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ORIGINAL ARTICLE

ACCESSIBILITY TO TREATMENT AND HEALTH STATUS OF HEMODIALYTIC PATIENTS

ACESSIBILIDADE AO TRATAMENTO E ESTADO DE SAÚDE DE PACIENTES HEMODIALÍTICOS ACCESIBILIDAD AL TRATAMIENTO Y ESTADO DE SALUD DE PACIENTES HEMODIALÍTICOS

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ABSTRACT

Objective: to identify accessibility to treatment and health status of hemodialysis patients. **Method:** quantitative, cross - sectional, descriptive study performed at a nephrology clinic. Data were collected through interviews, analyzed using descriptive statistics and presented in tables of absolute and relative frequency distribution. **Results:** of the 151 patients, 49.6% were elderly; 54.3% have low schooling; 66.2% have a monthly income of up to two minimum wages; 93.4% have their treatment financed by the Unified Health System, however, 45.7% refer to treatment expenses; 66.9% mention noncompliance with conservative treatment; 84.1% received pre-dialysis care; 84.1% declare their self-perception of health as good and half of them are accompanied by primary health care (50.3%). **Conclusion:** it is necessary to strengthen the social support network and health care, since the condition of vulnerability characterized elucidates new challenges in the development of actions in health promotion, prevention of complications and in the accessibility and organization of the flow of care. **Descritores:** Health Services Accessibility; Primary Health Care; Comprehensive Health Care; Renal Dialysis; Renal Insufficiency Chronic; Public Health.

RESUMO

Objetivo: identificar a acessibilidade ao tratamento e o estado de saúde de pacientes em hemodiálise. **Método:** estudo quantitativo, transversal, descritivo, realizado em uma clínica de nefrologia. Os dados foram coletados por meio de entrevista, analisados utilizando estatística descritiva e apresentados em tabelas de distribuição de frequência absoluta e relativa. **Resultados:** dos 151 pacientes, 49,6% são idosos; 54,3% têm baixa escolaridade; 66,2% possuem renda mensal de até dois salários mínimos; 93,4% têm seu tratamento financiando pelo Sistema Único de Saúde, porém, 45,7% referem gastos com tratamento; 66,9% mencionam a inobservância de tratamento conservador; 84,1% receberam cuidados pré-diálise; 84,1% declaram a autopercepção de saúde como boa e metade deles é acompanhada pela atenção primária à saúde (50,3%). **Conclusão:** necessita-se do fortalecimento da rede de apoio social e de atenção à saúde, uma vez que a condição de vulnerabilidade caracterizada elucida novos desafios no desenvolvimento de ações na promoção à saúde, prevenção de complicações e na acessibilidade e organização do fluxo de atendimento. **Descritores:** Acesso aos Serviços de Saúde; Atenção Primária à Saúde; Assistência Integral à Saúde; Diálise Renal; Insuficiência Renal Crônica; Saúde Pública.

RESUMEN

Objetivo: identificar la accesibilidad al tratamiento y el estado de salud de los pacientes en hemodiálisis. **Método:** estudio cuantitativo, transversal, descriptivo, realizado en una clínica de nefrología. Los datos fueron recolectados por medio de encuestas, analizados utilizando estadística descriptiva y presentados en tablas de distribución de frecuencia absoluta y relativa. **Resultados:** de los 151 pacientes, el 49,6% son ancianos; 54,3% tiene baja escolaridad; El 66,2% poseen renta mensuales de hasta dos salarios mínimos; 93,4% tiene su tratamiento financiando por el Sistema Único de Salud, pero el, 45,7% refiere gastos con tratamiento; 66,9% mencionan la inobservancia de tratamiento conservador; el 84,1% recibieron atención pre-diálisis; El 84,1% declaran la auto percepción de salud como buena; y la mitad de ellos son acompañados por la atención primaria a la salud (50,3%). **Conclusión:** se requiere del fortalecimiento de la red de apoyo social y de atención a la salud, una vez que la condición de vulnerabilidad caracterizada elucida nuevos desafíos en el desarrollo de acciones en la promoción a la salud, prevención de complicaciones y en la accesibilidad y organización del flujo de atención. **Descritores:** Acceso a los Servicios de Salud; Atención Primaria a la Salud; Atención Integral de Salud; Diálisis Renal; Insuficiencia Renal Crónica; Salud Pública.

