



ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

IJDR

International Journal of Development Research

Vol. 11, Issue, 11, pp. 52020-52025, November, 2021

<https://doi.org/10.37118/ijdr.23350.11.2021>



RESEARCH ARTICLE

OPEN ACCESS

SELF-PERCEPTION OF THE QUALITY OF LIFE OF CHRONIC KIDNEY PATIENTS IN LIGHT OF HUMAN NEEDS THEORY

Silas Alves da Silva*¹, Anando Rodrigues de Carvalho², Ludimila Vieira Granja², Maria Bianca Pereira Freitas², Matheus Halex Ferreira de Matos², Vinícius do Carmo Borges Silva², Dênio Rafael Matos Soares³, Fábio Palha Dias Parente³, Filipe Melo da Silva⁴, Jailson Alberto Rodrigues⁵

¹Graduado em Bacharelado em Enfermagem pela Universidade Federal do Piauí (UFPI), residente em terapia intensiva no Hospital São Domingos – MA; ²Aluno do curso de Graduação em Bacharelado em Enfermagem (CGBENF) da Universidade Federal do Piauí (UFPI), *campus* Amílcar Ferreira Sobral (CAFS); ³Graduando em Medicina pelo Centro Universitário Uninovafapi; ⁴Enfermeiro, mestrando pelo Programa de Pós-Graduação em Ciências e Saúde – PPGCS da Universidade Federal do Piauí (UFPI), Professor Substituto do curso de Enfermagem do CAFS-UFPI; ⁵Enfermeiro, Doutor em Modelos de Decisão e Saúde pela Universidade Federal da Paraíba (UFPB), Professor adjunto I do CGBENF/CAFS-UFPI

ARTICLE INFO

Article History:

Received 16th August, 2021
Received in revised form
26th September, 2021
Accepted 20th October, 2021
Published online 28th November, 2021

Key Words:

Chronic Disease. Chronic Kidney Failure. Renal Dialysis. Quality of life.

*Corresponding author:

Silas Alves da Silva

ABSTRACT

Chronic Kidney Disease - CKD is a worldwide public health problem, due to its high mortality rate. The multiple experiences and complications experienced by the chronic renal patient– CRP incite inquietudes around the understanding of Quality of Life - QL of those on hemodialysis treatment. **Objective:** To analyze the self-perception of QL related to health of CRP on hemodialysis, in the light Abraham Maslow's theory. **Methods:** QL was assessed by KDQOL-36TM, which is an abbreviated 36-item version that assesses health-related QLDialytic patients. **Results:** In the dimension of the burden of CKD, it is statistically stated that all topics affect considerably the life of individuals through the items that question whether CKD affects a lot in your life, whether your time is much allocated to CKD etc. As for Maslow's theory, all the needs in the hierarchical pyramid were affected. That, all measures of the instrument showed a sensitivity and impairment of the users' human needs. **Conclusion:** This study reinforces that it is important to know the whole background of the patient and shows that essential changes can be made to improve their health status, thus helping for the patient's commitment to treatment and consequent improvement their health related QoL.

Copyright © 2021, Silas Alves da Silva et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Silas Alves da Silva, Anando Rodrigues de Carvalho, Ludimila Vieira Granja, Maria Bianca Pereira Freitas, Matheus Halex Ferreira de Matos, Vinícius do Carmo Borges Silva, Dênio Rafael Matos Soares, Fábio Palha Dias Parente, Filipe Melo da Silva Jailson Alberto Rodrigues. "Self-perception of the quality of life of chronic kidney patients in light of human needs theory", *International Journal of Development Research*, 11, (11), 52020-52025.

INTRODUCTION

Chronic Kidney Disease (CKD) is a worldwide public health problem, due to its high mortality rate. CKD is characterized by the permanent loss of renal functions, altering human body homeostasis, leading the patient to develop problems such as anemia, metabolic acidosis, altered metabolism and malnutrition (Miyahira et al., 2016). According to the Brazilian Society of Nephrology (2018), when carrying out the Brazilian Census of Dialysis, it is estimated that in 2018, 133,464 patients with CKD were in Renal Replacement Therapy (RRT) in the country.

