old, undergoing hemodialysis at the Baixo Amazonas Regional Hospital, Doutor Waldemar Pensa (HRBA), city of Santarém (state of Pará), and who signed the Informed Consent Form (IFC). Patients with CKD undergoing hemodialysis and chemotherapy and/or radiotherapy and those enrolled in the hemodialysis program for less than one year were not included in the study. Ninety-six patients were evaluated, of which 70 performed all the evaluations, as shown in Figure 1.

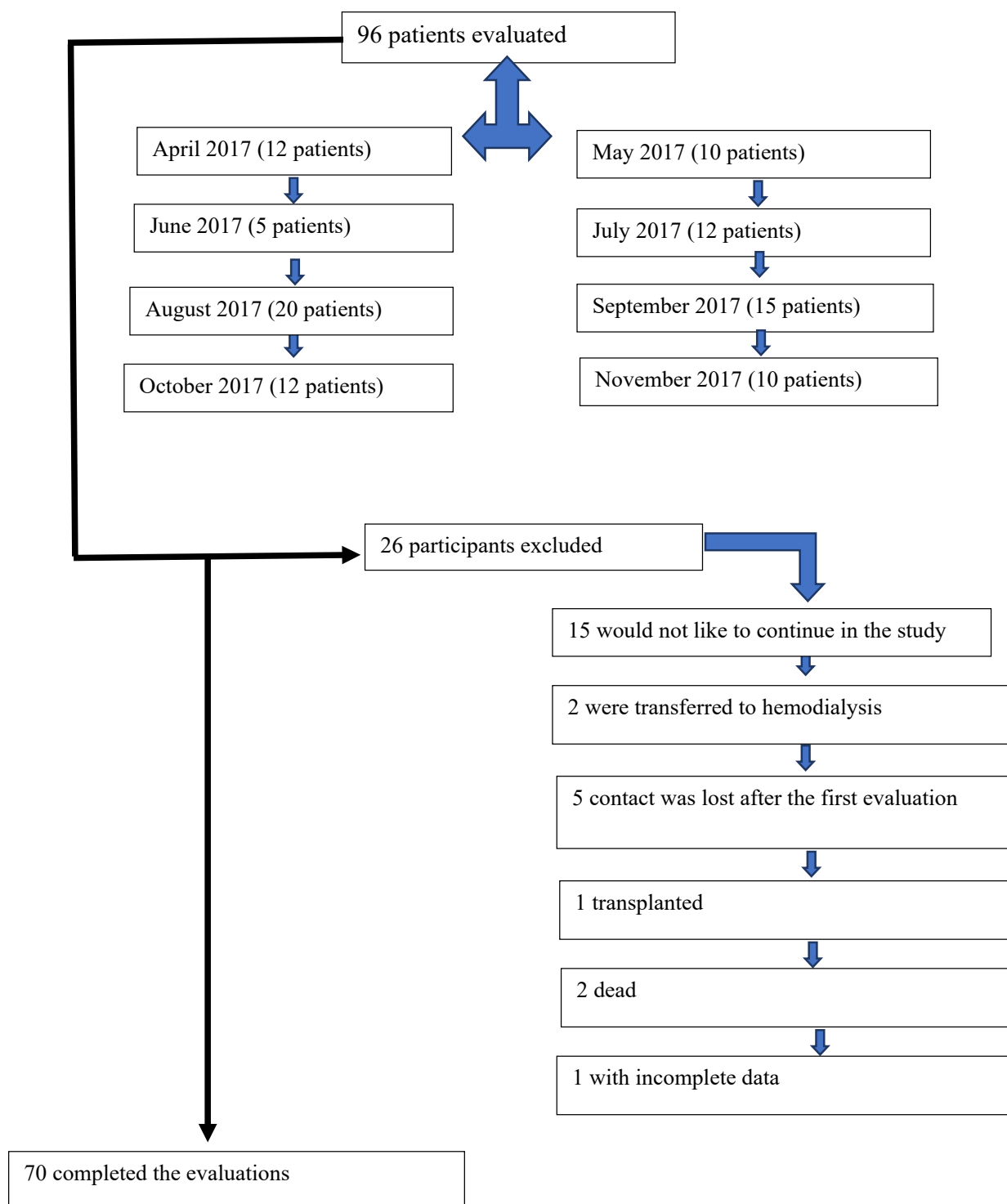


Figure 1. Flowchart of patient selection.