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INTRODUCTION

Chronic kidney disease is an important public health problem due to the high prevalence of morbidity and mortality. It is characterized by progressive loss of renal function, for more than three months, in which the body does not maintain metabolic and hydroelectrolytic balance. As it progresses to a glomerular filtration rate $<15 \text{ mL} / \text{min} / 1.73\text{m}^2$ (five dialytic stage), renal replacement therapy for life preservation is initiated regularly.¹

For the purpose of organizing holistic care to patients with chronic kidney disease, treatment is classified as conservative (stages one to three), pre-dialysis (stages four and five ND - non-dialytic) and renal replacement therapy (stage five D- dialysis).² The number of patients with chronic renal disease at the dialysis stage - initiating renal replacement therapy - is increasing worldwide, resulting in substantial economic and social costs, consuming important health budgets in many countries.³ the total estimated number of patients on dialysis was 112,004 and national estimates in the dialysis treatment of prevalence rates are 552 and the incidence of 180 patients per million of the global population.⁴

Among hemodialysis therapies, hemodialysis is the most common and most widely used treatment method in Brazil, with a prevalence of 91.4% in 2014.³ In 2008 and 2011, hemodialysis procedures were performed in the country, of US \$ 723,841,688.56 and US \$ 970,354,599.98, respectively, with an estimated average annual cost per patient of US \$ 7,932.52 in 2008 and US \$ 9,112.75 in 2011.⁵

Together with the economic impact, chronic kidney disease and hemodialysis provoke a succession of situations that affect the physical and psychological aspects, as well as the personal, family and social repercussions of the patient.⁶⁻⁸ In this context, a treatment routine is imposed that modifies their way of life impacting on the perception of health and disease management.⁷⁻⁹

In this regard, the importance of accessibility to conservative treatment, pre-dialysis and renal replacement therapy, and the care offered by the professional health team during these different treatment segments are highlighted.⁶ During the HD session, the Nursing professional has an important role, as it involves, in addition to the execution of techniques / procedures, the development of educational actions that qualify care and stimulate the self-care of

these patients at home.⁶ Additionally, the survey of sociodemographic and clinical characteristics, of the patient until leaving the hemodialysis session, allows the planning of individualized care that meet the real needs of these individuals.⁶⁻⁷

Against this backdrop, it is necessary to support public health policies so that professionals, especially nurses, who provide these care, can stimulate the capacities of these individuals by contributing to a positive adaptation to the new lifestyle, control of its treatment and improve health outcomes.⁹ Therefore, it is essential to unveil influential elements in the care process to the chronic renal patient.

OBJECTIVE

- To identify accessibility to treatment and health status of hemodialysis patients.

METHOD

This is a quantitative, cross-sectional, descriptive study in a clinic specialized in nephrology that treats patients from the northwest region of the State of Paraná (Unified Health System and contracted).

The following inclusion criteria were chosen: patients with chronic kidney disease at the five hemodialytic stage undergoing treatment at the referred clinic, of both sexes and over the age of 18 years. In turn, patients in psychiatric treatment with cognitive problems or impaired understanding of the study, pregnant and transplanted women constituted exclusion criteria.

Initially, there were 188 individuals enrolled at the study site on hemodialysis. Of these, 13 were excluded (seven in psychiatric treatment, with cognitive problems or impairment of study comprehension and three transplanted patients). Thus, the sample size was obtained through a simple sample calculation considering the 175 eligible individuals, significance level (α) of 0.05, statistical power of the test of 95% and possibility of sample loss of 20%, which resulted in a sample of 156 individuals. After the invitation to participate in the study, five subjects refused, which resulted in a final sample of 151 subjects.

