Profile of hemodialysis patients in the Brusque Region, State of Santa Catarina (SC), Brazil

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ABSTRACT

Introduction: Chronic Kidney Disease (CKD) is a multifactorial pathology. Depending on its severity, the treatment consists of dialysis, with hemodialysis being the most widely used method in Brazil. The objective of this study was to develop a profile of hemodialysis patients in the region of Brusque, Santa Catarina State, Brazil, addressing aspects of general and socioeconomic data, treatment data, lifestyle and quality of life, level of service satisfaction, and an approach to spirituality. Method: This is a descriptive, cross-sectional study with a qualitative and quantitative approach, carried out at the Hemodialysis Center in the Brusque region. Data collection was done through a structured questionnaire, divided into six blocks based on the guidelines of Toassi & Petry (2021). The data were tabulated and organized in Microsoft Excel 2019 software, through a simple descriptive analysis, following the recommendations of the cited authors. Results: Covering 75%, it revealed a diversified profile of patients. In summary, most of the participants were between 51 and 72 years old, predominantly male residents of Brusque, married, with low education, who consider themselves religious and have a monthly income of up to 2,000 reais. Regarding the evaluation of the service, the results were positive, with emphasis on the good relationship between patients and doctors and nurses. Regarding religious beliefs, the results show that they play a significant role in the patient's life and are a source of emotional support. Conclusions: Understanding this diverse profile is essential to improve quality of life, adherence, and clinical outcomes of treatment.

Keywords: Renal Dialysis, Chronic Renal Failure, Epidemiology, Disease Impact Profile, Patient Satisfaction, Spirituality.

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INTRODUCTION

Chronic kidney disease (CKD) is a silent condition that often progresses to end-stage renal failure (Barretti, 2022). CKD consists of a decrease in the Glomerular Filtration Rate (GFR), with a progressive and irreversible loss of kidney function (BRASIL, 2014). According to Ferreira (2023), based on the 2022 Dialysis Census of the Brazilian Society of Nephrology, Brazil registered 153,831 patients on dialysis treatment. In addition, according to the Brazilian Society of Nephrology (2022), hemodialysis is the predominant modality in the country, accounting for 92.5% of patients under treatment. The frequency of hemodialysis sessions, for most patients undergoing treatment, is 3 times a week, lasting 4 hours. In addition, more than 80% of medical care for chronic dialysis therapy is funded by the Unified Health System.

According to the 2014 Brazilian Clinical Guideline for the Care of Patients with Chronic Kidney Disease, CKD is a multifactorial, insidious, long-term pathology that is often asymptomatic for most of its evolution. Therefore, it is crucial to identify individuals at risk of developing CKD for the purpose of early diagnosis and to recognize the worse prognostic factors, which are associated with a more accelerated progression of kidney function loss. Groups at risk of developing CKD include people with diabetes, hypertension, the elderly, those with obesity (BMI > 30 kg/m²), those with a history of circulatory system disease, a family history of CKD, smokers, and the use of nephrotoxic agents.

In order to develop a profile of hemodialysis patients in the Brusque region, it is crucial to discuss the quality of life and satisfaction of these patients in relation to the hemodialysis service. Chronic Kidney Disease (CKD) impacts several areas of the patient's life, also interfering with factors that influence clinical practice and treatment adherence (Silva et al., 2011). Thus, the evaluation of the degree of user satisfaction encompasses a comprehensive analysis of the structure, care and services provided during the treatment process (Roderick, 2005).

In addition to this context, some studies, such as the one by Lucchetti et al. (2010), show that the relationship between spirituality and clinical practice has shown better outcomes in treatment adherence and quality of life of patients. In more depth, it also reports that patients with beliefs had lower levels of diastolic hypertension, lower mortality from cardiovascular causes, and lower mortality in general (Lucchetti et al., 2010). However, according to Puchalski and Romer (2000, apud Longo, 2011), measuring spirituality and religiosity in clinical practice is a challenge, given the complexity of the elements and definitions involved in the denomination. In this study by Puchalski and Romer (2000), the acronym FICA is cited as a widely used tool for spiritual assessment, in which information is collected that explores the relationship of beliefs in treatment, also addresses community involvement and social support of religious centers. In addition, the 2019 cardiovascular prevention guideline of the Brazilian Society of Cardiology also included the topic spirituality and

psychosocial factors in cardiovascular treatment, highlighting the FICA questionnaire as an evaluative tool for having the best psychometric characteristics.