Source: Research data.

As the third most populous municipality in the state, Santarém is the main urban, financial, commercial and cultural center in western Pará, and its metropolitan region is the second largest urban cluster in Pará. It belongs to the Lower Amazon mesoregion and the microregion of the same name and is located at the confluence of the Tapajós and Amazon rivers. It is located about 800 km from the metropolises of the Amazon (Manaus and Belém) and became known poetically as “Pearl of the Tapajós”.¹⁶

Conducted by trained researchers, data were collected from Monday to Friday, in the morning and afternoon shifts, in the hemodialysis rooms of the HRBA, during the sessions of each patient. After the objective and procedures of the research had been explained and after signing the informed consent form, the sociodemographic and associated factors questionnaire created by the research authors and the Individual Lifestyle Profile (ILP) instrument¹³ were completed, respecting the ethical and technical conditions of the sector.

In this questionnaire, aimed at individual evaluation and characterization of the sample, the following were distinguished: sex, ethnicity, age, marital status, education, hours worked, average income, lifestyle (smoking, drinking and physical activity), sleep, visits to the physicians and stress. Details on conditions related to chronic renal failure and hemodialysis were also characterized.

ILP measures LS based on the components nutrition, physical activity, preventive behavior, social relationships and stress control. Its Brazilian version is a self-administered instrument, which considers the behavior of individuals in the last month and whose results allow to determine the association between LS and health. The questionnaire contains 15 questions, and for each one there is a possibility of zero to 3 points, so a total of 45 points can be made (9 possible points are possible for each component). If the interviewee obtained up to 16 points, it was considered negative LS; 17 to 30 points, compatible with a regular LS; and above 30 points, good LS.¹³

The sample was calculated taking into account 0.05 alpha with 80% statistical power ($\alpha = 0.20$) and that there are 3 points of difference by the individual LS profile questionnaire between subjects who have or not LS considered healthy. The difference of 3 points was chosen because it is the least clinically important for this measure. This consideration was made based on the assumption that the individual with the best LS has less time undergoing hemodialysis compared to those with unhealthy lifestyle habits. We considered sample variation of 5%, standard deviation of 5.4 units, and difference of 3% to be detected. To answer the objective, it was necessary to evaluate 70 individuals.

The Kolmogorov-Smirnov normality test was applied to assess the distribution of data in relation to normality. Data are presented as mean and standard deviation. The t-test was applied to compare differences between variables when the sample was distributed into two groups. When it was necessary to analyze three quantitative variables, analysis of variance (ANOVA) was used with Bonferroni post-test. Differences between proportions were analyzed using the chi-square test. Statistical significance was considered if $p < 0.05$.

In compliance with Resolution 510/2016 of the National Health Council¹⁷, data collection and field procedures were only initiated after a favorable opinion from the Research Ethics Committee of the Adventist University Center of São Paulo (UNASP), Campus São Paulo, under the number 1.815.820/2016.

RESULTS

The 70 participants in this study were undergoing hemodialysis at HRBA and were over 18 years old; 41 (58.5%) lived in Santarém, and 29 (41.4%) came from neighboring cities and, because they needed to undergo treatment three times a week, were forced to move. As for sex, 38 (54.2%) individuals were men, and the age group was between 21 and

71 years old, 37 (52.8%) were married, 12 (17.1%) lived in a stable union, 15 (21.4%) were single, 6 (8.5%) separated, and one (1.4 %) widowed. Sixty-two subjects (88.5%) lived with the family. Only eight (11.4%) said they had no religion. Of the total number of participants, 47 (67.1%) received the Continued Illness Benefit (CIB).

