

## 176 - CHARACTERIZATION OF CHRONIC RENAL PATIENTS IN HEMODIALYTIC TREATMENT IN A PRIVATE CLINIC EM NATAL / RN

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### INTRODUCTION

Chronic Renal Failure (CRF) is a syndromic diagnosis of a loss progressive and usually irreversible of glomerular filtration and is multifaceted, treatable, controllable, progressive and high mortality. The prevalence of patients on renal replacement therapy increases gradually due to the high incidence of CRF in the world and the reduction of mortality in dialysis (THOMÉ et al., 2007).

The CRF have like co-responsible the increased incidence of chronic diseases such as hypertension, diabetes and cancer, mainly due to lack of early detection and appropriate follow-up of these pathologies (DAUGIRDAS; BLAKE; ING, 2003).

As we the CRF progresses to the stage more advanced, or terminal, where the patient needed replacement therapy to continue living, there is a substantial change in their daily activities, directly influencing the perception of quality of life, making it necessary for there is an appropriate multidisciplinary approach to minimize the doubts and rebellion (ROCHA, 2009; BITTENCOURT et al, 2004).

It is essential to clarify patient on therapeutic possibilities that are available like hemodialysis (HD), peritoneal dialysis (PD) and renal transplantation.

The term dialysis involves the transport of water and solutes through a semipermeable membrane that can be artificial, as in hemodialysis, or biological, as in peritoneal dialysis (THOMÉ et al, 2007).

Hemodialysis is the procedure performed to filter the blood of the patient by removing undesirable substances, liquids and electrolytes in excess. The blood flows through a circuit, adapted to a dialyzer filter, composed of two compartments, an internal through which the blood and an external through which inverse flow in the dialyzer solution, location where occurs the diffusion of solute between blood and dialysis solution resulting in the removal of metabolic slag and also in recovery of solutes such as sodium bicarbonate (THOMÉ et al, 2007).

Hemodialysis is indicated when there is stoppage of renal function, which can be classified as Acute Renal Failure (ARF), when it occurs suddenly and usually reversible, chronic renal failure (CRF) when installed in a slow and gradual form causing permanent damage kidneys (MOYSÉS NETO et al, 2000).

In front of exposed, the objective is characterize patients with CRF undergoing hemodialysis in a private clinic in Natal/RN.

### METHODOLOGY

Study exploratory, descriptive and quantitative realized in Néfron Clínica S / C LTDA, in Natal / RN. This is a private clinic of nephrology convening with the Unified Health System (UHS) and the Municipal Health Department, which serves patients from inside and from the state capital.

The project was developed based on the Resolution 196/96 (National Health Council, 1996) that governs research on humans, previously assessed and approved by the Ethics Committee of the Hospital Agamemnon Magalhães in Recife - PE, under the number of Protocol: 68/2008 and approved by the institution where data were collected.

The collection of clinical and laboratory data was performed by consulting the records of the dialysis unit available in electronic medical records and then stored in a spreadsheet in Excel. The data used contain information about socio-demographic, health and history of the patients, corresponding to the following variables: age, sex, education, marital status, etiology of disease and duration of dialysis.

The study population consisted of all medical records of patients with chronic renal failure on hemodialysis in Nefron Clínica S / C LTDA, with dialysis time greater than 24 (twenty four) months, a total sample of 173 medical records.

The data were categorized and processed electronically through the program for database Microsoft Excel XP and SPSS 15.0.

### RESULTS AND DISCUSSIONS

Data analysis showed that 64.4% of patients presented age until 59 years and 35.6% greater than or equal to 60 years. It is apparent then, that most of the study population was composed of adults in economically active age.

**Table 1- Distribution of sex by age group of hemodialysis patients treated at a private institution of Natal according to etiology of CRF. Natal / RN, 2009.**

|        | Until 59 years |      | Than or equal to 60 years |      |
|--------|----------------|------|---------------------------|------|
|        | N              | %    | N                         | %    |
| Female | 53             | 30.5 | 24                        | 13.8 |
| Male   | 59             | 33.9 | 38                        | 21.8 |
| Total  | 112            | 64.4 | 62                        | 35.6 |

Regarding gender, there was a slight predominance of males (55.7%) compared to females (44.3%).

Corroborating our data, Sesso (2002) analyzing statistical data on 1999 about patients with CRF, described as the age group, 52% of patients were male and 26% were over 60 years of age, with an estimated increase in this age in recent years. There were 2.2% of dialysis patients under 18 years in Brazil and only 297 of these with aged equal or less than 10 years.

Kusumota (2005) in his study on assessment of quality of life of hemodialysis patients found a greater number of patients undergoing hemodialysis in the age group 50 to 59. Already Mendonça (2006) noted in a comparative study, higher frequency in ages of 28 and 43 years, being 53.45% renal transplant patients and 48.99% in hemodialysis, followed by age group of 18 to 27 years, where 25, 81% were patients on hemodialysis and renal transplant 24.14%.