In view of this scenario, the study aimed to identify the profile of hemodialysis users in the Brusque Region - Santa Catarina.

METHODOLOGY

This is a cross-sectional descriptive study with a qualitative and quantitative approach to analyze the profile of participants with CKD on hemodialysis in the Brusque region. The research was conducted at the Hemodialysis Center in the region of Brusque, Santa Catarina State, Brazil. The target population included all participants over 18 years of age who had been on hemodialysis for more than 90 days, and participants who were not part of the inclusion criteria, who did not want to participate or did not have the possibility of communication were excluded from the study.

Data collection was carried out through a structured questionnaire that includes open and closed questions, allowing quantitative and qualitative data to be obtained, based on the concepts of the book "Scientific Methodology applied to the Health Area" by Toassi & Petry (2021). The questionnaire was applied from 05/15/2022 to 12/01/2022, divided into six blocks of questions. The time needed for each participant to complete it was recorded in order to evaluate the applicability of this developed tool. The first block addressed the identification of participants and general data, including name, age, gender, city of residence, marital status, weight, comorbidities, and medications in use. The second block focused on socioeconomic profile, addressing schooling, gross income, and whether they have health insurance. The third block investigated information about hemodialysis treatment, while the fourth block explored the lifestyle and quality of life of the participants. The fifth block evaluated the level of satisfaction with hemodialysis services, and the questions were adapted based on the work of Roderick (2005). In the sixth block of questions, to assess the spirituality of the participants in clinical practice, the acronym FICA was used, based on and adapted from the work of Puchalski et al., 2009. The acronym is derived from English, in which the letter F: "Faith or Beliefs", means faith or beliefs, letter I: "Importance and influence", letter C: "Community" means community and letter A: "Address" means approach in treatment. The organization of the data and the performance of the simple descriptive analysis using Microsoft Excel 2019 were guided by the recommendations of Toassi & Petry (2021).

This study was conducted in accordance with ethical and regulatory guidelines, with the approval of the Research Ethics Committee (REC) of UNIFEBE - Centro Universitário de Brusque, number 5.371.265.

RESULTS

The survey covered 75% of the participants in the hemodialysis service in the Brusque region. The mean time of application of the questionnaire was 13 minutes and 7 seconds, the minimum duration was 8 minutes, 20 seconds and the maximum was 25 minutes.

Of the 87 participants in the survey, 52.87% of the users of the hemodialysis service surveyed are male. The mean age was 57.3 years and the mean weight was 69.9 kg. Among the comorbidities present, the most prevalent was Systemic Arterial Hypertension, representing 73.56% of the participants and only 16.09% did not have comorbidities. Regarding schooling, 45.98% of the patients had incomplete primary education, as shown in Table 1. Regarding family income, 44.83% reported receiving up to 2,000 reais and 72.41% did not have health insurance. The other characteristics regarding identification, general data, and socioeconomic profile are described in Table 1.

Table 1. Blocks 1 and 2 - identification, general data and socioeconomic profile.

Age	**Range according to age**	**N**	**%**
	18 - 28 years old	**5**	**5,75%**
	29 - 39 years old	**6**	**6,90%**
	40 - 50 years	**13**	**14,94%**
	51 - 61 years	**25**	**28,74%**
	62 - 72 years old	**28**	**32,18%**
	73 years or older	**10**	**11,49%**
	Average age	**57,3 years**	
Gender		**N**	**%**
	Feminine	**41**	**47,13%**
	Masculine	**46**	**52,87%**
City you reside in		**N**	**%**
	Age range	**N**	**%**
	18 - 28 years old	**5**	**5,75%**
	29 - 39 years old	**6**	**6,90%**
	40 - 50 years old	**13**	**14,94%**
	51 - 61 years old	**25**	**28,74%**
	62 - 72 years old	**28**	**32,18%**
	73 years or older	**10**	**11,49%**
Marital status		**57.3 years**	**Gender**
	N	**%**	**62,07%**
	41	**47,13%**	**5,75%**
	46	**52,87%**	**City of residence**
	N	**%**	**2,30%**
	1	**1,15%**	**9,20%**
Abrupt	**61**	**70,11%**	**%**
	8	**9,20%**	**1,15%**
	6	**6,90%**	**4,60%**
	4	**4,60%**	**17,24%**
	1	**1,15%**	**35,63%**
	6	**6,90%**	**Marital status**
	N	**%**	**11,49%**
	54	**62,07%**	**5,75%**
	5	**5,75%**	**2,30%**