It is noteworthy that, among these patients, 58% are male, and mostly aged between 45 – 65 years (41.5%) (Aguiar et al., 2020). After the loss of kidney function, an intervention called Renal Replacement Therapy (RRT) is required. There are three treatment options: kidney transplantation, peritoneal dialysis, and hemodialysis. Hemodialysis is the most used method, in which the patient undergoes to sessions three times a week, lasting up to four (4) hours per session. Thus, the chronic kidney patient constantly lives with the pain of the treatment and the limitations caused in their quality of life (Ventura et al., 2018). In addition, the term quality of life (QL) has a broad dimension, consisting of physical, psychological, social, and environmental aspects. It is observed the individual's ability to live in

physical, psychological, and social well-being and not only in the absence of diseases or infirmities (Oliveira *et al.*, 2016). Once treatment is started, the client needs to adapt to the new routine, which can trigger factors that contribute to reduced QL. As a result, lack of energy and discouragement in daily activities and work are compromised (Sartori *et al.*, 2017). Abraham Maslow, in his Theory of Human Needs, expresses that the causes of human satisfaction are divided into five points defined in the form of a pyramid. The base is made up of the low-level needs, which are the physiological and the need for security. At the top are high-level needs, being social, self-esteem and self-fulfillment needs. As one level is met, the next becomes higher, according to his theory. Faced with such convictions, evaluating QL brings the need to understand the points of this pyramid and how each one would affect it (Maslow, 1943). Given these factors, concerns have arisen regarding the understanding of the QL of patients undergoing hemodialysis in Northeastern Brazil. Thus, the study aims to analyze the self-perception of the quality of life of chronic renal patients undergoing hemodialysis, in the light of the theory of the hierarchy of human needs proposed by Abraham Maslow.

METHODOLOGY

This is a descriptive, cross-sectional, analytical study with a quantitative approach, carried out with chronic renal patients undergoing hemodialysis in the city of Floriano-PI. The sample was carried out from January to March 2020 in a convenient location for the respondent. In this approach, they responded to the data collection instrument. To perform data collection, the Municipal Health Department (SMS) requested a list with information on each patient with chronic kidney disease undergoing hemodialysis treatment. The same pointed 41 addresses of residents in Floriano-PI, however, only 21 users were found from them. Thus, all users registered in the SMS, residents of the city, of both sexes, who were undergoing treatment and who voluntarily agreed to participate in the research were included. The recruitment of participants took place through an active search through home visits with the monitoring of Community Health Agents – ACS. In them, the researcher answered any doubts and clarified what he intended through the study. Thus, participation was manifested by signing the Informed Consent Term (TCLE). It was decided to carry out the interviews in a place convenient for the interviewee due to the conviction that CKD patients would feel more comfortable and with greater freedom to express themselves. Because, in a different environment from this, there are factors that can affect the participants' responses, which can impair the study's fidelity. Exclusion criteria were age under 18, not living in the city and situations where the participant did not have cognitive conditions to respond. To collect the data, a research protocol consisting of two parts was used. In part 1, data are collected on the characterization of the profile of patients related to sociodemographic and clinical data. Part 2 was intended to assess health-related quality of life, using the *Kidney Disease and Quality of Life Short Form (KDQOL-36™)*. The KDQOL-36™ questionnaire is an abbreviated version of the KDQOL-SF with 36 items to assess the Health-Related Quality of Life (HRQOL) in dialysis patients, which allows to reduce the interview time and improve its acceptance. The KDQOL-36™ is subdivided into 4 parts, which are SF-12: physical component summary and mental component summary as generic core, kidney disease burden, symptoms/problems, and effects of CKD on daily life. The collected data on quality of life were organized in *Excel for Windows (Microsoft)*, through a tool developed by the *KDQOL Working Group*, which improves the quantification of scores. Then, the study database was exported to *SPSS, Version 20.0*. Therefore, descriptive and inferential statistical techniques were applied, considering the alpha level of significance of 0.05. Aiming to seek comparisons and applications of the particular phenomena from the studied reality to the Brazilian context. The 36 items of the KDQOL-SF-36™ have a final score between zero and 100, the higher the value, the better the individual's quality of life. Hall *et al.* (2018), categorized the scores into five quintiles, where in the first and second the score is low, in the third average and in the fourth and fifth

it is high. In this study, we chose to use a similar score. However, using the quartiles as categorical amplitudes, scoring the QOL: 0-25 - very bad; 26-50 - bad; 51-75 - moderate; 76-100 - good. Soon after, descriptive methods were used, and the statistical inferences were guided from the *T-Student* analysis for the variables of an interval nature. It was verified the correlation of *Spearman*, given the non-normal nature of the data to be obtained. In addition, the study proposal was sent to the Research Ethics Committee (REC), and, after consideration, a favorable opinion was obtained. Finally, a qualified interview was carried out, avoiding embarrassing the interviewee, based on professional ethics, reading of the body expression and autonomy of the researched subject. In case of low QL, the subject was informed about measures that could be adopted to improve it and to seek specialized follow-up, in the step of returning the results.