Sesso (2006) in an epidemiological study on chronic renal disease in Brazil, found that 91% of patients with chronic

renal failure terminal received treatment by dialysis and these 26% were over 60 years of age, emphasizing that this ratio tends to increase with better life expectancy of the population.

Soares et al. (2003) in research with children and adolescents with CRF, also found little difference in relation to sex of participants, 35 male and 27 female. Bezerra (2006) in a study of 70 hemodialysis patients to assess quality of life, found balance in participation in both sexes, with 35 for each sex.

Already Oliveira et al. (2005) in a study of 133 hemodialysis patients found that 71 were male and 62 female and Kusumota (2005) noted in a study to assess the quality of life of hemodialysis patients with 194 patients, 63.4% were male, while 36.6% were female. Prevailing in both studies the male.

Regarding education, it was observed that 27.2% had not completed elementary, 26.6% completed elementary, 16.8% high school graduates and 15.6% illiterate.

Data from the IBGE (2007) showed that 9.96% of the Brazilian population have no education and less than a year of study, 13.42% have one to three years, 27.64% have four to seven years, 16, 68% of eight to ten years, has 23.78% of eleven to fourteen years of study and 6.21% have fifteen or more years of study. Out of a total population of 159,361 persons 10 years or older, by state of domicile and sex, according to years of study, these 77,052 males and 82,309 females.

Trentini et al. (2004) observed in a study on the quality of life of people dependent on dialysis, the level of schooling, 12.5% were illiterate, 31.1% did not study beyond the fourth grade of elementary school and 18.7% did not reach the fourth grade of elementary school. Lara and Sarquis (2004) in a study to identify key changes that hemodialysis led the life of the chronic renal and relevance of this population found that 67% of patients had access to primary education and had greater difficulty understanding the full extent of dialysis procedure. In this study, we observed 15.6% illiterate and 27.7% with incomplete primary education which can hinder the following guidelines by the health team, interfering with response to treatment.

With regard to marital status, 53.8% were married, 32.9% single, 7.5% widowed and 5.8% are those living together, divorced and none of the above. Abreu (2005) found in her research on quality of life related to health care of hemodialysis patients that 73% of patients were married, 15% single and 12% divorced, separated or widowed. The authoress notes that the presence of the spouse is very important as they can operate between other family members, the role of caregiver. Now, with the evolution of the disease, some can experience some physical difficulties that prevent them from performing their activities independently, and aid in the care related to dialysis. In this study, we identified 43.9% of the patients included in the group of single, widowed, divorced what can be inferred that the absence of the spouse may impede adherence to treatment, CRF is associated with dependence on machine hemodialysis, the people who wield it, cause change in the life of the patient, leading them to frustration, depression, anger and little hope for the future.

As regards the time of treatment, it was found that 60.3% of patients that performed hemodialysis between 25 and 75 months and 39.7% from 76 to 216 months of treatment, with an average of 73.8 months. It was found that females exhibit greater treatment time (between 76 and 216 months), this value being significant ( $p$ -value = 0.044).

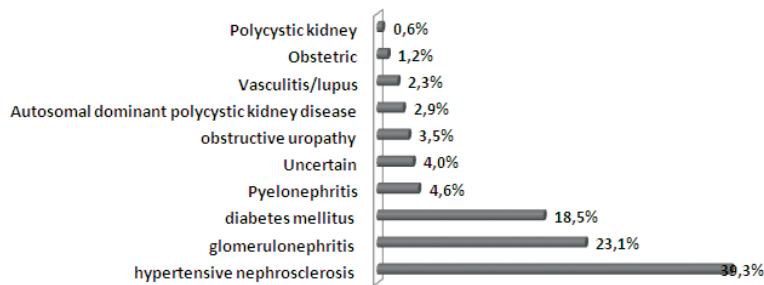
**Table 2 - Distribution of sex per time of treatment of hemodialysis patients treated at a private institution of Christmas according to etiology of CRF. Natal / RN, 2009.**

|        | Treatment time            |                            | Total |       |
|--------|---------------------------|----------------------------|-------|-------|
|        | 25 to 75 months<br>N<br>% | 76 to 216 months<br>N<br>% | N     | %     |
| Female | 40<br>23,0                | 37<br>21,3                 | 77    | 44,3  |
| Male   | 65<br>37,4                | 32<br>18,4                 | 97    | 55,7  |
| Total  | 105<br>60,3               | 69<br>39,7                 | 174   | 100,0 |

Kusomota (2005) noted in his study on assessment of quality of life related to health care of hemodialysis patients a variation of treatment time hemodialysis for 6 months to 22 years and attributes the increased survival of this population to the technological, scientific and law regulating services of dialysis.