	18	20,69%	
Height	Stable union	2	2,30%
	Widower	8	9,20%
	Intervals	N	%
	Less than 40 kg	1	1,15%
	40 - 50 kg	4	4,60%
	51 - 60 kg	15	17,24%
Body Mass Index (BMI) *	61 - 70 kg	31	35,63%
	71 - 80 kg	19	21,84%
	81 - 90 kg	10	11,49%
	91 - 100 kg	5	5,75%
	100 kg or more	2	2,30%
Comorbidities **	Average	69,9 kg	Height
	N	%	73,56%
	2	2,30%	45,98%
	25	28,74%	14,94%
	38	43,68%	13,79%
	19	21,84%	10,34%
	3	3,45%	Body Mass Index (BMI)*
	N	%	%
	3	3,45%	35,63%
	44	50,57%	24,14%
	27	31,03%	24,14%
	13	14,94%	Comorbidities**
Isolated comorbidities		%	%
	64	73,56%	94,25%
	40	45,98%	5,75%
Dyslipidemia		14,94%	%
	12	13,79%	25,29%
	9	10,34%	45,98%
	14	16,09%	9,20%
	N	%	6,90%
	31	35,63%	5,75%
	21	24,14%	6,90%
Has 3 or more associated comorbidities	21	24,14%	%
	14	16,09%	Continuous medication use
	N	%	44,83%
	82	94,25%	21,84%
	5	5,75%	Schooling
	N	%	4,60%
	22	25,29%	18,39%
	40	45,98%	3,45%
Completed high school		9,20%	%
	6	6,90%	26,44%
	5	5,75%	72,41%
	6	6,90%	Monthly Gross Family Income

Source: Prepared by the authors.

Caption: N, absolute number of responses. %, percentage calculation of responses. * Body Mass Index: calculated based on the information provided in the questionnaire, formula BMI = weight / (height x height). ** Isolated comorbidities represent the responses of comorbidities stratified specifically by comorbidity, and the patient may have more than one associated comorbidity.

Table 2 shows the data on hemodialysis, highlighting that 39.08% of the patients had three or more previous hospital admissions. Regarding the frequency of weekly hemodialysis, 91.95% underwent hemodialysis 3 times a week. Regarding hemodialysis in other services, 85.06% reported that they did not travel and only 13.79% underwent hemodialysis in another clinic when they needed to travel. Responses about complications, limitations, and major hemodialysis-related discomforts were grouped into similar categories for better statistical analysis and data interpretation. Regarding hemodialysis, 67.82% reported no complications and/or limitations. Among the most prevalent complications are tiredness, malaise, and hypotension, while the most frequent limitations include dietary restriction and impact on work. In addition, 41.38% indicated that they did not feel discomfort when undergoing hemodialysis.

Table 2. Block 3 - Data on hemodialysis

Intervals		**%**	**%**	
	1,15%	**22**	**Up to 2,000 real**	
	2 times	**Up to 5,000 real**	**19**	
	Up to 10,000 real	**5**	**5,75%**	
	4	**4,60%**	**12,64%**	
16	**18,39%**	**N**	**Prefers not to answer**	
	Health Insurance	**39**	**N**	
	Yes	**23**	**26,44%**	
	63	**72,41%**	**14,94%**	
	1,15%	**6**	**6,90%**	
	8 years or more	**9**	**Number of previous hospitalizations**	
N		**N**	**%**	
	25,29%	**33**	**37,93%**	
	22,99%	**33**	**37,93%**	
	39,08%	**21**	**24,14%**	
11		**N**	**Duration of treatment in the hemodialysis service**	
	%	**4**	**4,60%**	
	44,83%	**80**	**91,95%**	
	22,99%	**3**	**3,45%**	
13	**14,94%**	**N**	**%**	
	6,90%	**10**	**11,49%**	
	10,34%	**7**	**Reaction to discovering the diagnosis**	
	%	**1**	**1,15%**	
	37,93%	**1**	**1,15%**	
	37,93%	**68**	**78,16%**	
21		**N**	**Frequency of weekly hemodialysis**	
	%	**30**	**34,48%**	

