



Demographic profile of individuals with chronic renal disease from a multidisciplinary outpatient clinic of a university teaching hospital*

Perfil do doente renal crônico no ambulatório multidisciplinar de um hospital universitário

Perfil del enfermo renal crónico de consultorios externos multidisciplinario de un hospital universitario

Simone Martins Rembold¹, Débora Lucy da Silva dos Santos², Gabriela Baptista Vieira², Marlise Silva Barros², Jocemir Ronaldo Lugon³

ABSTRACT

Objective: To describe the demographic profile of individuals with chronic renal disease from a multidisciplinary outpatient clinic of the Antonio Pedro University Teaching Hospital. **Method:** This descriptive study consists of a review of medical records of 72 patients from 2006 to 2008. EXCEL 2007 and SPSS 13.0 were used for data management and analysis. **Results:** Participants had a mean age of 59 ± 14 years, 60% of them were female, and a great number (42%) incomplete elementary education. The majority of them had stage 4 chronic renal disease. The primary underlying diseases were diabetes mellitus and high blood pressure. Over 80% of the participants were taking antihypertensive medication, and more than a half were taking diuretics. Nocturia was the most common symptoms among the participants. Only 7 individuals had arteriovenous fistula for hemodialysis. **Conclusion:** The majority of the sample of participants consisted of women in their 50s or 60s who had stage 4 chronic renal diseases per DOQI classification, and diabetes mellitus was the main cause of renal disease. **Keywords:** Nursing care; Renal insufficiency, chronic/prevention & control; Health profile

RESUMO

Objetivo: Descrever o perfil do cliente com doença renal crônica em tratamento conservador no Ambulatório Multidisciplinar do Hospital Universitário Antonio Pedro. **Métodos:** O estudo é descritivo tendo sido analisados 72 prontuários de pacientes atendidos nos anos de 2006 a 2008. Os dados foram processados eletronicamente com o auxílio dos programas EXCEL 2007 e SPSS 13.0. **Resultados:** A média de idade dos pacientes foi 59 ± 14 anos sendo 60% do sexo feminino. Em relação à escolaridade, 42% tinham ensino fundamental incompleto. A maior parte encontrava-se no estágio 4 da doença renal crônica, sendo as principais doenças de base o *diabetes mellitus* e a hipertensão arterial. Mais de 80% usavam anti-hipertensivos, e mais da metade usava diuréticos. O sintoma predominante foi a noctúria. Apenas em sete pacientes foi confeccionada fistula artério-venosa. **Conclusão:** A população atendida no referido ambulatório consistiu, na sua maior parte de pacientes na quinta ou sexta década de vida, com predominância do sexo feminino. A maioria encontrava-se no estágio 4 da classificação do DOQI para doença renal crônica sendo diabetes a principal causa da doença renal.

Descritores: Cuidados de enfermagem; Insuficiência renal crônica/prevenção & controle; Perfil de saúde

RESUMEN

Objetivo: Describir el perfil del cliente con enfermedad renal crónica en tratamiento conservador en Consultorio Externo Multidisciplinario del Hospital Universitario Antonio Pedro. **Métodos:** Se trata de un estudio descriptivo en el que se analizaron 72 historias clínicas de pacientes atendidos en los años de 2006 a 2008. Los datos fueron procesados electrónicamente con la ayuda de los programas EXCEL 2007 y SPSS 13.0. **Resultados:** El promedio de edad de los pacientes fue entre 59 ± 14 años siendo el 60% del sexo femenino. En relación a la escolaridad, el 42% tenían primaria incompleta. La mayor parte se encontraba en la fase 4 de la enfermedad renal crónica, siendo las principales enfermedades de base la *diabetes mellitus* y la hipertensión arterial. Más del 80% usaban anti-hipertensivos, y más de la mitad usaba diuréticos. El síntoma predominante fue la nicturia. Apenas en siete pacientes se confeccionó una fistula arterio-venosa. **Conclusión:** La población atendida en el referido consultorio externo consistió, en su mayor parte de pacientes que se encontraban entre la quinta y sexta década de su vida, con predominancia del sexo femenino. La mayoría se encontraba en la fase 4 de la clasificación del DOQI para enfermedad renal crónica siendo la diabetes la principal causa de la enfermedad renal.