The data was collected from the elaboration of a questionnaire semi-structured by the authors with 20 questions that addressed the socioeconomic characteristics, the financing, the accessibility and the state of health. Data were collected through interviews during the hemodialysis sessions, with an average duration of 25 minutes, in the

months of July and August of 2016. In addition to the necessary information, the patients' charts were accessed after the interview. After recording the data in a spreadsheet in Microsoft Excel 2013, we performed the analysis using descriptive statistics performed in the Statistical Package for Social Sciences (SPSS) ®, version 2.0, and presented the results in distribution tables of absolute and relative frequency.

The study was approved in the Committee of Ethics in Research under the opinion nº. 1,624,927 in the year 2016 and this was conducted in accordance with the recommendations of Resolution No. 510 of

2016 of the National Health Council / Ministry of Health.

RESULTS

Of the 151 patients in the study, 63.6% were male; 45.7% white; 49.6% over 60 years of age; 61.6% were born in the southern region; 55.6% are married; 54.3% have incomplete primary education; 66.2% earn up to two minimum wages; 43.7% are retired and 35.8% are receiving sickness benefits.

Table 1 shows the characteristics related to financing and accessibility to treatment and follow-up of the hemodialysis patient.

Table 1. Financing and accessibility to treatment and follow-up of the hemodialysis patient, according to financing, transportation, conservative treatment, pre-dialysis treatment and follow-up by the Basic Health Unit Paranavaí (PR), Brazil, 2016. (N = 151)

Variables	Patients (n=151)	
	N	%
Funded Treatment		
Unified Health System	141	93.4
Health Plans	10	6.6
Current Expenses Related to the Treatment of Illness		
No	82	54.3
Yes	69	45.7
With Medications	63	41.7
Accommodation and fuel	6	4.0
Transportation to the dialysis clinic		
Own car	36	23.8
Transportation provided by the municipality	110	72.8
Third Party Ride	3	2.0
Walking	2	1.3
This transport allows companions for consultations and treatment practices		
No	117	77.5
Sometimes	8	5.3
Yes	26	17.2
Conservative treatment		
No	103	68.2
Yes	48	31.8
Pre-dialysis treatment		
No	24	15.9
Yes	127	84.1
The Basic Health Unit of reference monitors its treatment		
No	32	21.2
Yes	76	50.3
Sometimes	43	28.5

Regarding the time of hemodialysis, 82% of individuals reported having started more than one year ago. Table 2 shows characteristics

related to the individual's perception of health status and effects of dialysis treatment.

Table 2. Perception of health status and dialysis according to self-perception of health, pain, and effects of chronic kidney disease. Paranavaí (PR), Brazil, 2016. (N = 151)

Variables	Patients (n=151)	
	n	%
Self-perception of health		
Good	127	84.1
Bad	24	15.9
Have you had any problems with your work or usual activities due to your physical health in the last 60 days		
No	118	78.1
Yes	33	21.9
Problems with their physical or emotional health interfered with social activities		
No	78	51.7
Yes	73	48.3
Do you feel physical pain		
No	69	45.7
Yes	82	54.3
When you feel physical pain disrupts your routine		
No	60	39.7
Yes	49	32.5
Do not know	42	27.8
Perception regarding chronic kidney disease and dialysis treatment		
Positive	107	70.9
Negative	44	29.1
With regard to the effects of chronic kidney disease and dialysis treatment, at which points the disease bothers you		
Changes in daily habits (diet, water and work)	119	78.8
Difficulty traveling	6	4.0
Need for medical services and other health professionals	7	4.6
Exposure to stress and concerns about disease and treatment	3	2.0
Do not know	16	10.6

DISCUSSION

The number of people with chronic kidney disease has been increasing gradually in Brazil and in the world and may be related to the increase in the life expectancy of the population, the incidence and prevalence of chronic diseases such as hypertension, diabetes mellitus and cardiovascular diseases, which are pointed out as the major underlying diseases of patients with chronic kidney disease.^{1,3-4}

The socio-demographic profile identified in this study corroborates data evidenced in other scientific studies,^{8,10-1} however, it is emphasized that factors such as the predominance of the elderly, male gender, low educational level and source of low income linked to retirement and sickness accentuate the vulnerability to which these individuals are already exposed because of chronic kidney disease. Thus, it is necessary to strengthen the social support network, between family members and, in particular, with the different services of the health care network, since most of the subjects in treatment use transportation provided by several municipalities in the region. As a result, there is a limitation on the attendant's participation during this process.