RESULTS AND DISCUSSION

The sample consisted of 21 people sick with CKD and undergoing hemodialysis, of these, 15 (71.4%) are male and 11 (52.4%) claimed to be single. The age group between 60 and 79 years was the most prevalent, with 8 users (31.1%), and most participants lived with their spouses (33.3%). Regarding the level of education, those with incomplete primary education were the most present (38.1%).

Table 1. Sociodemographic and clinical data of chronic kidney patients. N = 21. Floriano – PI, Brazil, 2020

Variables	n (%)	
Genre	Feminine	06(28,6)
	Male	15(71,4)
Marital Status	Single	11(52,4)
	Married	07(33,3)
	Widower	02(9,5)
	Divorced	01(4,8)
Race	White	04(19,0)
	Brown	09(42,9)
	Black	08(38,1)
Age Group	18 – 39	05(23,8)
	40 – 59	07(33,3)
	60 – 79	08(38,1)
	80+	01(4,8)
Schooling	Elementary School	06(28,6)
	Primary incomplete	08(38,1)
	High School	06(28,6)
	Higher Education	01(4,8)
Income*	Until 1	08(38,1)
	In between 1 – 3	12(47,6)
	In between 3 - 5	01(14,3)
Activity / Source of Income	Retired	10(47,6)
	Works	01(4,8)
	Study	02(9,5)
	Doesn't work/ Doesn't study	8(38,1)
Who they live with	Spouse	07(33,3)
	Family Members	04(19,0)
	Parents	03(14,3)
	Friends	01(4,8)
	Alone	03(14,3)
Religion	Sons	03(14,3)
	Catholic	12(57,1)
	Evangelical	06(28,6)
	Agnostic	01(4,8)
Origin of Chronic Kidney Disease	Undeclared	02(9,5)
	Diabetes Mellitus	04(19,0)
	Systemic arterial hypertension (SAH)	06(28,6)
	Glomerulonephritis	04(19,0)
	Polycystic kidneys	01(4,8)
Years in Hemodialysis Therapy	Other factors	06(28,6)
	1 - 2	06(28,6)
	2 - 5	08(38,1)
	5 - 10	05(23,8)
>10	02(9,5)	

*In minimum wages Source: elaborated by the author

Table 2. SF-12 dimension score: physical and mental components. N = 21. Floriano - PI, Brazil, 2020

Scale - SF-12	Average	Median	Standard Deviation	p-value
Your general health is?	42,8	50,0	25,18	0,208
Do you have difficulty with moderate activities (moving a table, etc.)?	33,3	50,0	32,91	0,031
Do you have difficulty climbing stairs?	38,1	50,0	31,24	0,096
Did you decrease the time spent on other activities due to your physical health?	71,4	100,0	46,30	0,047
Do you feel limited in other activities?	57,1	100,0	50,71	0,526
Did you decrease the time spent on other activities due to an emotional problem?	57,1	100,0	50,71	0,526
Do you perform jobs with less care than before?	57,1	100,0	50,71	0,526
Do you feel pain during housework?	55,9	50,0	23,60	0,261
Did you feel calm and at ease?	63,8	60,0	13,00	0,000
Did you feel lots of energy?	65,7	60,0	9,26	0,000
Do you feel depressed?	45,7	40,0	18,05	0,289
Did you find difficulties in social activities?	61,9	50,0	20,34	0,014

Source: elaborated by the author

Table 3. Descriptive specific score of symptoms/problems of chronic kidney disease. N° = 21. N = 21. Floriano – PI, Brazil, 2020