	4,60%	**18**	**20,69%**	
	91,95%	**23**	**26,44%**	
	3,45%	**16**	**Transplant Waiting List Waiting Time**	
N		**N**	**%**	
	11,49%	**12**	**13,79%**	
	8,05%	**74**	**85,06%**	
	1,15%	**1**	**1,15%**	
1		**N**	**%**	
	68	**78,16%**	**67,82%**	
	Had complications and/or limitations	**N**	**%**	
	Complications:	**City Hall Car**	**30**	**34,48%**
	Edema	**Drive your own car**	**18**	20,69%
	Pain	**Out-of-Home Treatment (PDT)**	**23**	26,44%
	Bruise	**Brought by car by companion**	**16**	18,39%
	Situations in which you need to travel	**5**		
	Malaise	**I do hemodialysis at another partner clinic**		
	Hypotension	**I don't travel**		
	Hypertension	**Other**		
	Complications and/or limitations due to hemodialysis*	**1**		
	There were no complications	**59**		
	28	**32,18%**		
N		**N**	**%**	
	Dietary restriction	**3**	**25,29%**	
	Affects work	**4**	**74,71%**	
1		**2**	**%**	
	Displacement	**8**	**9,19%**	
	Environment	**1**	**1,15%**	
	Tiredness	**3**	**3,45%**	
	Pain	**12**	**13,79%**	
	Lack of freedom	**3**	**3,45%**	
	Systemic blood pressure	**1**	**1,15%**	
	Restricting the amount of water	**2**	**Hemodialysis affects the work routine**	
	%	**21**	**24,14%**	
	25,29%	**36**	**41,38%**	

Source: Prepared by the authors.
Caption: N, absolute number of responses. %, percentage calculation of responses.
* Responses grouped into similar categories for statistical analysis

Of the participants who did not practice any type of physical exercise, 49.42% were found. Regarding the amount of water ingested daily, 82.76% of hemodialysis users have water restrictions, and 83.91% ingest 1 to 4 glasses of water per day. Another relevant fact shows that 85.10% consider themselves independent in the performance of daily activities and 54.02% are retired, as shown in table 3.

Table 3. Block 4 - Data on lifestyle and quality of life

65		**N**	**Biggest hassle of doing hemodialysis in 1 word***
	N	**%**	**12,64%**
	Displacement	**8**	**9,19%**
	3 times a week	**Environment**	**1**
	3 times a week or more	**5**	**Tiredness**
	3,45%	**43**	**49,42%**
Pain		**13,79%**	**%**
	Lack of freedom	**3**	**3,45%**
	2 glasses - 500 mL	**Systemic blood pressure**	**1**
	4 glasses - 1 Liter	**30**	**Restriction of the amount of water**
	2,30%	**7**	**8,05%**
	21	**24,14%**	**6,90%**
	None	**36**	**41,38%**
Do you have any dietary restrictions?		**N**	**%**
	Sim	**72**	**82,76%**
	Não	**N**	**%**
Drink alcohol		**11**	**12,64%**
	2 times a week	**19**	**21,83%**
	3 times a week	**9**	**10,34%**
	3 times a week or more	**5**	**5,74%**
In daily activities		**43**	**49,42%**
	It is independent	**N**	**%**
	1 cup - 250 mL	**8**	**9,20%**
Performs professional activity		**35**	**40,23%**
	4 glasses - 1 Liter	**30**	**34,48%**
	6 Flakes - 1.5 Liters	**7**	**8,05%**
	8 flakes - 2 liters	**6**	**6,90%**
	Doesn't drink water	**1**	**1,15%**
Do you have any dietary restrictions	**Breaks**	**N**	**%**
	Yes	**72**	**82,76%**
	No	**15**	**17,24%**
	Quarterly	**N**	**%**
	No	**76**	**87,36%**
	Rarely	**10**	**11,49%**

Source: Prepared by the authors.
Caption: N, absolute number of responses. %, percentage calculation of responses.

