CUIDADO É FUNDAMENTAL

EMOTIONAL FACTORS AND HEMODIALYSIS: NURSING AND ADHERENCE OF CHRONIC KIDNEY PATIENTST

Fatores emocionais e hemodiálise: enfermagem e adesão dos pacientes renais crônicos

Factores emocionales y hemodiálisis: enfermería y adherencia de pacientes renal crónicos

Iarla Kayane Araújo Santos[1] (iD)
Evelyne Ellene Alves de Carvalho[2] (iD)
Rayssa do Nascimento Sousa[3] (iD)
Aléxia Bezerra de Oliveira[4] (iD)
Deyce Danyelle Lopes Silva[5] (iD)
Jhussara Silva Alves[6] (iD)

ABSTRACT

Objectives: to identify the interference of emotional factors in the adherence of chronic kidney patients and the relevance of nursing care for this confrontation. **Method:** from an applied study, of a descriptive nature, with a quantitative nature, carried out with 138 individuals undergoing hemodialysis treatment from May to July 2022. A semi-structured questionnaire with seven open and closed questions was used for data collection. **Results:** anxiety was the most common feeling when undergoing dialysis 21.7%. A percentage of 66.7% of the participants reported a good relationship with the nursing team, 72.5% of the participants stated that they are satisfied with the care provided by the team. **Conclusion:** the research showed that the nursing team contributed to a better development of chronic renal patients through two cares provided, reducing emotional wear and tear through support and humanization.

DESCRIPTORS: Renal insufficiency, chronic; Renal dialysis; Nursing care.

[1,2,3,4,5,6] State University of Piauí, Piauí, Floriano, Brazil.

Corresponding Author: Iarla Kayane Araújo Santos iarlaaraujo123@gmail.com

RESUMO

Objetivo: identificar a interferência de fatores emocionais na adesão de pacientes renais crônicos e a relevância da assistência de enfermagem para este enfrentamento. **Método:** de um estudo aplicado, de cunho descritivo, com natureza quantitativa, realizado com 138 indivíduos em tratamento hemodialítico no período de maio a julho de 2022. Para a coleta de dados foi utilizado um questionário semiestruturado com sete questões abertas e fechadas. **Resultados:** ansiedade foi o sentimento mais comum ao realizar diálise 21,7%. Uma porcentagem de 66,7% dos participantes relatou um bom relacionamento com a equipe de enfermagem, 72,5% dos participantes afirmaram que estão satisfeitos com os cuidados prestados pela equipe. **Conclusão:** pesquisa apontou que a equipe de enfermagem contribui para uma maior adesão dos pacientes renais crônicos através dos cuidados prestados, diminuindo os desgastes emocionais através do acolhimento e humanização.

DESCRITORES: Insuficiência renal crônica; Diálise renal; Cuidados de enfermagem.

RESUMEN

Objetivos: identificar la interferencia de los factores emocionales en la adherencia de los pacientes renales crónicos y la relevancia del cuidado de enfermería para ese enfrentamiento. **Método:** a partir de un estudio aplicado, de carácter descriptivo, con carácter cuantitativo, realizado con 138 individuos en tratamiento de hemodiálisis de mayo a julio de 2022. Para la recolección de datos se utilizó un cuestionario semiestructurado con siete preguntas abiertas y cerradas. **Resultados:** la ansiedad fue el sentimiento más común al someterse a diálisis 21,7%. Un porcentaje del 66,7% de los participantes reportaron una buena relación con el equipo de enfermería, El 72,5% de los participantes manifestaron estar satisfechos con la atención brindada por el equipo. **Conclusión:** la investigación señaló que el equipo de enfermería contribuye para una mayor adherencia de los pacientes renales crónicos a través del cuidado prestado, reduciendo el desgaste emocional a través de la acogida y la humanización.

PALABRAS CLAVE: Insuficiencia renal crónica; Diálisis renal; Atención de enfermería.