Symptom /Problem	Average	Median	Standard Deviation	p-value
Muscle aches and pains	42,8	25,0	29,7	0,284
Chest pain	79,7	100,0	31,2	0,000
Cramps	27,3	25,0	30,5	0,003
Itchy skin	51,2	50,0	31,1	0,863
Dry skin	70,2	75,0	23,2	0,001
Shortness of breath	70,2	75,0	32,2	0,009
Fainting/ dizziness	75,0	75,0	25,0	0,000
Lack of appetite	75,0	75,0	32,6	0,002
Physical exhaustion	58,3	50,0	28,8	0,201
Tingling in hands and feet	60,7	75,0	31,2	0,131
Nausea	79,7	100,0	31,2	0,000
Fistula/catheter related problems	88,1	100,0	23,2	0,000

Source: elaborated by the author

Most declared to be Catholic (57.1%), being predominantly retired (47.6%). Those who do not work and do not study add up to 38.1% and the majority of chronic kidney patients earn between one and three minimum wages (47.6%). Those who live on a minimum wage appear next, totaling 38.1% of participants. Systemic Arterial Hypertension (SAH) was the most reported cause (28.6%) as the underlying disease for the onset of CKD, accompanied by Diabetes Mellitus (19.0%) and glomerulonephritis (19.0%). As for the duration of hemodialysis treatment, the largest portion is of users/clients/patients between 2 and 5 years of treatment (38.1%). Table 2 presents the description of the data obtained through the physical and mental generic components, which are part of the first part of the KDQOL-36™, in which physical and mental questions are addressed. Table 2 shows that the averages of the lowest scores were in the performance of moderate activities (33.3); difficulties in climbing stairs (38.1); the item that addresses health in general (42.8); and the fact of feeling depressed (45.7). These items fall into the modality of terrible QL, categorized into quartiles, described in the methodology of this study. The items: feeling limited in other activities (57.1); feeling pain while performing housework (55.9); feeling calm and at ease (63.8); feeling very energetic (65.7); decrease of time spent on other activities (57.1); carrying out work with less care than before (57.1); feeling pain during housework (55.9); difficulty in social activities (61.9). All of them fit in the moderate QL score range. Regarding the SF-12 scores, users listed some items as those that most interfere in their lives after CKD. Through the statistical method, the difficulty of performing moderate activities ($p = 0.031$), difficulty in climbing stairs ($p = 0.096$), reduced time working in other activities ($p = 0.047$), feeling calm and at ease ($p < 0.000$), if they felt energetic ($p < 0.000$), and had problems with social activities ($p = 0.014$) were identified as significant. Thus, such items, through statistical evidence, in this study, affect users more negatively in their QL. As for the affected human needs, according to Maslow's theory, it can be indicated that the possible affected needs can only be of a physical and mental nature. Since these are the quantities that are part of the first dimension of QDQOL-36. Thus, some kidney patients have affected 'physiological needs', which are part of the first level of the hierarchical pyramid.

Needs were affected based on the answers to the mentioned items, which showed statistical relevance such as: difficulty in moderate activities, difficulty climbing stairs, reduction of time in other activities and feeling energetic. Maslow called hunger, thirst, sex, and other bodily activities to be 'physiological needs', being crucial for life and therefore essential to be satisfied so that the being can fulfill other high-level needs (Ferreira et al. 2015). Regarding the items: 'Did you feel calm and at ease?' and 'Did you find difficulties in social activities?' it is pertinent to associate the first item as 'security need' affected (noting that the item that reports whether the user has difficulty climbing stairs could also fit this need), and, in the second, affected 'social need', also called 'need of belonging and love' and 'participation'. Corroborating, Maslow agreed that the 'need for security' stemmed from the principle of including protection against physical and mental risks relating to the environment. If the environment causes this instability, the need is no longer addressed (Silva et al. 2017). This corresponds to the possible living conditions of a person suffering from CKD, who is continually afflicted by external elements of the environment, strengthened by the limitations of the chronic disease. Nevertheless, the item related to problems with activities of a social nature is entirely linked to the 'social need' explained by Maslow. Which relates it as the act of living in society, encompassing the need for conviviality, friendship, respect, love, leisure, and participation (Wyse, 2018). In this aspect, when CKD patients are unable to maintain social relationships, they run the risk of becoming resistant, antagonistic, and hostile to the people around them, leading to loneliness due to the lack of social adaptation, making their well-being even more difficult. Regarding the physical and mental components, results were similar to those of this study, with very similar averages, especially in the mental component. Contrary to other studies, different data, with very high QL scores for the mental and physical components of the SF-12 were verified by other researchers (Beber et al., 2017). Table 3 specifies the scores given to symptoms/problems that affect CKD. Symptoms that obtained lower scores and presented with a poor QL score are highlighted: cramps (27.3) and muscle pain (42.8). However, itchy skin (51.2), physical exhaustion (58.3), dry skin (70.2), shortness of breath (70.2), fainting/dizziness (75.0), lack of appetite (75.0) and tingling in limbs (60.7) indicate moderate QL scores.

