

Socio-demographic profile of patients in a clinical Peritoneal Dialysis of Sergipe, Brazil

Perfil sócio-demográfico de pacientes de uma clínica de Diálise Peritoneal de Sergipe, Brasil

V. S. Santos¹; A. C. F. Abud²; J. A. B. Alves²; A. S. T. Daltro²; V. T. G. Santos³; V. L. C. Feitosa⁴; F. P. Reis⁵

¹*Student's master's program in Parasitic Biology, Federal University of Sergipe, 49100-000, São Cristóvão-Se, Brazil*

²*Department of Nursing, Federal University of Sergipe, 49100-000, São-Cristóvão-Se, Brazil*

³*Integrad Multidisciplinary Health Collective, Tiradentes University, 49032-490, Aracaju-Se, Brazil*

⁴*Department of Morphology, Federal University of Sergipe, 49100-000, São-Cristóvão-Se, Brazil*

⁵*Instituto Research and Technology, Tiradentes University, 49032-490, Aracaju-Se, Brazil*

santanasantos7@hotmail.com

A Diálise Peritoneal é um método de terapia renal substitutiva que utiliza o peritônio como membrana semipermeável, removendo solutos acumulados no sangue. O objetivo do estudo foi descrever o perfil sócio-demográfico dos pacientes que realizaram tratamento por DP entre de janeiro/2005 a dezembro/2008 em uma clínica do Estado de Sergipe. Os dados foram obtidos a partir do prontuário eletrônico da clínica. Observou-se um predomínio do sexo masculino, etnia parda, idosa e de boa escolaridade, e que a hipertensão arterial e o diabetes são as principais co-morbidades. Conclui-se que conhecer o perfil dos pacientes é importante para o planejamento das ações educativas.

Palavras-chave: Doença Renal Crônica; Diálise Peritoneal; Epidemiologia

Peritoneal Dialysis is a method of renal replacement therapy which uses the peritoneum as a semipermeable membrane, removing solutes accumulated in the blood. The aim of study was to describe the socio-demographic profile of patients who underwent treatment for DP between January/ 2005 to December/2008 in a clinical state of Sergipe. Data were obtained from the clinic's electronic medical record. There was a predominance of males, mulattoes, and good old school, and that hypertension and diabetes are the major co-morbidities. We conclude that meet the profile of patients is important for the planning of educational activities.

Keywords: Kidney Disease; Peritoneal Dialysis; Epidemiology

1. INTRODUCTION

In recent decades, the Chronic Kidney Disease (CKD) has become an important public health problem due to its high and crescent prevalence, morbidity and mortality determined by its chronic complications and its enormous social and economic impact [1, 2, 3].

CKD is a clinical syndrome characterized by the insidious and irreversible loss of kidney function, in which the body's ability to maintain metabolic and electrolyte balance is insufficient [1,4,5]. According to the National Kidney Foundation [6], the pathology is characterized by the installation of kidney damage due to morphological or functional abnormalities, for a period less than three months, had clinical signs of electrolyte disturbances or when the Filtration Rate glomerular (GFR) is less than 60 mL/min/1, 73 m². When the GFR is below 15 ml / min, has been the so-called end-stage renal disease requiring then perform a renal replacement therapy.

Data from the Brazilian Society of Nephrology revealed that in 2007 there were 73,605 patients on renal replacement therapy in Brazil. Of these, 66,833 (90.8%) in hemodialysis and 6772 (9.2%) in peritoneal dialysis (PD). In 2008, this number increased to 87,044 patients, 89.4% were treated by hemodialysis and 10.6% for PD. According to these data it is possible to observe how each year has increased the number of patients starting renal replacement therapy [7].

Peritoneal Dialysis is a method that uses the peritoneum as a semipermeable membrane, removing solutes accumulated in the blood. Osmotic agents are infused into the cavity through a flexible catheter. Moreover, it is the treatment of choice for patients who are unable to undergo hemodialysis or renal transplantation. Therefore, individuals who have diabetes or cardiovascular disease, the elderly and those with adverse systemic action of heparin have better outcomes when treated by PD [8,9].