INTRODUCTION

Kidney failure is characterized by the irreversible and gradual loss of the ability of the kidneys to perform their basic functions and maintain the homeostasis of the organism due to the deterioration or destruction of the nephrons, its functional unit. This leads to the accumulation of substances that should be excreted through the urine, such as metabolites of drugs, medication, urea, and creatinine. In its early stages, chronic kidney disease (CKD) may be asymptomatic, making early diagnosis difficult.[1]

Adequate evaluation of renal function is necessary, in which early diagnosis of CKD allows immediate initiation of treatment and it is possible to interrupt the progression of renal damage, following the modification of risk factors, such as systemic arterial hypertension, diabetes mellitus, hereditary factors, chronic glomerulonephritis, anemias, cardiovascular diseases and the use of nephrotoxic agents that predispose to pathology.[2]

Hemodialysis (HD) is the replacement of kidney function, it is an extracorporeal procedure in which the blood passes through the machine through a dialyzer filter, which has the function of cleaning and filtering the blood. To perform this procedure, venous access is required, usually, the double lumen catheter (CDL) or an arteriovenous fistula (AVF) is used, in which the anastomosis is made between a vein and an artery.[4]

HD increases the survival of patients with chronic kidney failure, but the dependence on highly complex technology for their survival creates several limitations in the daily lives of these individuals that can affect their biopsychosocial behavior.[5]

Nurses play a fundamental role in the care of patients with chronic kidney disease and, in the field of hemodialysis, aim to identify and monitor the adverse effects of hemodialysis, and the complications resulting from CKD. [6]

Therefore, based on this assumption, the aim of the present study was to identify the feelings of chronic kidney patients during hemodialysis and the interference of emotional factors in the adherence of these patients. This research allows the dissemination of more information on the subject so that nursing professionals can share a more comprehensive knowledge about the importance of care of the team as an instrument of greater adherence to HD treatment. It is also a contribution to the scientific field since CKD is a public health problem with high incidence, prevalence, and mortality.

METHOD

This is an applied research, of descriptive nature, with quantitative character. The study was carried out in a hemodialysis clinic located in the city of Floriano - Piauí. The nephrological activities of the respective health service began in the mid-2000s, it is a private institution linked to the Unified Health System (SUS), with a profile of care for clients with impaired renal function who need dialysis and nephrology services, in the states of Piauí and Maranhão.

Table 1 -. Sociodemographic Data of CKD Patients on Hemodialysis Floriano, PI, Brazil 2022.

Variables	n	%
Age		
18 to 24	5	3,6
25 to 39	38	27,5
40 to 55	54	39,1
56 to 70	34	24,6
71 to 85	7	5,1
Sex		
Male	91	65,9
Female	47	34,1
Color		
White	19	13,8
Brown	44	31,9
Black	74	53,6
Not informed	1	0,7
Naturalness		
Floriano	19	13,8
Other cities	119	86,2
State		
Piaui	91	65,9
Maranhão	41	29,7
Bahia	1	0,7
Not informed	5	3,6
Profession		
Retired (a)	36	28,7
Unemployed (a)	43	31,2
Farmer (a)	18	13
Housekeeper	15	10,9
Other activities	26	16,2
Education		
Illiterate (a)	23	16,7
Elementary Complete	13	9,4
Elementary Incomplete	52	37,7
High School Complete	25	18,1
High School Incomplete	15	10,9
College Complete	4	2,9
Not informed	6	4,3

Source: Research data, 2022

Table 2 -. Most common feelings during hemodialysis. Floriano, PI, Brazil 2022.

Variables	n	%
Hemodialysis time		
More than ten years	123	89,1
Less than or equal ten years ago	15	10,9
Safety level when performing dialysis		
Very safe	77	55,8
Don't feel safe	8	5,8
Unsafe	46	33,3
Didn't answer	7	5,1
Feelings when performing hemodialysis		
Anguish	3	2,2
Anxiety	30	21,7
Depression	11	8,0
Despondency	1	0,7
Stress	5	3,6
Weakness	1	0,7

Insomnia	2	1,4
Fear	12	8,7
Sadness	12	8,7
Nervousness	2	1,4
Not informed	5	3,8
None	54	39,1

Source: Research data, 2022

Table 3 -. Dialysis Patient's Perception of the Nursing Team's Reception and Care Floriano, PI, Brazil, 2022 .