Regarding the hemodialysis service, 98.85% of the patients reported that the hemodialysis clinic has a well-distributed space, 97.70% reported that they have privacy when undergoing hemodialysis, that the environment is calm and pleasant. In addition, 98.85% of the patients have a good relationship with the physician of the service and with the nurses only 60.92% report having a good relationship. Another relevant fact is that 98.85% of the survey participants feel safe in the hemodialysis clinic and 100% trust in the capacity of nurses. Regarding the multidisciplinary team,

100% answered that they had easy access to a nutritionist and social worker in the hemodialysis clinic, as shown in table 4.

Table 4 - Block 5 - User satisfaction with the hemodialysis service

About the hemodialysis service	**3 times or more**	**1**	**1,15%**	**In daily activities**	**Não (%)**
	%	**86**	**It's self-contained**	**74**	**85,10%**
	Get help	**13**	**14,90%**	**Has a professional activity**	**39,08%**
	%	**86**	**Retired**	**47**	**54,02%**
	Financially dependent	**6**	**6,90%**	**0**	**Yes**
	9,20%	**84**	**No**	**26**	**29,89%**
	Breaks	**N**	**%**	**3**	**Weekly**
	34,48%	**83**	**Monthly**	**11**	**12,64%**
	Quarterly	**6**	**6,90%**	**1**	**Semiannual**
	24,14%	**85**	**Annual**	**19**	**21,84%**
	Has easy access to continuous use medications:	**79**	**90,80%**	**8**	**9,20%**
	Questions	**Yes (N)**	**Yes (%)**	**No (N)**	**No (%)**
	Have a good relationship with the doctor:	**86**	**98,85%**	**1**	**1,15%**
	Has a good relationship with the nurse:	**53**	**60,92%**	**34**	**39,08%**
	Do you feel safe:	**86**	**98,85%**	**1**	**1,15%**
	Trust in the ability of nurses to care for you:	**87**	**100%**	**0**	**0%**
	Have enough time to discuss with the nurses:	**84**	**96,55%**	**3**	**3,45%**
	It's easy to make an appointment with your doctor:	**84**	**96,55%**	**3**	**3,45%**
	You could discuss questions and problems with your doctor:	**83**	**95,40%**	**4**	**4,60%**
	You trust the hemodialysis clinic's ability to take care of you:	**86**	**98,85%**	**1**	**1,15%**
	You get information about what you want to know about your kidney disease and treatment:	**85**	**97,70%**	**2**	**2,30%**
	Has easy access to continuous-use medications:	**79**	**90,80%**	**8**	**9,20%**
	Easy access to medicines in the public service:	**74**	**85,06%**	**13**	**14,94%**
	Easy access to social assistance:	**87**	**100%**	**0**	**0%**

Source: Adapted from Roderick, 2005.
Caption: N, absolute number of responses. %, percentage calculation of responses.

In the last block of the questionnaire, we presented an analysis of the spirituality of hemodialysis service users, adapting the interpretation of data from the *FICA* questionnaire. The answers were categorized and organized in a qualitative table, grouping similar data, to facilitate data analysis. However, this highlights the disadvantage of not having a more in-depth discussion on the subject. As a result, 80% of the survey participants consider themselves religious and 10.34% spiritual. In addition, 87.36% of them reported having beliefs that help them deal with problems and 87.36% also considered giving a lot of importance to their faith or religious beliefs. For 89.66% the faith or beliefs influenced to deal with stress or health problems and 95.40% did not have beliefs that could affect the medical decision or their treatment and even 87.36% considered the doctor to consider their religious issue with the treatment independent. It was also addressed about the support offered by the religious community, from which we obtained a variety of responses, which were later categorized to facilitate statistical analysis. The results, as detailed in Table 5, are distributed in several categories. In Category 1 - Prayers and Spirituality, we obtained 31 answers to prayers, 4 answers to watch Masses on television, 1 answer to talk to the priest and 1 answer to listen to Mass. In Category 2 - Church Support, we recorded 8 responses to receive home visits, 4 responses to donations and aid, 2 responses to meeting friends at church, and 1 response to believing in miracles. In Category 3 - Hope and Emotional Support, 4 responses were accounted for the feeling of hope and strength, 1 response to feel better after going to church, 2 responses to face problems in a different way, and 1 response to speak directly to God. In Category 4 - Social Support, we observed 4 responses to group conversations and 2 responses to emotional support through advice. In addition, 2 responses were classified in Category 5 as "Never sought support", and 19 responses were included in Category 6 as "Did not know how to answer".