In their study Araújo et al. (2000) analyzing patients in different regions of Brazil through bone biopsy observed that dialysis time lower than two years or more than two years differed among various diagnostic categories, patients on dialysis less than two years had a higher frequency of disease Adynamic for other diagnoses. Mixed disease was the most frequent pathology in patients with longer duration of dialysis.

Chart 1 below, shows that the main cause of chronic renal failure in the study population was hypertensive nephrosclerosis in 39.3% of patients, followed by glomerulonephritis in 23.1% and diabetes mellitus (DM) in 18.5%



**Figure 1 - Distribution of underlying diseases in hemodialysis patients treated at a private institution of Christmas according to etiology of CRF. RN, 2009.**

Abreu (2005) found in his study on quality of life related to health care of hemodialysis patients, as the major cause of IRC the glomerulonephritis in 35% of patients, followed by hypertensive nephrosclerosis in 25% and diabetes in 20% of patients.

Romão Jr. et al. (2004) in a study conducted at Hospital das Clínicas (FMUSP), São Paulo, with 145 patients with CRI, noted that 36% of patients had how etiologic diagnosis of renal disease the hypertensive nephrosclerosis, 23% of patients had diabetic nephropathy, 12% had chronic glomerulonephritis and 14% tubulointerstitial nephropathy and other diagnoses in the remaining 22 patients. However, Sesso (2006) questions the validity of these diagnoses due to no evidence histological and the lack of monitoring before the terminal phase in these patients. However, the prevalence of hypertension in the adult population in

our country is over 25%, many do not know they are hypertensive, those who know less than 30% are inadequately treated which suggests that hypertension may be coming years yet important cause of CRF.

### CONCLUSION

The study allowed to characterize socio-demographic and clinical variables across the study group, providing the knowledge of the characteristics of the clientele of Nefron Clínica.

The results of this study showed a population of predominantly male, with ages ranging from 18 to 59 years old, married, with incomplete elementary school; on dialysis for hypertensive nephrosclerosis.

The CRF causes changes in lifestyle and causes physical and behavioral changes in their carriers, due the condition of the chronically ill. Facing these situations requires the use of individual strategies, which is a challenge for the professional.

The nurses can give patients necessary means for these to develop mechanisms to deal with the IRC, with a view to improving their living conditions and encourage the family to participate actively in the process.

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### CHARACTERIZATION OF CHRONIC RENAL PATIENTS IN HEMODIALYTIC TREATMENT IN A PRIVATE CLINIC EM NATAL / RN

This exploratory, descriptive and quantitative study in a private clinic convening with the Sistema único de Saúde (SUS) in Natal / RN, in order to characterize patients with CRF on hemodialysis. The research was initiated after approval by the Ethics in Research (n.68/2008). Data collection was performed by consulting the records of the dialysis unit available in electronic medical records and then stored in a spreadsheet in Excel. The sample was composed of 173 medical records of patients with chronic renal failure on hemodialysis in clinic with dialysis time longer than 24 months. The data were categorized and processed using Microsoft-Excel XP and SPSS. The results of this study showed a population predominantly male (55.7%), with ages

ranging from 18 to 59 years (64.4%), married (53.8%), with incomplete primary education (27.2%); on dialysis for hypertensive nephrosclerosis (39.3%), with an average of 73.8 months of treatment time. It was found that females exhibit greater treatment time (between 76 and 216 months), this value being significant ( $p$ -value = 0.044). It was found that CRF is a chronic, stressful, which causes changes in lifestyle carrier. In this sense, it is for nurses offer patients the necessary means for develop mechanisms to cope with the illness in order to improve their living conditions and encourage the family to participate actively in the process.