Variables	n	%
Relationship with the nursing team		
Great	92	66.7
Good	37	26,8
Reasonable	7	5,1
Bad	2	1,4
How the nursing team contributes to the permanence in the treatment		
Through humanized and welcoming assistance	49	35,5
By passing security in relation to procedures	16	11,6
Giving accurate information and dialoguing with the patient	21	15,2
Offering emotional support in addition to the care provided	18	13
None of the alternatives	5	3,6
All alternatives	2	1,4
Didn't answer	27	19,6
Satisfaction with the care provided by the team		
Unsatisfactory	1	0,7
Not very satisfactory	12	8,7
Satisfactory	100	72,5
Very satisfactory	24	17,4
Not informed	1	0,7
Sessions		
Group 1	73	52,9
Group 2	65	47,1

Source: Research data, 2022

Table 4 -. Fisher's exact test. Floriano, PI, Brazil, 2022.

Variables	Race			
Feeling when performing hemodialysis	**White** n (%)	**Brown** n (%)	**Black** n (%)	**Not informed** n (%)
Anguish	3 (15,8)	0 (0,0)	0 (0,0)	0 (0,0)
Anxiety	4 (21,1)	9 (20,5)	17 (23,0)	0 (0,0)
Depression	0 (0,0)	3 (6,8)	8 (10,8)	0 (0,0)
Despondency	0 (0,0)	0 (0,0)	1 (1,4)	0 (0,0)
Stress	0 (0,0)	0 (0,0)	5 (6,8)	0 (0,0)
Weakness	1 (5,3)	0 (0,0)	0 (0,0)	0 (0,0)
Insomnia	1 (5,3)	0 (0,0)	1 (1,4)	0 (0,0)
Fear	1 (5,3)	4 (9,1)	6 (8,1)	1 (100)
Nervousness	1 (5,3)	0 (0,0)	1 (1,4)	0 (0,0)
Sadness	1 (5,3)	4 (9,1)	7 (9,5)	0 (0,0)
Not informed	0 (0,0)	3 (6,8)	2 (2,7)	0 (0,0)
None	7 (36,8)	21 (47,7)	26 (35,1)	0 (0,0)

Source: Research data, 2022

The study population consisted of 367 people who agreed to participate in this study and underwent hemodialysis, without distinction of sex, race, color, or religion, and who were submitted to the procedure at least twice a week. Exclusion criteria were individuals who had not been on hemodialysis for more than three months; patients undergoing peritoneal dialysis or any other type of treatment for CKD other than hemodialysis; individuals under the age of 18; and individuals without cognitive ability.

Applying the sample size calculation with a population distribution of 80/20, a percentage error of 5%, a confidence level of 95%, and a margin of error of 6.23%, a sample of 148 people was obtained, but during data collection, only 138 people met the inclusion criteria.

For the data collection, carried out in July 2022, a questionnaire developed by the author was used, consisting of questions evaluating sociodemographic and clinical conditions, which was applied during the hemodialysis sessions, divided into two groups and three shifts.

The organization and review of the quantitative data obtained were performed using Microsoft Excel (2016) software, after which they were exported to the Statistical Package for the Social Science (SPSS) software, version 20.0, and compiled in a Windows® environment. The significance level for all analyses was $p<0.05$. Exploratory data analysis was performed to determine the statistical tests to be used.

Descriptive analysis included the calculation of absolute and relative frequencies for the proportions of categorized variables. Fisher's exact test was used in contingency tables to compare groups of two independent samples.

The research, for being related to studies with human beings, obeyed the criteria of Resolution 466/12 and 510/16 of the National Health Council, focusing on the reliability and confidentiality of participants, the project through the Certificate of Presentation for Ethical Appreciation - CAAE 58260122.4.0000.5209, receiving approval opinion number 5,407,399.