Table 5 - Block 6 - Relationship between spirituality and clinical practice

F – Faith / belief			
Easy access to a nutritionist:		**100%**	**0**
	Religious	Hemodialysis disrupts your social life:	28
	59	67,82%	10,34%
	22	25,29%	65
74,71%		**The hemodialysis clinic has a pleasant atmosphere:**	**85**
	2	2,30%	86,21%
	85	97,70%	2
	If not: what gives you meaning in life?	**The hemodialysis clinic has well-distributed space:**	**86**
	1	1,15%	58,33%
	85	97,70%	2
	Do not know	Do hemodialysis with the same group of patients every day:	87
100%			
0 life? *		**N**	**Likes to meet other patients from your session when you come for hemodialysis:**
	95,40%	4	4,60%
	It is easy to see at the clinic when you feel unwell:	87	100%
	0%	2	Clinic offers snacks:
87		**0**	**0%**
	Yes	78	89,66%
	No	F – Faith/belief	Do you consider yourself religious or spiritual?
Do you have any specific beliefs that may affect medical decisions or your treatment? *		**%**	**%**
	70	80,46%	4,60%
	9	10,34%	95,40%
None			
8		**Do you have spiritual or religious beliefs that help you cope with problems? ***	**%**
	%	74	Yes
	86,21%	13	No
12	**13,79%**	**N**	**If not: what gives you**

			meaning in life?
	%	37	Family
	58,33%	15	Self-esteem
	8,33%	8	Don't know
	33,33%	I – Importance or influence	What importance do you place on faith or religious beliefs in your
	N	%	2,3
	76	87,36%	21,84
Little		**10,34%**	**%**
	2	2,30%	Has faith or beliefs ever influenced you to cope with stress or health problems? *
	N	%	0
Yes		**89,66%**	**%**
	9	10,34%	Do you have any specific beliefs that could affect medical decisions or your treatment? *
	N	%	1,15
	4	4,60%	12,64
No			
83		**C – Community**	**Are you part of any religious or spiritual community? ***
	N	%	87,36
	74	85,06	3,45
	13	14,94	She supports you, how? *
	N	%	8,05
Category 1: Prayers and Spirituality		**42,53**	**%**
	15	17,24	33,33

	8	9.20	6,9
	6	6,9	5,75
	2	2,3	1,15
	19	21,84	Is there a group of people that you "really" love or that are important to you? *
	N	%	40,23

Source: adapted Puchalski, et al., 2009.
Caption: N, absolute number of responses. %, percentage calculation of responses.
* Responses grouped into similar categories for statistical analysis

DISCUSSION

Based on the results obtained in the present study, the first block of questions of the questionnaire sought to bring results referring to the general data of the participants. We concluded that most of the participants were male, which is consistent with the 2012 report of the Brazilian Census of Chronic Dialysis that fifty-eight percent of the patients were male (Sesso, 2014). In addition, the most prevalent comorbidity among the interviewees was arterial hypertension, and of all participants, 94.25% used continuous medications. Thus, in line with this percentage, Guyton and Hall (2011, p. 425-426) show that among the most common causes of end-stage renal injury are diabetes mellitus and hypertension, which together account for more than 70% of all cases of CRF. A study conducted at a hemodialysis center in the interior of Rio Grande do Sul also reinforces that these are the most prevalent comorbidities among patients with CKD (Souza et. al., 2022).

The results of the questionnaire on the socioeconomic profile revealed that most of the participants had not completed elementary school, which coincides with previous studies on the sociodemographic profile of patients with CKD on dialysis (Freitas et al., 2013). In addition, most participants do not have health insurance and have low income, showing that, according to Travassos (2006), there is a significant influence of social condition and place of residence on access to health services in the country. Additionally, the study by Lopes et al. (2014), entitled 'Health-related quality of life of chronic kidney patients on dialysis', shows that most patients receive up to two minimum wages per month.