Regarding health conditions, ten (14.2%) people had been hospitalized in the last month, and 23 (32.8%) practiced some type of physical activity. With respect to the presence of chronic diseases (in

addition to CKD), 50 (71.4%) reported having some type of diagnosis, with emphasis on AH and DM, and seven (10%), heart disease. Performing physical activity, eating fruits and vegetables and sleeping before 22 hours were the main factors denied by patients. As for the profile according to sex, women, on average, used a higher number of medicines than men, just as there was a greater number of women receiving CIB. Table 1 lists the demographic and general health information of the studied sample.

Table 1. Demographic characteristics and health status variables of patients with CKD undergoing hemodialysis at HRBA

Variables	Values
Age (years)	50±15.2
BMI (kg/m ²)	23.6±3.8
Men (%)	68
Women (%)	32
Time undergoing hemodialysis (months)	52±30.0
Medication in use	3.9±2.2
Self-rated health (peers)	
Much worse (%)	0
Worse (%)	10
Equal (%)	23
Better (%)	33
Much better (%)	3
Self-rated health (last year)	
Much worse (%)	3
Worse (%)	14
Equal (%)	24
Better (%)	24
Much better (%)	4

Source: Research data.

As for the time undergoing hemodialysis, there were no statistically significant differences between patients younger than 45 months and those older than 45 months. Data for this profile are listed in Table 2.

Table 2. Profile characterization according to the time undergoing hemodialysis

Variables	< 45 months n = 35	> 45 months n = 35	p (t-test)
Age (years)	52.7±15.4	49.7±13.7	0.35
Illness time (months)	26.9 ±9.71	52.8±24.3	<0.0001
Number of medicines	4.3±2.4	4.4±1.9	0.06
Diabetes (%)	37.5	34.3	0.76
Hypertension (%)	65	68.7	0.76
Hospitalizations (%)	17	9.3	0.14
Work (%)	8.5	0	-
Recipients – CIB (%)	68.5	75	0.34
Retirees (%)	17.1	15	0.84
No benefits (%)	5.9	10	0.43

Source: Research data.

The LS was assessed for 70 chronic renal patients undergoing hemodialysis, it was found that they had an LS that needed changes. The total score obtained in the ILP questionnaire was 20 points, out of a possible total of 45 points; 15.7% had very

negative LS, 74.2% regular LS, and 8.5 positive LS. Most presented a regular LS for both the general and the components. However, the minority had a positive LS, as listed in Table 3.

Table 3. Percentage of negative, regular and positive lifestyle for 70 patients with CKD undergoing hemodialysis

Variables	Negative lifestyle	Regular lifestyle	Positive lifestyle
Total ILP (%)	15.7	74.2	8.5
Nutrition (%)	30	50	20
Physical activity (%)	74.2	17.1	8.5
Preventive behavior (%)	32.8	52.8	14.2
Social relationship (%)	20	51.4	28.5
Stress control (%)	37.1	45.7	12.8

Source: Research data.

LS was no different for patients who self-declared that their health was worse, equal, better or much better in relation to individuals of their own age, as presented in Table 4.

Table 4. Lifestyle analysis for patients according to self-rated health status in relation to individuals of their age

Variables	Total ILP	Nutrition	Physicao activity	Preventive behavior	Relationships	Stress control	Time undergoing hemodialysis
Worse (n = 35)	<u>17.7±3.8</u>	<u>4.5±1.4</u>	<u>1.5±1.7</u>	<u>4.5±1.8</u>	<u>3.7±1.7</u>	<u>3.2±1.7</u>	<u>59.6</u>
Equal (n = 20)	<u>22.7±7.2</u>	<u>4.7±2.3</u>	<u>2.4±3.1</u>	<u>4.9±2.4</u>	<u>5.8±2.3</u>	<u>4.5±2.4</u>	<u>53.1±29.2</u>
Better (n = 10)	<u>19.6±6.7</u>	<u>5.0±2.0</u>	<u>1.8±2.4</u>	<u>4.3±2.0</u>	<u>4.9±2.2</u>	<u>3.5±1.9</u>	<u>49.10±32</u>
Much better (n = 5)	<u>21.2±6.1</u>	<u>5.4±2.0</u>	<u>1.2±1.0</u>	<u>4.6±1.9</u>	<u>5.2±1.7</u>	<u>4.2±2.1</u>	<u>57.6±26.0</u>
p (ANOVA)	0.16	0.24	0.35	0.49	0.11	0.25	0.45

Source: Research data.