**KEY-WORDS:** Renal Insufficiency, Chronic, Renal Dialysis, nursing

#### CARACTÉRISTIQUES DES PATIENTS ATTEINTS D'IRC EN HEMODIALYSE DANS UNE CLINIQUE PRIVEE A NATAL/RN

cet exploratoire, descriptif et quantitatif lieu dans une clinique privée en vertu du système de santé unifié (SUS) dans le Natal / RN afin de caractériser les patients atteints d'IRC sous hémodialyse. La recherche a été lancée après l'approbation de l'éthique dans la recherche (n.68/2008). La collecte des données a été effectuée en consultant les dossiers de l'unité de dialyse disponibles dans les dossiers médicaux électroniques, puis stocké dans une feuille de calcul dans Excel. L'échantillon était composé de 173 dossiers médicaux des patients atteints d'insuffisance rénale chronique en hémodialyse dans les cliniques de dialyse avec le temps plus long que 24 mois. Les données ont été classées et traitées à l'aide de Microsoft Excel XP et SPSS. Les résultats de cette étude a montré une population majoritairement masculine (55,7%), avec des âges allant de 18 à 59 ans (64,4%), mariés (53,8%), avec les études primaires (27,2%), sur la dialyse pour néphrosclérose hypertendus (39,3%), avec une moyenne de 73,8 mois de temps de traitement. Il a été constaté que les femmes présentent plus de temps de traitement (entre 76 et 216 mois), cette valeur étant significative ( $p$ -value = 0,044). Il a été constaté que les CRF est une maladie chronique, stress, ce qui provoque des changements dans le mode de vie du porteur. En ce sens, les infirmières donnent aux patients les moyens pour les pays à élaborer des mécanismes pour faire face à la maladie afin d'améliorer leurs conditions de vie et d'encourager la famille à participer activement au processus.

**MOTS-CLÉS:** insuffisance rénale chronique; Soins infirmiers

#### CARACTERIZACIÓN DE LOS PACIENTES CON INSUFICIENCIA RENAL CRÓNICA EN TRATAMIENTO HEMODIALÍTICO EN UNA CLÍNICA PRIVADA EN NATAL/RN

Estudio exploratorio, descriptivo y cuantitativo, realizado en una clínica privada que también asiste los pacientes del Sistema Único de Salud (SUS) en Natal /RN con el fin de caracterizar los pacientes con enfermedad renal crónica en hemodiálisis. La investigación se inició después de la aprobación por el Comité de Ética en la Investigación (n.68/2008). La recopilación de datos se realizó mediante la consulta de los registros de la unidad de diálisis disponibles en los registros médicos electrónicos y registrados en una hoja de cálculo en Excel. La muestra estuvo compuesta de 173 historias clínicas de los pacientes con insuficiencia renal crónica en hemodiálisis en la clínica con tiempo de diálisis más de 24 meses. Los datos fueron clasificados y procesados utilizando en Microsoft Excel XP y SPSS. Los resultados de este estudio mostraron una población predominantemente masculina (55,7%), con edades comprendidas entre 18 a 59 años (64,4%), se casó (53,8%), con educación primaria incompleta (27,2%); en diálisis por nefroesclerosis hipertensiva (39,3%), con un promedio de 73,8 meses de tiempo de tratamiento. Se encontró que las mujeres presentan mayor tiempo de tratamiento (entre 76 y 216 meses), este valor es significativo ( $p$ -valor = 0,044). Se encontró que el IRC es una enfermedad crónica, estrés, que provoca cambios en el estilo de vida del usuario. En este sentido, las enfermeras proporcionan a los pacientes los medios para que los países a desarrollar mecanismos para hacer frente a la enfermedad a fin de mejorar sus condiciones de vida y alentar a la familia a participar activamente en el proceso.

**PALABRAS CLAVE:** insuficiencia renal crónica, diálisis renal, enfermería

#### CARACTERIZAÇÃO DOS PACIENTES COM IRC EM TRATAMENTO HEMODIÁLITICO EM UMA CLÍNICA PRIVADA EM NATAL/RN

Estudo exploratório, descritivo com abordagem quantitativa realizado em uma clínica privada conveniada ao Sistema Único de Saúde (SUS) em Natal/RN com o objetivo de caracterizar os pacientes com IRC submetidos a hemodiálise. A pesquisa foi iniciada após aprovação do Comitê de Ética em Pesquisa (n.68/2008). A coleta dos dados foi realizada mediante consulta aos registros da unidade de diálise disponíveis em prontuários eletrônicos e em seguida armazenados em planilha no Excel. A amostra foi constituída pelos 173 prontuários dos pacientes com insuficiência renal crônica em tratamento hemodialítico na clínica com tempo de diálise maior que 24 meses. Os dados foram categorizados e processados pelo programa Microsoft-Excel XP e SPSS. Os resultados deste estudo evidenciaram uma população predominantemente do sexo masculino (55,7%), com faixa etária de 18 a 59 anos (64,4%); casados (53,8%); com ensino fundamental incompleto (27,2%); em tratamento dialítico por nefroesclerose hipertensiva (39,3%), com média de 73,8 meses de tempo de tratamento. Verificou-se que o sexo feminino apresenta maior tempo de tratamento (entre 76 e 216 meses), sendo este valor significante ( $p$ -valor=0,044). Verificou-se que a IRC é uma doença crônica, desgastante, que provoca mudanças do estilo de vida do portador. Nesse sentido, cabe ao enfermeiro proporcionar aos pacientes meios necessários para que estes desenvolvam mecanismos para enfrentar a doença com vistas a melhorar a sua condição de vida e incentivar a família a participar ativamente do processo.

**DESCRITORES:** Insuficiencia Renal Crónica, diálisis renal, enfermería

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