The third block of questions of the questionnaire brought significant results related to hemodialysis. According to the data obtained, 39.08% of the patients attending the hemodialysis service had already had three or more hospital admissions prior to the beginning of treatment. According to Nitsch et al., 2013, hemodialysis patients are more prone to decompensation and complications, so even before hemodialysis treatment, these patients had already been hospitalized. In addition, it has been observed that most patients are on treatment for a period of one year or less,

and this fact leads us to emphasize that performing early interventions can slow the progression to more severe stages (Ene-Iordache et al., 2016). Another interesting result is that 91.95% of the participants undergo hemodialysis 3 or more times a week, a result that brings us to reflect on whether this periodicity generates a proximity of these patients to the hemodialysis service or if it provides difficulty in the consistency of treatment adherence.

Based on the comprehensive results of the research, the fourth block of questions of the questionnaire sought to analyze data on the quality and lifestyle of hemodialysis patients. Regarding the practice of physical exercise, it was found that almost half of the participants are not engaged in any type of physical exercise, this is a worrying finding, since studies have found that physical exercise twice a week for 5 months increases the physical function and aerobic capacity of hemodialysis patients (Molsted et al., 2004). On the other hand, independence in the performance of daily activities was a positive characteristic, since most patients maintain a degree of autonomy in their routines. These data differ from the literature, which show that patients with CKD have a decreased ability to perform routine daily activities or work (Lopes et al., 2014). As previously mentioned (Molsted), regular physical exercise is extremely important for this population. Regarding occupational status, more than half, representing 54.02% of the participants, are retired. Regarding lifestyle habits, the data highlight a prudent approach on the part of patients undergoing hemodialysis treatment. Adherence to fluid restrictions and dietary guidelines are essential self-care for the proper management of patients with chronic kidney disease undergoing hemodialysis treatment. Therefore, water intake is a crucial aspect to be considered, 40.23% of the patients interviewed consume only a limited amount, about 2 glasses of 500mL per day. Adherence to adequate fluid intake is usually measured by interdialytic weight gain (IDG). Lower than recommended or excessive IDPG is related to increased risk of morbidity and mortality. The difference in weight between one dialysis and another, in percentage (%IDWG), is recommended to be between 4 and 4.5% (Nerbass et al., 2011). In addition, a significant percentage, corresponding to 82.76% of the patients, have some type of dietary restriction, evidencing the importance of a diet adapted to medical needs. And yet the vast majority, equivalent to 87.36%, choose not to drink alcoholic beverages, due to the implications that alcohol can have on compromised kidney health.

The results regarding the evaluation of the hemodialysis service, the structure of the clinic stood out positively among the patients, according to the results of our research, 98.85% of the patients evaluated that the space of the clinic is well distributed, demonstrating the efficiency in the planning of the environment. This reflects the fact that almost all patients are satisfied with privacy during hemodialysis sessions, contrasts considerably with another study that presented a significantly lower result, with only 21.5%, thus highlighting a remarkable dissimilarity between the two results (Roderick et al., 2005). These data show us the clinic's commitment to offering a functional and

welcoming space, contributing to the positive experience of patients during hemodialysis treatment. The evaluation of the care provided by the team in the hemodialysis clinic reveals a duality of perceptions on the part of the patients. While a remarkable percentage of 98.85% of the patients enjoy a good relationship with the physician of the service, the statistic of only 60.92% report having a good relationship with the nurses, which points to a variation compared to the results of other studies that applied the Roderick questionnaire and obtained a result of more than ninety percent stating to have a good relationship with both the physician and the physician. and with the nurses of the service (Silva et al., 2011). Despite this, it is observed that a significant percentage of the participants report feeling safe in the clinic facilities. This confidence is reinforced by the fact that 100% of patients have full confidence in the ability of the nursing team. Accessibility to complementary services is also a positive point, since all interviewees claim to have easy access to a nutritionist and social worker in the hemodialysis clinic, which surprises us positively when compared with other findings in the literature that do not reach a consensus of totality (Roderick et al., 2005). Regarding the repercussion of dialysis on the social life of patients and on the relationship with their partners, in both questions, more than 50% of the research participants stated that dialysis treatment does not interfere with these aspects. The diversity of perceptions regarding the relationship with the team highlights the importance of continuous improvements in communication and interaction with nurses, while on the other hand, the results demonstrate the general confidence in the quality and safety of the treatment environment provided by the clinic, as well as the functionality of the multidisciplinary team.