Descriptorios: Atención de enfermería; Insuficiencia renal crónica/prevenición & control; Perfil de salud

* Study developed at Hospital Universitário, located in the city of Niterói (RJ), Brasil.

¹ Assistant Professor at the Medical-Surgical Nursing Department, Universidade Federal Fluminense – UFF - Niterói (RJ), Brazil.

² Undergraduates, 8th semester, Escola de Enfermagem Aurora de Afonso Costa, Universidade Federal Fluminense – UFF - Niterói (RJ), Brazil.

³ Full professor, Universidade Federal Fluminense – UFF - Niterói (RJ), Brazil; Chief at the Nephrology Service, Hospital Universitário Antonio Pedro – HUAP - Niterói (RJ), Brazil.

INTRODUCTION

Chronic kidney disease (CKD) is an important public health problem in Brazil with approximately 26,177 new cases receiving dialysis in 2007. This disease leads to an increased risk for cardiovascular diseases and can also evolve to end-stage renal disease, when there is the need for renal replacement therapy (RRT). In March, 2008, the estimated number of patients receiving dialysis in Brazil was 87,044; over half of the patients were in the Southeast region (57.4%). The Brazilian Dialysis Census of 2008 showed that RRT is paid by the Brazilian Health System (SUS) in 93.8% of the cases and hemodialysis is the prevalent treatment, performed in 89.4% of the cases (n= 35,928)⁽¹⁻³⁾.

The main causes for CKD are hypertension and diabetes mellitus, accounting for 36% and 26% of the primary diagnoses respectively. Therefore, strict control of blood pressure and glucemia are very important to minimize the progression of CKD⁽³⁻⁵⁾.

Prevalence of early stages of CKD is even higher and studies demonstrate that it can be prevented or that the unfavorable outcomes can be delayed. Signs and symptoms indicating renal failure only appear in the advanced stages with important outcomes in patients' lives and costs to the health system⁽⁶⁻⁸⁾.

This picture leads to a need for different follow-up of this group. Thus, the multidisciplinary outpatient clinic specialized in chronic kidney disease at Universidade Federal Fluminense has a care model where patients are approached in a complete and integrated manner, by a team formed by nurses, physicians, dieticians, psychologists and social assistants, in order to positively change the current profile of renal diseases in the country, according to the government proposal of a national care policy for people with renal diseases. Within this perspective, the present study aimed to describe the profile of patients with chronic kidney disease undergoing conservative therapy in the Multidisciplinary Outpatient Clinics at Hospital Universitário Antonio Pedro.

METHODS

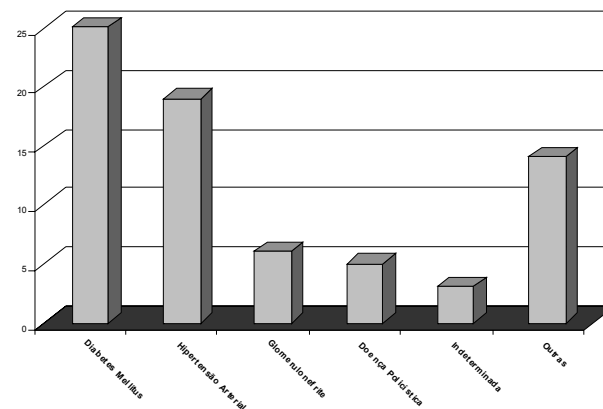
Hospital Universitário Antonio Pedro (Huap) belongs to Universidade Federal Fluminense, located in the city of Niterói-RJ; providing care to patients in the Metropolitan Region number II, encompassing the cities of Niterói, São Gonçalo, Maricá, Itaboraí, Rio Bonito, Silva Jardim and Tanguá. It is in charge of specialized care services and Nephrology is among them.

Descriptive, retrospective study carried out from September 2006 to May 2008. Seventy two charts of patients seen in the multidisciplinary Outpatient Clinics

were assessed and the following variables from patients' records were raised: gender, schooling, primary diagnoses, renal disease stage, use of diuretics and antihypertensive class, physical and work activities, family income and body mass index. The research protocol was approved by the local Ethics Committee. Data have been electronically processed using EXCEL 2007 and SPSS 13.0, with presentation of means, frequencies and standard deviation.