Although hemodialysis is the method used worldwide for several decades PD has become popular, mainly because of its simplicity, convenience, low cost of implementation [10], and the fact that some measure of independence of the patient. In fact, in this mode, the client is primarily responsible for the quality of their treatment, or perform self-care. The education of this and even your family for the adoption of adequate hygiene and the proper performance of the procedure are important measures in preventing complications such as peritonitis.

It is therefore of utmost importance to know the profile of clients who undertake PD by health professionals so that they can plan educational activities for individuals to promote health, reduce the risk of complications and thus provide better quality of life customers dependent on this therapy. Thus, the study aimed to describe the socio-demographic profile of clients in treatment for PD.

2. MATERIALS E METHODS

It is a descriptive, retrospective study with a quantitative approach involving patients enrolled in the program in a Peritoneal Dialysis Nephrology Service of the city of Aracaju/Se, Brazil. This clinic serves patients from throughout the Sergipe and has a multidisciplinary team to treat them.

The population consisted of individuals with chronic kidney disease in both sexes, different social classes, peritoneal dialysis, from January 2005 to December 2008.

The study followed the recommendations of Resolution No. 196/96 of the National Council of Health Data collection was initiated only after the project was approved by the Ethics Committee on Human Research of the Federal University of Sergipe (CEP/UFS) at a meeting held on 04.03.2009 under the protocol CAAE - 07780.000.107-09. Request was submitted to CEP/UFS remit the Terms of Consent (IC), considering that the institution is the guardian of medical records, and that the subjects' anonymity is guaranteed.

We conducted research from the electronic medical record of that clinic that uses the program Dialsist 2.5[®]. As data collection instrument used was a spreadsheet that included the patient identification, socio-demographic profile (age, sex, race, marital status, origin and whether active or retired), underlying disease and presence of comorbidity

The collected data were entered into a database and analyzed using descriptive statistics and presented as graphs and tables, characterized by percentages, using the Microsoft[®] Excel 2007.

3. RESULTS E DISCUSSION

Foram identificados 207 pacientes realizaram diálise peritoneal no período de janeiro de 2005 a dezembro de 2008. A *Tabela 1* mostra a caracterização quanto ao perfil sócio-demográfico dos pacientes estudados.

We identified 207 patients who underwent peritoneal dialysis from January 2005 to December 2008. Table 1 shows the characterization of the socio-demographic profile of the patients.

The average age was 58.34 ± 18.03 , and 72.46% were aged over fifty years. These data are similar to those found in the literature [11]. As for sex, (50.79%) of the patients were male, finding that was shown in other studies [7,11,12,13]. Regarding ethnicity, 65.22% were brown, data that differ from others found in the national literature [7,13]. This discrepancy between the results of the studies found and this study can be explained by regional differences where the research has been done.

Table 1: Socio-demographic characteristics of patients undergoing PD. Sergipe, January 2005 to December 2008.

Variable	N	%
Age		
< 50 years	57	27,54
≥ 50 years	150	72,46
All	207	100,00
Sex		
Male	105	50,72
Female	102	49,28
All	207	100,00
Ethnicity		
Black	14	6,76
White	44	21,26
Brown	135	65,22
Uniformed	14	6,76
All	207	100,00
Education		
Unlettered	44	21,26
Literate	23	11,11
Basic education	83	40,10
High school	30	14,49
Higher education	8	3,86
Uniformed	19	9,18
All	207	100,00
Occupation		
Retired	90	43,48
No retired	117	56,52
All	207	100,00
Origin		
Aracaju/SE	86	41,55
Other cities	121	58,45
All	207	100,00

The merits, 58.45% live in the state of Sergipe. The prevalence of patients who reside within the state can be justified by the absence of dialysis centers near their homes, making it difficult for hemodialysis treatment, since this type of treatment requires constant and frequent attendance at the clinic.