In the LS analysis, according to the self-reported health status in relation to the previous year, individuals who said their health was much worse had significantly worse LS compared to those who reported that their health was worse, equal or better

for the following components: general sum ($p = 0.008$), preventive behavior ($p = 0.008$) and stress control ($p = 0.032$). This finding can be seen in Table 5.

Table 5. Lifestyle analysis for patients according to self-rated health status compared to last year

Variables	Total ILP	Nutrition	Physicao activity	Preventive behavior	Relationships	Stress control	Time undergoing hemodialysis
Worse (n = 42)	21.4±5.8	5.5±2.0	1.5±2.5	4±2.3	5.6±2.4	4.7±1.8	48.5±27
Equal (n = 20)	21.8±6.7	4.5±1.8	2.5±2.6	5.8±2.0	5.2±2.1	3.4±2.0	52.2±31.2
Better (n = 5)	20.8±6.8	4.9±2.3	2±2.6	4.2±1.8	5.3±2.1	4.4±2.3	55.4±29.8
Much worse (n = 3)	10.3±1.8*	4.6±0.41	0±0	1.3±0.41*	2±0.71*	1.6±0.82*	36.3±17.7
p (ANOVA)	0.008	0.427	0.110	0.007	0.008	0.032	0.153

Source: Research data.

* p-value ≤ 0.05 .

When correlating the time during which the patient underwent hemodialysis and the LS, a significant correlation was detected between the LS and the general sum of the ILP, as well as the nutrition

and social relationship components. This means that, over the years, individuals were able to improve their LS, as presented in Table 6.

Table 6. Correlation between the time the patient undergoes hemodialysis and the lifestyle

Variable	Pearson r	p-value
Time undergoing hemodialysis x total ILP	0.02	0.025
Time undergoing hemodialysis x nutrition	0.25	0.0014
Time undergoing hemodialysis x physical activity	0.02	0.58
Time undergoing hemodialysis x preventive behavior	0.03	0.45
Time undergoing hemodialysis x social relationships	0.28	0.004
Time undergoing hemodialysis x stress control	0.07	0.47

Source: Research data.

DISCUSSION

The main objective of this study was to assess the health profile of chronic renal patients undergoing hemodialysis, as well as to know their lifestyle profile. Among the main results, the predominance of men stands out. Most individuals self-declared to be hypertensive and took about four different medications daily, in addition to undergoing hemodialysis for over 2.5 years. Participants had regular LS and needed significant improvements. There was also a self-report that the disease had a strong impact on their lives, since most were unable to work, in addition to being forced to leave their city to undergo hemodialysis, with hospitalization during the last year.

Regarding the predominance of men, the results of the present study are similar to those found by Santos¹⁸, whose sample of 107 people consisted predominantly of men. However, Chadban et al.¹⁹ found that the prevalence of chronic kidney patients in Australia was equal for men and women. These differences can be related to regional or demographic discrepancies. Chadban et al.¹⁹ and Coresh et al.²⁰ also show that the prevalence of CKD increases with age; in this sense, in the sample of the present study there was a prevalence of individuals in middle age.

The relationship between health and work is of paramount importance with regard to human productivity, and this is a concern for patients with chronic disease, especially those undergoing

hemodialysis, since they are conditioned to a “machine”. For Carreira et al.²¹, most individuals with CKD do not engage in paid work, and when they do, they count on the help and understanding of the employer. CKD and its treatment are not a direct and absolute impediment to the performance of professional activity, but they have significant limitations. It is considered necessary for health professionals to ally themselves with family members and society in the search for support so that these individuals can be inserted into the labor market when they so wish and when conditions exist.