RESULTS

Table 1 shows that the total number of study participants in the age group 40 to 55 years predominated 54 (39.1%), and the age range of those studied was from 18 to 82 years. The male gender predominated 91 (65.9%). The colors brown and black are the majority in the sample. Regarding the naturalness, most of them belonged to other cities of the State of Piauí. Regarding the occupation, a relevant total of 102 (71.3%) of the participants did not have a fixed income, but exercised some paid activity, while 43 (31.2%) were unemployed. In terms of schooling, low schooling predominated with less than 8 years of schooling (TABLE 1).

Table 2 shows the relationship between clients and dialysis modality; most of these 123 (89.1%) reported having been on dialysis for more than a decade. The analysis of the average

time of hemodialysis in years, of the participants of this study is 4.84 ± 3.793, being the patient with the shortest treatment time being one year and the one with the longest duration in hemodialysis therapy being 19 years, with sessions around 4 hours.

Regarding the safety of the sessions, there is a significant confidence level of 54 (39.1%). At the same time, a total of 79 (57.1%) claim to have some feelings because of the procedure, of which: anxiety, depression, fear, and sadness are most common in patients with chronic kidney disease 65 (47.1%).

According to the relationship with the nursing team, there was a prevalence of good or excellent, a significant part of the clients, with a total of 129 (93.5%). In terms of nursing contributions to the permanence in treatment, 49 (35.5%) of the patients stated that it is through humanized and welcoming care, however, 27 (19.1%) did not answer any of the alternatives of the research instrument and 5 (3.6%) said it was none of the options.

Regarding satisfaction with the care provided by the care team, 136 (98.6%) of the respondents indicated some level of satisfaction. 79 (52.9%) of these participants belong to the 1st session group, while 65 (47.1%) belong to the 2nd session group.

Table 4 shows the result of Fisher's exact test, which identified a relationship between race and feelings about undergoing dialysis, showing that black patients are the most affected by anxiety, which was the most common feeling [$X2$ (33) = 52.063; $p = 0.019$].

DISCUSSION

The literature explains that the age group of 40 years is considered a risk factor for CKD because the glomerular filtration rate decreases by 0.08ml per year from this age. This increases the fragility of the kidney, making it more difficult for the system to maintain the body's homeostasis.[7]

Overall, males predominated in the hemodialysis population. This finding is similar to that of the Brazilian Dialysis Census (2020).[16] This fact may be related to the macho culture in which this population has less preventive health care and seeks services only when morbidity is high.[8] However, it is well known that this pathology affects both sexes without distinction.

The high unemployment rate among patients with CKD may be related to the limitations imposed by the disease process, which results in the absence of work and sources of income.[4] The lack of employment in this group is contradictory. During data collection, there were reports that the standard of living was significantly reduced due to the limited source of income caused by disability due to kidney disease.

This study noted a low level of education among the participants, which affects adherence to treatment, as well as knowledge about health and disease processes, a fact necessary to improve the patient's quality of life and acceptance of this condition; in addition, the lack of literacy hinders the search

for health services and makes the ultimate goal of dialysis treatment unattainable.[10-14]

According to some authors, education is considered an important factor in the literature because it is related to the quality of information acquired by the patient and the ability to assimilate it, i.e. the higher the level of education, the greater the understanding of the individual about his health, the challenges of treatment and the imposed limitations in his life caused by the pathology.

The form of hemodialysis treatment has become increasingly safer, in addition to increasing the longevity of patients, but several complications can occur.[3] In addition to causing numerous mental health damages, which justifies the performance and training of the nursing professional who directly cares for this client and can provide the most adaptable health actions and a less exhausting form of treatment.[6]

There is a perception of health professionals that people on hemodialysis suffer from feelings such as sadness, anxiety, isolation, fear, lack, and associate the suffering of the treatment as a trigger or increase in depression, disillusion, and feeling of loss of autonomy, especially by always listening to what they should or should not do, this is likely to have emotional consequences.[11]

The treatment affects the personal life in terms of the changes that occur in daily life. This causes the individual to suffer from adherence to therapy, and changes in eating habits, such as the need to follow a proper and strict diet. These feelings become intertwined and generate an emotional impact that can lead to treatment abandonment.[11]