Regarding the analysis of spirituality, the last block of questions of the research questionnaire revealed a strong presence of religious and spiritual aspects in the lives of the participants, with 80% of them identifying themselves as religious who, according to Lucchetti et al. (2010), the book "Handbook of Religion and Health" (Koenig; Mccullough; Larson, 2001) emphasizes the importance of beliefs in health, explaining that religiosity means the extent to which an individual believes, follows and practices a religion. This religiosity can be in an organizational sphere (participation in the church or religious temple) or in a non-organizational sphere (such as praying, reading books and watching religious programs on television), and 10.34% of the participants consider themselves as spiritualized that according to the book mentioned above, spirituality is a personal search to understand issues related to the end of life. to its meaning, on the relations with the sacred or transcendent, which may or may not lead to the development of religious practices or the formation of religious communities. In addition, a large majority stated that their beliefs play a significant role in helping them cope with problems, and the same percentage consider beliefs to be of utmost importance in their lives. Surprisingly, many participants reported that their beliefs positively influenced their ability to cope with stress and health problems. However, the vast majority, 95.40%,

stated that their beliefs do not affect their medical decisions or treatments. Thus, 87.36% of the participants consider that it is independent for the physician to take into account their religious beliefs in the treatment. Despite this, physicians face several barriers when discussing beliefs with patients, such as lack of knowledge, little experience, discomfort with the topic, and difficulty recognizing its importance (Lucchetti et al. 2010). Overcoming these barriers is essential to provide comprehensive health care that is sensitive to individual needs, that is, when it is the patient's will, their beliefs can be correlated to their treatment.

CONCLUSION

Thus, correlating the analysis of the results previously described, we can conclude that the research reveals a diversified profile of hemodialysis patients in the Brusque region. In summary, most participants are in the age group of 51 to 72 years, with an average age of approximately 57 years. There is a predominance of residents of Brusque, male, married, with low education, considered religious and with a monthly income of up to 2,000 reais. Although most of them report that they are independent in their daily activities, a limitation presented is the fact that the treatment is face-to-face and requires time for each session, added to a weekly frequency of 3 times a week, makes the profile of these patients people who do not perform professional activity and do not travel far from the hemodialysis service. These facts make it difficult to travel, interfere with freedom and even the possibility of having a paid job to improve their monthly income.

When we approach the interaction of patients with the hemodialysis service, the results show high levels of satisfaction. This is mainly reflected in the positive relationship established with doctors and nurses, in an environment that is perceived as calm and safe. In addition, the data indicate that there is easy access to the multidisciplinary team, and that this is crucial to clarify doubts about the treatment, since a significant portion of the patients have a low level of education, making it a critical factor, given the complexity of the treatment, which involves dietary and water restrictions, among others, as well as the need for strict adherence by the patient.

Another trend presented in the answers reveals that spirituality plays a significant role in the lives of patients, most of whom have a religious connection that is a source of emotional support. In addition, another characteristic is that patients consider medical treatment to be independent of religion and that their beliefs do not affect medical decisions related to clinical follow-up, data that are related to the results of clinical follow-up. Thus, this positive result in relation to the hemodialysis service, added to the religious support, contributes to the understanding of the treatment and helps in a better quality of life for these patients.

Among the limitations of our study, we faced the challenge of managing the large amount of data collected, which made it difficult to analyze the information and develop a more synthesized

profile of hemodialysis patients. In addition, we noticed a limitation in the interpretation of the FICA questionnaire, due to the necessary explanation of the questions to the participants. Thus, the statistical analysis of the questionnaire was adapted and the answers were categorized into similar blocks. The data were grouped in a qualitative table, which made it impossible to perform a deeper and more reflective analysis of this theme.

These findings can serve as a basis for future work, in which it is suggested that studies be carried out to answer the questions that remained pending in this work. Therefore, there is a need to further explore the population's understanding of beliefs and whether they really help in the treatment of hemodialysis patients. In addition, there is a need for studies that understand the characteristics of the profile of dialysis patients and their particularities, questioning the fact that hemodialysis treatment is face-to-face and high-frequency, whether this would help to bring patients closer to treatment or whether this is a point that interferes with their adherence. Thus, understanding this diverse profile is essential to provide personalized and effective care that meets the needs of each patient, promoting a better quality of life, better adherence to treatment, and better clinical outcomes.

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