RESULTS

Distribution of the 72 patients according to gender demonstrates that 43 were female (60%). Mean age was 59 ± 14 (22 to 84 years old), and 47% (n=34) were 60 or over. Prevalent schooling was incomplete elementary school (41.7%). Most frequent primary diagnoses were: diabetes mellitus in 25 individuals (34.7%), hypertension in 19 (26.4%), chronic glomerulonephritis in six patients (8.3%), polycystic kidney disease in five patients (6.9%) and in three patients (4.2%) the cause was not determined, and other causes (19.4%), as shown in Picture 1.

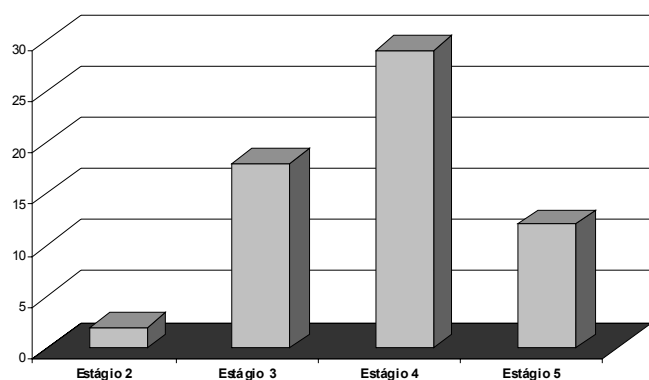


Picture 1 – Primary diagnoses of patients followed-up in the Nephrology Outpatient clinic at HUAP from 2006 to 2008

Staging of renal disease was performed through Cockcroft-Gault equation. When arriving at the outpatient clinic, one patient presented CKD stage II (1.7%), 18 (30%) stage III; 29 (48.3%) stage IV and 12 (20%) were at end stage (Picture 2). In twelve charts there were no records on CKD stage. During treatment, CKD stage worsened in 8 patients, in six patients there was remission with increase in glomerular filtration rate.

Among the 41 patients at stage 4 and 5, arteriovenous fistula was created only in seven patients especially due to operational problems. These data demonstrate that patients should arrive for replacement therapy with a definitive vascular access, improving the quality of dialysis

which will reflect in lower morbidity and mortality.



Picture 2 – Staging of chronic kidney disease in patients followed up in the Nephrology Outpatient Clinic at HUAP from 2006 to 2008

As for signs and symptoms, 29.2% had insomnia, 79.2% had nocturia, and proteinuria was present in 31.9% of patients.

Fifty-nine individuals (81.9%) were hypertensive, and the most commonly used classes of antihypertensive medications were: angiotensin-converting enzyme (ACE) inhibitors (51.4%), beta-blockers (30.6%) and calcium channel blockers (41.7%). Patients using diuretics regularly accounted for 76.4% and most of them took furosemide (66.7%). As for diabetic patients, five (6.9%) were taking oral hypoglycemic agents and 19 (26.4%) received insulin.

Regarding body mass index, 38.9% had normal weight, 31.9% were overweight, and 12.5% were obese class I, 6.9% class II, 2.8% class III, and 6.9% were underweight. As for occupation, most patients were retired or pensioners (55.6%); 11.1% were working; 8.3% were on a sick leave, 13.9% were unemployed and 11.1% were housewives. Family income of most patients was between one or two minimum wage (59.7%). It was observed that 52.8% of patients came back to their appointments, 30.6% did not come back, 6.9% received hemodialysis, only one went to peritoneal dialysis, and there was one death.

DISCUSSION

The profile of patients seen in the Nephrology Outpatient Clinic at HUAP showed the prevalence of diabetes mellitus and hypertension as the main causes for chronic kidney disease, corroborating results from other surveys performed in Brazil^(4, 9). Most patients were females, which is in contrast with the information from

patients in dialysis where there is predominance of males⁽³⁾. In other two Brazilian studies, the distribution between genders was either equal⁽⁹⁾ or there was predominance of females⁽⁴⁾. There could have been more women because they take better care of their health. Family income was between one or two minimum wages. Usually, two or more classes of antihypertensive medications were used for blood pressure control and half the patients used angiotensin-converting enzyme (ACE) inhibitors. Considered as a group, overweight and obese patients were the majority, accounting for 54.1% of the sample. These data reinforce the idea that obesity and diabetes are conditions whose prevalence is increasing in developing countries similarly to what happens in developed countries. In the United States for example, diabetes is the greatest cause for being admitted to a dialysis program⁽¹⁰⁾. Similar to other Brazilian studies^(4, 9), there was a significant number of patients in the age group from 50 to 60 or over, indicating that degenerative chronic diseases follow the increase in life expectancy of the population. This data point to the need for health education strategies and new ways to approach hypertensive and diabetic patients to reduce the impact of morbidity and mortality related with chronic kidney disease and its complications. More than half the patients returned to the appointments, however, there was a significant rate of absences (30.6%) demonstrating the need for building strategies for greater adherence to treatment.