Table 4. Specific descriptive score of the effects of chronic kidney disease on daily life. N = 21. Floriano - PI, Brazil, 2020

Effects of CKD	Average	Median	Standard Deviation	p-value
Liquid decrease	16,6	0,0	22,8	0,000
Food decrease	32,1	25,0	19,6	0,000
Ability to work from home	50,0	50,0	35,3	1,000
Ability to travel	23,8	25,0	50,0	0,001
Medical Dependency	50,0	50,0	31,6	1,000
Stress or worries	39,2	50,0	33,1	0,154
Sexual activity	35,7	25,0	34,0	0,069
Personal appearance	72,6	75,0	28,4	0,002

Source: elaborated by the author

Table 5. Specific descriptive score of the burden of chronic kidney disease. N = 21. Floriano - PI, Brazil, 2020

Burden of CKD	Average	Median	Standard Deviation	p-value
My kidney disease interferes too much in my life	21,4	25,0	21,3	0,000
I spend too much time on my kidney disease	16,6	0,0	21,4	0,000
I feel disappointed with my kidney disease	35,7	25,0	32,1	0,055
I feel like a burden to my family	71,4	75,0	30,9	0,005

Source: elaborated by the author

With a good QL score, there are symptoms of chest pain (79.7), nausea (79.7) and fistula problems (88.1). Although some symptoms appear with high scores, based on statistical grounds, it is noted that symptoms such as: chest pain ($p < 0.000$), cramps ($p = 0.003$), dry skin ($p = 0.001$), Shortness of breath ($p = 0.009$), fainting/dizziness ($p < 0.000$), lack of appetite ($p = 0.002$), nausea ($p < 0.000$) and fistula problems ($p < 0.000$), express, statistically, a greater health problem in perception of kidney patients, showing in this study that these items interfere more than others in users' lives and their QL. Therefore, Maslow's theory is concrete in saying that many factors permeate the 'physiological needs', considering that each described symptom is aggravation that harms your well-being. Thus, anything that causes a lack of homeostasis to the body can be characterized as an affected 'physiological need' (Hayashi, 2016). In this context, it is noted that the symptoms in evidence (chest pain, cramps, dry skin, shortness of breath, fainting/dizziness, lack of appetite, nausea, and fistula/catheter related problems) that most affect the QL of patients with CKD are 'physiological needs' affected, according to Maslow.

In some studies, high means were found for CKD symptoms and problems, typifying less damage to users' QL compared to this study (Silva et al., 2017; Zanesco et al., 2017). However, it was observed in some studies, similarity with these results, configuring low scores and, in this case, a greater negative impact on QL (Everling et al., 2016; Silva et al., 2016). Among the various symptoms, we highlight cramps, nausea/vomiting and itchy skin. However, cramp is one of the most aggravating symptoms for CKD patients and one of the reasons for the most complaints (Silva et al., 2017; Peipert et al., 2019; Pereira et al., 2017). Clients report that cramps are very common in trans and post hemodialysis sessions. They occur a lot due to ultrafiltration and vascular filling, hydroelectrolyte imbalance, and it is usually accompanied by hypotension (Deus, 2015). Fistula problems is another symptom that stands out in this study. The arteriovenous fistula itself, at the beginning of the treatment, brings a feeling of frustration due to the sudden change in body image; in addition, there is an anxiety that revolves around the fear of losing the fistula (Machado et al., 2019). The most common problems with fistula are hematoma, decreased thrill, presence of collateral veins, early puncture, hypotension, aneurysm, and infection. These symptoms are recurrent in many clients, causing their fears, frustrations, and anguish to increase, and consequently impair their QL (Sánchez et al., 2018). It is noted that fistulaproblems have the worst average among symptoms, which shows how fistulaproblems have a negative impact on the lives of kidney patients (Peipert et al., 2019; Aslan, 2018). In table 4, paying attention to the scores pertinent to the effects caused by CKD in the daily life of users, it can be seen that the liquid decrease (16.6) and the ability to travel (23.8) reached a score that refers to a very bad QL.