Depressive disorders in chronic kidney disease patients may be associated with adverse outcomes, such as dialysis discontinuation. Several interventions are needed to reduce depressive symptoms, including educational and problem--solving ones that can be developed by the nursing team.[15]

The nurse-patient relationship is undoubtedly a very important variable for the success of the treatment and the improvement of the emotional conditioners, since it allows the professional to guide and clarify doubts, reducing anxiety and providing better adherence and acceptance of prolonged treatment. In this way, it will guide the patient to the best possible therapeutic form.[4-5]

Care should be improved according to the specific needs of each individual so that it provides information for knowledge of pathology. In this way, the nurse will not only communicate with the patient but also access the world of the person with CKD to the extent that it helps to face the reality of the disease.[17]

The close coexistence between patients and the team, usually for a long time due to the treatment modality, eventually converges into a relationship of friendship and trust, in which patients form a bond with the team that supports them.[12] This is a beneficial relationship because the feeling of being welcomed and supported in the face of the emotional fragility caused by the disease is an aggregating factor of meaning, and therefore motivating.

The adherence process is a dynamic event that can suffer from the influence of several factors and can change quite frequently, the team must develop strategies such as efficient care to maintain a constant promotion of adherence behavior. The objectives of renal care practice are to increase survival, reduce morbidity, improve quality of life and ensure access to and continuity of treatment.[13]

CONCLUSION

Limitations were identified in certain patients, because they had resistance in describing and identifying the emotional impact, in addition to not being able to describe how the care team contributes to the permanence of the treatment.

Therefore, it is necessary to have active and frequent listening to nurses in the face of emotional issues, to outline a care plan to minimize the emotional impact of the disease, in addition to continuous professional training for a better initial approach aimed at educating about the treatment and encouraging therapeutic adherence.

BIBLIOGRAPHIC REFERENCES

1. Aguiar LK, Prado RR, Gazzinelli A, Malta DC. Fatores associados à doença renal crônica: inquérito epidemiológico da Pesquisa Nacional de Saúde. Rev. bras. epidemiol. [Internet]. 2020 [Cited 2023 jan 13];23. Available from: https://doi.org/10.1590/1980-549720200044.

2. Bravo-Zúñiga J, Gálvez-Inga J, Carrillo-Onofre P, Chávez-Gómez R, Castro-Monteverde P. Early detection of chronic renal disease: coordinated work between primary and specialized care in an ambulatory renal network of Peru. J. bras. nefrol. [Internet]. 2019 [Cited 2023 jan 13];41(2). Available from: https://doi.org/10.1590/2175-8239-jbn-2018-0101.

3. Neto IRL, Soares GL, Gonçalves AS. O papel do enfermeiro de uma unidade de terapia intensiva na hemodiálise. Rev UNINGÁ Review. [Internet]. 2017 [Cited 2023 jan 13];31(1). Available from:https://revista.uninga.br/uningareviews/article/view/2041/1633.

4. Ribeiro WA, Evangelista DD, Figueiredo Júnior JC, Sousa JG. Encadeamentos da Doença Renal Crônica e o impacto na qualidade de vida de pacientes em hemodiálise. Rev. Pró-UniverSUS. [Internet]. 2020 [Cited 2023 jan 13];11(2). Available from: https://doi.org/10.21727/rpu.v11i2.2306.

5. Ribeiro KSMA, Mota ESGM, Rocha RF, Rocha IEM, Almeida HCM, Oliveira VL, et al. Perfil dos pacientes renais crônicos em tratamento hemodialítico de um município do norte de Minas Gerais. Renome. [Internet]. 2020 [Cited 2023 jan 13];7(1). Available from: https://www.periodicos.unimontes.br/index.php/renome/article/view/1219.

6. Freitas EA, Santos M F, Félis KC, Moraes Filho IM, Ramos LSA. Assistência de enfermagem visando a qualidade de vida dos pacientes renais crônicos na hemodiálise. Rev Inic Cient Ext. [Internet]. 2018 [Cited 2023 jan 19];1(2). Available from: https://revistasfacesa.senaaires.com.br/index.php/iniciacao-cientifica/article/view/59.