Following this reasoning, Souto²² emphasizes that work is understood as any effort that man, in the exercise of physical and mental capacity, performs to achieve his goals. Everyone has the right to decent work in order to fulfill himself and guarantee his livelihood, as well as those for whom he is responsible. However, he/she can only cope with his/her professional duties if he/she has clinical, physical, mental and social conditions, which can become an obstacle for chronic renal patients.

Most of the sample in the present study received the CIB, which is limited to a minimum wage for people with disabilities and elderly people aged 65 and over who prove they do not have an income above a quarter of a minimum wage.²³ According to Charter of Rights of Health Users, Ordinance GM 1820, of August 13, 2009, chronic kidney patients are entitled to receive free, high-cost drugs for continuous treatment.²³

In the present study, more than a third of the participants declared to be diabetic, as well as a prevalent proportion of hypertensive individuals. For Coresh et al.²⁰, the main reason for the increase in the prevalence of individuals undergoing hemodialysis is related to the growth in the number of people with AH and DM.

The increase in chronic diseases is a known fact and has generated many discussions today. With an apparent and possible interaction between these chronic conditions, such as CKD, which, possibly due to glomerular hyperfiltration (supranormal elevation of GFR), has a prevalence in patients with type 2 diabetes of 20% to 40%.^{24,25} Although the role of this finding in the pathogenesis of chronic renal failure is not completely understood, it is suggested that hyperfiltration would cause direct damage to the capillary wall, triggering an increase in the passage of macromolecules and their deposit in the mesangium. This deposit, subsequently, would cause glomerular capillary closure, through glomerulosclerosis. The least affected capillaries would undergo compensatory hyperfiltration, closing the circle that would favor progressive glomerular damage.²⁶

In the study by Barros et al.²⁷, there was adherence to pharmacological treatment among patients undergoing hemodialysis, which consists of several medications for daily use, in order to stabilize the disease and prevent the appearance of complications. However, Figueiredo et al.²⁸ emphasize that factors such as number of drugs, adverse reactions (intolerance), need for fasting periods, disagreement between drugs, difficulty in understanding the objectives of therapy and inappropriate use of drugs contribute to complete non-adherence to therapy. In the present study, there was the use of an average number of drugs with a slightly higher proportion among women compared to men. Several authors talk about adherence, according to the characteristics of the patient, the treatment regimen, the bonds with professionals, the social insertion and the severity of the disease.^{29,30}

In work carried out on the LS of health professionals in Santarém³¹ using the Individual Lifestyle Profile instrument, there was an LS classified as regular, but with a better overall LS than that found in the present study. This difference was possibly due to the imposition of the disease on LS. It is noteworthy that in the present study it was seen that the participants' LS was regular, requiring many changes. Similarly, research conducted with chronic kidney patients in southern Brazil with LS assessment using a questionnaire created by the authors indicated prevalence among those who did not practice physical activity, did not have leisure activities, ate sweets and fatty foods, almost half received help to perform some daily task and self-report that practically did not consume alcohol or smoke³².

In the present investigation, regarding the nutrition component of the questionnaire that evaluates the LS, there was a prevalence of those classified as "regular". It is important to emphasize that the chronic kidney patient undergoing hemodialysis needs to follow a diet, avoiding certain types of fruit and vegetables, as well as the amounts consumed. It is possible that these limitations have interfered with the LS assessed in the nutritional component. Food and water restrictions are essential for the efficiency of treatment and the quality of life of the patient, but they can be a source of frustration for changing day-to-day habits and establishing various deprivations, compromising LS.³³

Regarding the physical activity, the present study pointed out that there was a prevalence of those classified as "negative". There are recommendations for people undergoing hemodialysis to stretch out and some kind of light physical activity. Pilot study developed with chronic kidney patients shows the feasibility of muscle strength training and aerobic exercises, which assess the impact on heart strength, muscle strength and their functional performance. Even though not everyone can perform this activity, there is an improvement in quality of life and in physical and occupational rehabilitation, constituting therapy with positive results.³⁴

The third component of the LS assessed in the present study was preventive behavior, which also presented a result classified as “regular” in just over half of the participants. According to Nascimento et al.³⁵, there is effective adherence to the treatment of CRF, which provides the individual with a hemodialysis session with less risk of complications and better maintenance of physical, social and psychological well-being. CKD patients are generally able to meet preventive treatment recommendations. Those who took part in this study took therapy seriously and sought to know the symptoms of changes, making it possible to identify when something was abnormal with their blood pressure and cholesterol level. This was verified by the researchers during the procedures, and these characteristics probably contributed to regular LS measured by the preventive component.