Likewise, food decrease (32.1), sexual activity (35.7) and stress/worries (39.2), ability to work at home (50.0), and medical dependency (50.0) highlight poor score for QL. Personal appearance (72.6) reached the highest average, denoting a moderate score for QL. From the perspective of patients, it is observed that some items have high average scores. However, there was statistical significance that indicate some of these items negatively influencing more intensely in the lives of kidney patients. Among them, the items: liquid decrease ($p < 0.000$), food decrease ($p < 0.000$), ability to travel ($p < 0.001$), sexual activity ($p = 0.069$) and personal appearance ($p < 0.002$) presented statistical evidence of that fact. Several factors are important for a person's survival, including liquid and food intake. From this perspective, Maslow emphasizes that the existence and survival of an individual depends on their physiological needs, including that of satisfying hunger and thirst. Apparently, this need is not as important as those at secondary level. However, Maslow places them as the 'base' of his study, as it was based that if the needs of the primary level were not fulfilled, the individual would not fulfill those of other levels (Tripathi et al., 2018).

In addition to the physiological needs mentioned above, the need for sex is also included, as according to Maslow, this need is aroused by stimuli, similar to hunger and thirst. In view of this, it is considered that if this need is affected, it will bring harm to individuals (Silva et al., 2017). The need for sex can be related to what Maslow qualifies as belonging and love, also known as 'social need'. It refers to an individual's environment of intimacy and friendship, in addition, the indispensability of sex belongs to physiological needs (Hopper, 2019). *Regarding the 'need for esteem', also known as 'need of the ego', the needs pertaining to personal appearance and ability to travel are included. It links the contentment afforded by freedom with independence. As well as the act of the subject finding himself decided, valued, having effort and competence. When this need is affected, the individual feels incompetent, weak, dejected, and discouraged, which can generate major problems of a mental nature (Maslow, 1991).* Nonetheless, personal appearance is included in the 'need for aesthetics'. However, this need is related to the 'need for self-realization', being placed by Maslow as a sub-theme. According to the need for aesthetics, there are beauty stimuli. Maslow noted this through the actions of people at different ages in their quest to look good (Tomazoni et al., 2018). Through a survey conducted in the United States (USA) using the KDQOL-36TM in 443,947 CKD patients undergoing hemodialysis, obtained numerical conclusions about HRQOL through secondary data. In comparison with this study, similar results were obtained, such as the liquid, food and sex life decrease are problems that affect the daily life of a chronic kidney patient. Also noting negative results in relation to QL through the means. However, other topics such as personal appearance and traveling competence do not have a high impact on the QL of

patients, based on an evaluative proportion of the score generated by the authors. However, in a research carried out using the KDQOL-36TM in 178 people with CKD in order to assess HRQOL, it was observed that fluid retention was the only aspect that did not negatively impact QL. However, all other aspects had a negative impact on the QL of patients with negative means described using a scale depicted in quintiles (Aslan, 2018).

In the research in question, the means of all participants provided significance. Thus, it is stated that all topics considerably affect the lives of individuals with CKD. Highlighting four items: knowing if CKD affects your life a lot ($p < 0.000$), if your time is too much dedicated for CKD ($p < 0.000$), feeling disappointed with your CKD ($p = 0.055$) and, if the disease reflects negatively on your family ($p = 0.005$). Therefore, it is concluded that all the items mentioned above contribute negatively to the QL of patients. The last part of the KDQOL-36TM presents subjective questions, through which it is possible to notice attitudes that demonstrate how patients suffer from CKD in an insightful way. Thus, it demonstrates how CKD affects different aspects such as, in life, time, self-esteem and in the family. Therefore, Maslow's theory is related in the midst of some affected needs, thus, it is understood that the need for 'self-assessment' is the most affected. For Maslow, this need is at the highest level, that is, to realize it it is necessary that all other levels have already been carried out and, being directly connected to the total realization of the being (Cunha, 2015). This need is aimed at things that the subject has the capacity to be and do based on the idea that every individual can be whatever they want, as they are always competent to become something better than they already are. In this segment, if the subject is incapable or has some limitation as a result of some factor, they will be incapable of self-realization (Maslow, 1991). It was noted through the statistical significance of topics related to CKD that the patients' time is dedicated only to treatment and activities associated with the disease. Thus, it is observed that they are not available to perform other activities. In addition, they feel a nuisance for their families, consequently, there is frustration in the family environment along with discontent with their disease, as they feel that it is an obstacle in their lives. Following this parameter, self-realization is difficult, according to Maslow. It is also noteworthy that Brazilian and international studies have similar results to this one, with low mean scores for the burden that CKD carries in the lives of patients, indicating that subjects with CKD have a poor or very bad QL (Zanesco et al., 2017; Aslan, 2018; Kim et al., 2013; Zimbudzi et al., 2016). On the other hand, studies reveal through the scores that CKD patients do not have such a bad QL (Hall et al., 2018; Beber et al., 2017; Peipert et al., 2017). All topics that make up the load component of the DRC score high. All above 60.0, revealing a good QL of patients (Peipert et al., 2019). Finally, study participants gained new knowledge about their own quality of life and the limitations imposed by the disease. It also shows the main weakened fields associated with their human needs, with a view to better coping and better expectations regarding the future and living with the problem. In addition, it will reveal new theoretical foundations for the field of study on the KDOL of chronic renal patients undergoing hemodialysis treatment.