7. Soares FC, Aguiar IA, Carvalho NP, Carvalho RF, Torres RA, Segheto W, et al. Prevalência de hipertensão arterial e diabetes mellitus em portadores de doença renal crônica em tratamento conservador do Serviço Ubaense de Nefrologia. Rev Cient FAGOC-Saúde. [Internet]~. 2017 [Cited 2023 jan 13];2(2). Available from: https://revista.unifagoc.edu.br/index.php/saude/article/view/232.

8. Andrade AS, Lima JS, Inagaki AD, Ribeiro CJ, Modesto LD, Larré MC, Abud AC. Fatores associados à qualidade de vida de pacientes submetidos à hemodiálise. Enferm. foco (Brasília). [Internet]. 2021 [Cited 2023 jan 13];12(1). Available from: https://doi.org/10.21675/2357-707x.2021.v12.n1.3451.

9. Pacheco ES, Macêdo IS, Macêdo GS, Ribeiro AM, Silva MP, Costa GO, et al. Perfil sociodemográfico e epidemiológico de pacientes renais crônicos em terapia hemodialítica. RSD. [Internet]. 2020 [Cited 2023 jan 13];9(11). Available from: https://doi.org/10.33448/rsd-v9i11.9715.

10. Pereira CV, Leite IC. Fatores associados à não adesão ao regime terapêutico de pacientes em hemodiálise. Cad. saúde colet., (Rio J.). [Internet]. 2022 [Cited 2023 jan 13];30(3). Available from: https://doi.org/10.1590/1414-462x202230030012.

11. Salimena AM, Costa YC, Amorim TV, Souza RC. Sentimentos da pessoa em hemodiálise: percepção da equipe de enfermagem. Rev. enferm. Cent.-Oeste Min. [Internet]. 2018 [Cited 2023 jan 26];8. Available from: https://doi.org/10.19175/recom.v8i0.2578.

12. Teles VR, Tavares MM, Silva DF, Moreira PSCR, França BF, Rabelo TS. Relacionamentos interpessoal entre o paciente renal crônico em hemodiálise e a enfermagem: um relato de experiência. RECIMA21. [Internet]. 2022 [Cited 2023 jan 19];3(5). Available from: https://doi.org/10.47820/recima21.v3i5.1446.

13. Lins SMSB, Leite JL, Godoy S, Tavares JMAB, Rocha RG, Silva FVC. Adesão de portadores de doença renal crônica em hemodiálise ao tratamento estabelecido. Acta Paul. Enferm. (Online). [Internet]. 2018 [Cited 2023 jan 13];31(1). Available from: https://doi.org/10.1590/1982-0194201800009.

14. Pereira LTC, Ferreira MMM. Percepções de pacientes com doença renal crônica sobre tratamento de hemodiálise e assistência de enfermagem. J. nurs. health. [Internet]. 2022 [Cited 2023 jan 13];12(2). Available from: https://revistas.ufpel.edu.br/index.php/JONAH/article/view/4424.

15. Pretto CR, Winkelmann ER, Hildebrandt LM, Barbosa DA, Colet CF, Stumm EMF. Quality of life of chronic kidney patients on hemodialysis and related factors. Rev Latino-Am Enfermagem. [Internet]. 2020 [Cited 2023 jan 13];28. Rev. latinoam. enferm. (Online). Available from: https://doi.org/10.1590/1518-8345.3641.3327.

16. Nerbass FB, Lima HD, Thomé FS, Vieira Neto OM, Sesso R, Lugon JR. Brazilian dialysis survey 2021. J bras. nefrol. [Internet]. 2022 [Cited 2023 jan 20];4. Available from: https://doi.org/10.1590/2175-8239-jbn-2022-0083en.

17. Nascimento ME, Mantovani MD, Oliveira DC. Cuidado, doença e saúde: representações sociais entre pessoas em tratamento dialítico. Texto & contexto enferm. [Internet]. 2018 [Cited 2023 jan 26];27(1). Available from: https://doi.org/10.1590/0104-07072018003290016.