The fourth component - social relationship - proved to be regular for almost half of the patients, suggesting necessary adjustments in the LS. Many feel excluded and abandoned by their own family and/or community to which they belonged - some, due to the need to move to another city, and others, due to impaired relationships with people around them, either through empathy gaps or for reasons related to psychological factors of those involved, sometimes they end up distancing themselves.^{8,14} Sisdelli et al.³⁶ report feelings that are part of the daily lives of these people: anguish, insecurity, panic, depression, discouragement, feeling of being tied to the machine, fear associated with the limitations resulting from these situations and their repercussions and changes in the way of being and living.

The fifth and last component of the ILP questionnaire is stress control, the result of which was shown to be predominantly “regular”; it was possible to verify that the participants of the present study look for such control. According to Bertolin et al.³⁷, ways of coping focused on the problem are more widely used, and depression has been positively correlated with modes of coping focused on emotion for people undergoing hemodialysis. The identification of such modes is desirable to plan the

individualized treatment that provides control of the stressors inherent to the disease and to hemodialysis, subsidizing a better adaptation of the chronic kidney patient to the therapeutic regimen.

The hemodialysis room has a cold climate, but it is full of human warmth, and patients become friends. Going to the hospital often turns into a walk; the loud jokes and smiles are heard when one approaches the door: they are people fighting for life, full of hope. Even with this environment, the disease impacts their lives and their LS, producing a high number of hospitalizations.¹⁴

An early diagnosis of kidney disease is of paramount importance, because, when identified at an advanced stage, dialysis treatment is needed. According to Silva et al.³⁸, when CRF is discovered, patients go through a moment of rejection/acceptance in face of the need for dialysis treatment and may present different reactions and ways of acting during the coping process, because, at the same time that guarantees life, makes the person dependent on technology. Kimmel et al.³⁹ emphasize that the factors that can influence the life of chronic renal patients can be divided into two groups: fixed, which cannot be modified by the patient or physician and which include age, concomitant disease, sex and race; and variables that can be changed and that include depression, social support and marital status.

Among the limitations of this study, the investigation was carried out in a single hospital unit, restricting the conclusions. Among the strengths, it is worth mentioning the evaluation of the LS by a questionnaire with evidence of validity in different populations¹³, providing an analysis of the LS with better conditions for comparison in future studies.

Hemodialysis patient suffers impacts such as stress, professional difficulties, drop in monthly income, impaired sexual capacity or interest, fear of dying, changes in body image, dietary and water restrictions. In the present study, the engagement of the entire health team is noticeable so that the moment of hemodialysis is safe and quiet; each professional is responsible for a number of patients, which creates

an emotional relationship for both parties, as each technician perceives when the person is not well or was absent on the day of the procedure, enhancing the effectiveness of the process.

There is a consensus that educational programs to encourage health-promoting habits can be potential attenuators of negative conditions imposed by treatment, favoring the quality of life of chronic renal patients undergoing hemodialysis.¹⁴ Clinical implications of the present study draw attention to people undergoing hemodialysis, which are affected by the disease, without a specific program to their lifestyle. These programs should include health education strategies, implemented to reduce the impact of CKD, as well as promoting the health of this population and their families.

CONCLUSION

The profile of chronic kidney patients undergoing hemodialysis is predominantly male, middle age group. Women consumed more medicines and were the ones who received the most social benefits from the assistance. There was a prevalence of lifestyle classified as regular in the global lifestyle, and negative in the physical activity domain, as well as self-report of an important impact of CKD on the patient's life and the way he/she lives, which can potentially be mitigated by the implementation of initiatives and interventions that promote a healthy lifestyle.

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