The importance of the financing of the Unified Health System in the costs of the treatment of hemodialysis due to the limitation of patients with chronic kidney disease in maintaining their professional activity is also highlighted by the vulnerability profile. It should be pointed out that the difficult insertion in the labor market after the start of treatment may be related to the difficulties reported by patients of alterations in the image, time spent on hemodialysis and reduced physical conditions for the performance of work activities.¹² Meanwhile, the study shows a significant number of individuals who remain active in the labor market but who survive with up to two minimum wages. In addition, almost half of the participants reported drug costs, which may occur due to some coexisting comorbidities and specificities of the clinical condition related to the organism's resistance to the drug offered by the network.

When considering integral care that is fundamental to human care, it is necessary to highlight the importance of accessibility to conservative and pre-dialysis treatment, which aims to increase the survival of patients who need this therapy, as well as to obtain adequate clinical parameters.¹³ In this study, most had pre-dialysis care for more than six

months and was instructed on all modalities of renal replacement therapy. However, in many of them, conservative treatment was unobservable, which shows a lack of access to health and prevention and management of chronic conditions, especially related to the modifiable elements that are essential to postpone the progression of the disease.

In this scenario, Nursing is very present in the follow-up of these individuals in order to control the clinical manifestations in the pre-dialytic phase and provide patients and their families with explanations about the dialytic modalities, complications and prevention of modifiable risk factors, control of comorbidities reduction of risk behaviors related to diet, sedentary lifestyle, alcoholism and smoking. This conduct favors clarification regarding possible injuries, which potentiates positive feelings of coping with the disease and treatment.⁹

Faced with the complexity of care for the individual with chronic illness, the proper and integrated functioning of the health care network is essential. Thus, the monitoring of all patients by the Primary Care team favors the organization of the demand in relation to the real needs. In addition, in the case of chronic kidney disease, it makes possible the referral at the appropriate time for the nephrologist, as well as the counter-reference to the Basic Health Unit with a view to maintaining treatment at home, reducing recurrent hospitalizations and preventing complications that can lead to mortality.²

Although the majority of the participants consider their health self-perception to be good, they present positive feelings about their expectations regarding chronic kidney disease and dialysis and believe that the physical and emotional health situation does not interfere with their social activities and life routine. Many said that changes in their daily habits, such as diet, water and work habits, bothers them, which shows that these dietary changes, limitations in physical activities, leisure, work, the continuous use of medications, as well as family dependence and health professionals can make life a challenge.¹⁴⁻⁵ In addition, the physical restriction of one arm due to arteriovenous fistula, the discomfort caused by the catheter, when it is the case, and the pain that has been reported frequently by the patients in this study cause changes in the performance of patients' daily and professional activities making them more insecure in caring for themselves.⁹

This study had as a limitation to be performed in a single dialysis center that is

influenced by the peculiar characteristics of the region.

CONCLUSION

When identifying the accessibility to treatment and the health status of hemodialysis patients together with elements influencing care, it is concluded that there is a need to strengthen the social support network and health care, since the condition of vulnerability due to the state of illness is aggravated by characteristics such as low schooling, income and old age.

In addition, new challenges to the different health care points are elucidated, since the prevalence of non-compliance with conservative treatment reflects the insufficiency in the development of management actions for chronic kidney disease in health promotion, complication prevention and even in the accessibility and organization of the flow of care.

The data from this study provide support for the rethinking of care policies, the role of health professionals and the importance of strengthening the network of attention to the accessibility of treatment and the health status of dialysis patients. It reiterates the need to incorporate the characteristics found in the planning of care strategies in order to respond to the real needs identified. Finally, the effectiveness of the system of reference and counter-referral used by the different points of attention of the network will provide support for an integral and continuous care to these individuals.

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