CONCLUSION

From the results presented, we may conclude that most patients were females, between 50 and 60 years old, with poor education. Most were CKD stage 4 according to K/DOQI classification and diabetes mellitus was the main cause for renal disease followed by hypertension. Most patients were taking antihypertensive medication and more than half used diuretics. The predominance of patients with overweight/ obesity shows the importance of dietary guidance and physical activity. Arteriovenous fistula was created only to seven patients, demonstrating the poor structure for treating chronic patients according to the present protocols. Knowing the profile of patients with chronic kidney disease and the treatment in initial stages with the adoption of individual and adequate management may delay evolvement and avoid complications, improving patients' quality of life and reducing costs with treatment.

REFERENCES

1. Santos FR, Filgueiras MST, Chaoubah A, Bastos MG, Paula RB. Efeitos da abordagem interdisciplinar na qualidade de vida e em parâmetros laboratoriais de pacientes com doença renal crônica. *Rev Psiquiatr Clín (São Paulo)*. [Internet] 2008 [citado 2008 Jul 21];35(3):87-95. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0101-60832008000300001&lng=pt. doi: 10.1590/S0101-60832008000300001.
2. Queiroz MVO, Dantas MCQ, Ramos IC, Jorge MSB. Tecnologia do cuidado ao paciente renal crônico: enfoque educativo-terapêutico a partir das necessidades dos sujeitos. *Texto & Contexto Enferm*. [Internet] 2008 [citado 2008 Jul 22];17(1):55-63. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072008000100006&lng=pt. doi: 10.1590/S0104-07072008000100006
3. Sesso R, Lopes AA, Thomé FS, Bevilacqua JL, Romão Junior JE, Lugon J. Relatório do Censo Brasileiro de Diálise, 2008. *J Bras Nefrol*. 2008;30(4):233-8.
4. Ronqui TT, Nomoto P, Yamada SS, Baroni EA. Caracterização epidemiológica dos pacientes atendidos no ambulatório de nefrologia do hospital universitário de Maringá no ano 2004. *Arq Ciências Saúde UNIPAR. Umuarama*. [Internet] 2007 [citado 2008 Mar 20];11(3):205-9. Disponível em: <http://revistas.unipar.br/saude/article/view/2040/1782>
5. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Diabetes Mellitus. Brasília: Ministério da Saúde; 2006. [Cadernos de Atenção Básica, n. 16] (Série A. Normas e Manuais Técnicos).
6. National Kidney Foundation. K/DOQI Clinical Practice Guidelines for Chronic Kidney Disease: Executive Summary (Diretrizes de Prática Clínica para Doença Renal Crônica: Resumo Executivo) [Internet]. New York, 2002. Disponível em: http://www.transdoreso.org/pdf/Doenca_renal_cronica.pdf
7. Bastos MG, Carmo WB, Abrita RR, Almeida EC, Mafra D, Costa DMN, et al. Doença renal crônica: problemas e soluções. *J Bras Nefrol*. [Internet] 2004 [citado 2008 Mar 20];26(4):202-15. Disponível em: http://www.prerenal.ufjf.br/ensino/JBN_2004_DRC.pdf
8. Romão Junior JE. A doença renal crônica: do diagnóstico ao tratamento. *Prat Hosp*. [Internet] 2007 [citado em Mar 20];9(52):183-7. Disponível em: <http://www.praticahospitalar.com.br/pratica/2052/pdfs/mat/2032.pdf>
9. Bregman R. Avaliação de pacientes com doença renal crônica em tratamento especializado por equipe multidisciplinar. *J Bras Nefrol*. 2006;28(3 Supl 2):33-5.
10. US Renal Data System: Excerpts from the USRDS 2005 Annual Data Report: Patients characteristics. *Am J Kidney Dis*. 2006; 47(Suppl 1):S81-94.