CONCLUSION

Researching about quality of life is not a simple task, as it is known that QL is permeated by several factors and variables that are part of the complexity of human beings and everything that surrounds them. Furthermore, if the research on QL is aimed at a specific audience, as is the case in this study, the difficulty becomes even greater (Viana et al., 2017). At this juncture, there was a need to add the short instrument to assess the QL of chronic kidney patients (KDQOL-36TM), undergoing hemodialysis treatment, added to the perspective and view of the Basic Human Needs theory proposed by Abraham Maslow. Thus, aiming at a better elucidation of the QL of the study participants, since the questionnaire is suitable for the target audience of the study. Regarding the scores averages related to the dimensions of the KDQOL-36TM, it can be seen that, in general, in this study,

there were low levels of scores. Among the dimensions, the one referring to the burden of kidney disease was the one with the worst overall average score, accompanied by the summary of physical components and effects of CKD on daily life. When observing the item-by-item elucidation through Maslow's theory, such complications for users are perceived. Notably, all the needs that Maslow listed in his hierarchical pyramid were affected. That is, all dimensions of the instrument obtained items that triggered a sensitivity and compromise of human needs. Each dimension compromised one need while another did not. In this sense, there is a concern with this group of people, who are being deprived of a good quality of life. In the meantime, the importance of primary care and the nursing service comes in, for better monitoring of cases. The present study reinforces that users with CKD do not have a satisfactory QL and, in addition, in some dimensions, as already observed, QL is bad or very bad. Evidencing that the biopsychosocial aspects of these people are being harmed. Furthermore, this thesis is enforced by the basic human needs impaired in its effectiveness in the lives of the individuals participating in this study, highlighting that the limitations imposed by CKD are more serious than merely one might think. The results of this study provide subsidies for the multidisciplinary health team to recognize the importance of discovering the complications/feelings pertaining to the life of renal patients undergoing hemodialysis, as well as the interference of this therapeutic particularity in the patient's life. By understanding the patient's background, positive changes in the patient's condition and QL can be promoted. These results can persuade researchers, professionals working in nephrology and students to develop research on this thesis and even with the use of other approaches.