One of the factors considered important to select a patient to the PD program will be referred to by the client to take self-care. However, for the proper development of the technique of peritoneal dialysis is necessary that the patient has this ability to understand basic concepts and understanding of the procedure, since he will be responsible for the procedure. Thus, the level of education is also important because it enables the client to receive written information to help understanding of the guidelines regarding the process of communication and health education.

With respect to education, the study found that 78.74% of patients have some degree of education, which enables nurses to expand training to carry out the treatment for PD, providing instructional materials to the customer, for example, brochures, videos as well as verbal

instructions addressing the prevention of complications related to treatment modality and the promotion of healthy habits.

As to marital status has been: 69.08% were married, 18.36% were single, widowed and 1.45% 11.11% were divorced. There was a predominance (87.74%) of those who lived with the family which reinforces the role of family caregiver, which is critical since the diagnosis of kidney disease and treatment. As is the evolution of CKD, the patients start to have physical difficulties that prevent you from performing the tasks of daily life, thus requiring the commitment and dedication of the family [14].

In relation to occupation, it is observed that 43.48% of patients were retired, and 56.52% developed some form of activity. The prevalence of patients who continue to exercise a professional activity demonstrates the freedom that patients must continue their daily activities, as the technique does not require offsets for dialysis centers.

The data in Table 2 show the distribution of the underlying disease that led the study population to develop CKD. From there, it can be observed that the diabetic nephropathy occurred in 29.47% of patients, followed by that hypertensive nephrosclerosis in 18.36% and 32.85% in polycystic kidney disease was not clarified the etiology for loss of kidney function.

These findings follow a different pattern etiology of CKD in the Brazilian population, which until the 80s had the glomerulonephritis as the main cause, but currently those most responsible are diabetes and hypertension [4]. Moreover, this study presents data similar to other works for the underlying disease affecting the appearance of CKD [8,11,12,13,15].

Table 2: Disease Distribution Base in patients undergoing PD. Sergipe, January 2005 to December 2008.

Underlying renal disease	N	%
Diabetic nephropathy	61	29,47
Hypertensive nephrosclerosis	38	18,36
Polycystic kidney disease	10	4,83
Glomerulonephritis	8	3,86
Lupus Erythematosus	7	3,38
IRC unclear	68	32,85
Others	15	7,25
All	207	100,00

Systemic Hypertension (SH) is in one of the biggest public health problems in Brazil and other countries, and are among the most frequent morbidities in adults and presenting itself as a major cause for chronic kidney disease. The detection and treatment should be a priority for reducing morbidity and mortality [4,16]. The presence of diabetes mellitus (DM), and is a predisposing factor for the onset of kidney disease increases the risk of infections, and may be associated with the incidence of peritonitis, which is a major complication of treatment for PD.

With regard to comorbidities (Table 3), highlights that 14.98% of patients showed no pathology associated with CKD. However, 85.02% of subjects who had chronic disease, and 53 patients had more than one co-morbidity present, hence the N = 242. Of this amount, 38.84% had hypertension, 9.09% had DM (this study did not differentiate between diabetes mellitus type I and type II), and 23.55% of patients had concomitant hypertension and diabetes mellitus. Cardiovascular disease accounted for 21.07%.

Table 3: Distribution of Co-morbidities in patients undergoing PD. Sergipe, January 2005 to December 2008.

Co-morbidities	N	%
SH	94	38,84
DM	22	9,09
SH + DM	57	23,55
Cardiovascular	51	21,07
HIV +	1	0,41
Others	17	7,02
All	242	100,00

The findings in relation to diseases associated with kidney failure are similar to those found in a descriptive epidemiological study with 217 patients undergoing peritoneal dialysis [13].

4. CONCLUSION

From the data presented, it was found that the profile of the population replacement therapy by peritoneal dialysis was performed at the clinic where the study is slightly masculine, with predominance of mulattoes, elderly, and also is well educated.