REFERENCES

- Aguiar LKD, Prado RR, Gazzinelli A, Malta DC (2020). Fatores associados à doença renal crônica: inquérito epidemiológico da Pesquisa Nacional de Saúde. *Revista Brasileira de Epidemiologia*. 23(1):e200044.
- Aslan I (2018). Aplicação do formulário KDQOLTM -36 em pacientes com DRC. *Revista de Tópicos Atuais em Gestão em Saúde (COES & RJ-JHM)*. 1(1): 11-21.
- Beber GC, et al. (2017). Qualidade de vida de pacientes transplantados renais após longo período do transplante. *Saúde e Pesquisa*. 10(1): 163-170.
- Cunha RM (2015). A teoria de Maslow é válida para o estudo hábitos de consumo ou as relações sociais atuais estabelecem as necessidades de consumo de um grupo determinado.
- Deus BPM, et al. (2015). Sintomas agudos e complicações da hemodiálise. *Jornal de Epidemiologia e Controle de Infecção*. 5(1):52-56.
- Everling J, et al. (2016). Eventos associados à hemodiálise e percepções de incômodo com a doença renal. *Avances en Enfermería*. 34(1):48-57.
- Ferreira A, Demutti CM, Gimenez PEO (2015). A Teoria das Necessidades de Maslow: A Influência do Nível Educacional Sobre a sua Percepção no Ambiente de Trabalho.
- Hall RK, et al. (2018). Associação da Qualidade de Vida na Doença Renal (KDQOL-36TM) com mortalidade e hospitalização em idosos em hemodiálise. *BMC nephrology*. 19(1):11.
- Hayashi JRP (2016). Tattvabodha e a necessidade hierárquica de Abraham Maslow. *Journal of Management, Espiritualidade e Religião*. 13(2):82-93.
- Hopper E (2019). A hierarquia de necessidades de Maslow explicada. *Viiattatu*. 12: 2019.
- Kim JY, et al. (2013). Health-related quality of life with KDQOL-36TM and its association with self-efficacy and treatment satisfaction in Korean dialysis patients. *Quality of Life Research*. 22(4):753-758.
- Machado FS, et al. (2019). Autoimagem de idosos com fistula arteriovenosa submetidos à hemodiálise. *Revista Kairós: Gerontologia*. 22(1):209-230.
- Maslow AH (1991). *Motivação e personalidade*. Edições Díaz de Santos.

- Maslow AH. A theory of human motivation (1943). Disponível em: <psychclassics.yorku.ca/Maslow/motivation.htm>.
- Miyahira CK, et al. (2016). Avaliação da dor torácica, sono e qualidade de vida de pacientes com doença renal crônica. *Arquivos de Ciências da Saúde*. 23(4): 61-66.
- Oliveira APB, et al. (2016). Quality of life in hemodialysis patients and the relationship with mortality, hospitalizations and post-treatment adherence. *Brazilian Journal of Nephrology*. 38(4): 411-420.
- Peipert JD, et al. (2019). Qualidade normativa da Doença Renal 36-Item Short Form Survey (KDQOL-36™) valores normativos para a população de diálise dos Estados Unidos e nova pontuação única e resumida. *Jornal da Sociedade Americana de Nefrologia*. 30(4): 654-663.
- Pereira RMP, et al. (2017). Qualidade de vida de idosos com doença renal crônica em tratamento conservador. *Revista Brasileira de Enfermagem*. 70:851-859.
- Sánchez MTM, et al. (2018). Cuidados de enfermagem em pacientes com fístulas arteriovenosas. *Comps. M^a del Carmen Pérez-Fuentes José Jesús Gázquez M^a del Mar Molero*. 103.
- Sartori A, et al. (2017). Impacto do cronotipo na qualidade de vida de pacientes renais crônicos submetidos a tratamento hemodialítico. *Ciência & Saúde*. 10(3): 161-169.
- Silva GD, et al. (2016). Qualidade de vida de pacientes com insuficiência renal crônica em tratamento hemodialítico: análise de fatores associados. *Rev Bras Qual Vida*. 8:229-245.
- Silva VL, et al. (2017). Análise da motivação de pessoas: um estudo baseado em princípios da Hierarquia de Necessidades de Maslow. *Revista Foco*. 10(2):148-166.
- Tomazoni J, et al. (2018). A pirâmide da hierarquia das necessidades humanas aplicada em um call center. *Cadernos de iniciação científica*. 3(1).
- Tripathi N, et al. (2018). Uma avaliação da teoria da auto-atualização de Abraham Maslow para a melhoria da qualidade de vida. *Jornal indiano de saúde e bem-estar*. 9(3): 499-504.
- Ventura J, et al. (2018). Pacientes em tratamento hemodialítico: percepção acerca das mudanças e limitações da doença e tratamento. *Rev. pesqui. cuid. fundam. (Online)*, 6(1): 926-931.
- Viana A, Junior GA (2017). Qualidade de vida em idosos praticantes de atividades físicas. *Psicologia e saúde em debate*. 3(1), 87-98.
- Wyse RM (2018). Motivação: Teorias Motivacionais do Comportamento Humano. *Revista de Ciências Gerenciais*. 22(36):134-141.
- Zanesco C, et al. (2017). Qualidade de vida em pacientes hemodialíticos: avaliação através do questionário KDQOL-SF. *Rev Saúde com*. 13(1):818-823.
- Zimbudzi E, et al. (2016). Predictors of health-related quality of life in patients with co-morbid diabetes and chronic kidney disease. *PLoS One*. 11(12): e0168491.