Hypertension and diabetes mellitus are featured as the main risk factors for chronic kidney disease. With this, it reinforces the importance of professionals in primary care settings, monitoring and monitoring of risk groups, such as hypertension or diabetes.

For health care planning and implementation of care is necessary to know the characteristics of the population assisted to obtain a diagnosis of local reality and contribute to the reduction of the complications of chronic kidney disease and the treatment for PD.

1. BASTOS, M. G. et al. Doença Renal Crônica: Problemas e Soluções. *J Bras Nefrol*, 26 (4): 202-215 (2004).
2. EKNOYAN G., et al. The burden of kidney disease: Improving global outcomes. *Kidney Int*, 66 (13): 10-4 (2004).
3. SALGADO-FILHO, N.; BRITO, D. J. A. Doença Renal Crônica: A Grande Epidemia Deste Milênio. *J Bras Nefrol*, 28 (3): 1-5. (2006).
4. ROMÃO-JUNIOR, J. E. Doença Renal Crônica: Definição, Epidemiologia e Classificação. *J Bras Nefrol*, 26 (1):1-3. (2004).
5. SILVA, F. V. C. et al. Tratamento da Doença Renal Crônica: Estratégias para maior envolvimento do paciente em seu auto-cuidado. *J Bras Nefrol*, 30 (2): 83-87. (2008).
6. NATIONAL KIDNEY FOUNDATION KIDNEY DISEASE OUTCOME QUALITY INITIATIVE. Clinical practice guidelines for chronic kidney disease: evaluation, classification, and stratification. *Am J Kidney Dis*, (1): 1-266. (2002)
7. SESSO, R. et al. Relatório do Censo Brasileiro de Diálise, 2008. *J Bras Nefrol*, 30 (4): 233-238. (2008).
8. BEVILACQUA, J. L.; GUERRA, E. M. M. Protocolo para Diálise Peritoneal Ambulatorial Contínua DPAC. *Baxter Hospitalar*, (1): 5-10. (2000).
9. ASH, S. R. Chronic peritoneal dialysis catheters: overview of design, placement, and removal procedures. *Semin Dial*, 16: 323. (2003).
10. BLAKE, P. G.; DAUGIRDAS, J. T. *Fisiologia da Diálise Peritoneal*. In: DAUGIRDAS, J. T.; BLAKE, P. G.; ING, T. S. *Manual de diálise*. 3ª ed. Rio de Janeiro: Guanabara Koogan. (2003).
11. JACOBOWSKI, J. A. D.; BORELLA, R.; LAUTERT, L. Pacientes com insuficiência renal crônica: causas de saída do programa de diálise peritoneal. *Rev Gaúcha Enferm*, 26 (3): 381-391. (2005).
12. CRUZ, L. P. Complicações relacionadas ao implante cirúrgico de 146 cateteres de diálise peritoneal do tipo Swan Neck Missouri. (2005). Disponível em: www.bibliomed.ccs.ufsc.br. Acesso em: 12/12/2008.
13. RIBEIRO, R. C. H. M. et al. Caracterização e etiologia da insuficiência renal crônica em unidade de nefrologia do interior do Estado de São Paulo. *Acta Paul Enferm*, 21: 207-211. (2008).

14. CARREIRA, L.; MARCON, S. S. Cotidiano e trabalho: concepções de indivíduos portadores de insuficiência renal crônica e seus familiares. *Rev Latino-Am Enferm*, 11 (6): 823-31. (2003).
15. MOREIRA, P. R. R. et al. Mupirocina tópica no orifício de saída do cateter reduz infecção decorrente da DPCA. *J Bras Nefrol*, 24 (1): 1-6. (2002).
16. BARBOSA D. A. et al. Co-morbidade e mortalidade de pacientes em início de diálise. *Acta Paul Enferm*, 19 (3): 304-309. (2006).