

## Quality of life and chronic renal failure

Qualidade de vida e insuficiência renal crônica

Calidad de vida y la insuficiencia renal crónica

Juliana Marques Weykamp<sup>1</sup>, Márcia Helena Baltassare Nunes<sup>2</sup>, Diana Cecagno<sup>3</sup>, Hedi Crecencia Heckler de Siqueira<sup>4</sup>

### How to quote this article:

Weykamp JM, Nunes MHB, Cecagno D, Siqueira HCH. Quality of life and chronic renal failure. Rev Fund Care Online. 2017 out/dez; 9(4):1113-1120. DOI: <http://dx.doi.org/10.9789/2175-5361.2017.v9i4.1113-1120>

### ABSTRACT

**Objective:** To know the scientific production from 2009 to 2015, concerning the quality of life of chronic renal failure bearers. **Method:** Integrative review conducted online via the Virtual Health Library in the database of the Latin American and Caribbean Health Sciences (LILACS), respecting the ethical aspects regarding the authorship of the articles. The sample consisted of 14 complete scientific articles. **Results and Discussion:** Although chronic renal failure is gaining importance on the list of chronic diseases, there is a small number of articles related to the theme; among them, the focus of this study is for users in hemodialysis and, regardless of the approach, the analyzed studies show that various dimensions of the chronic renal failure carrier are affected and these influence their quality of life. **Conclusion:** Further studies are recommended on the quality of life of users in treatment modalities such as peritoneal dialysis and kidney transplantation.

**Descriptors:** Health, Quality of life, Chronic renal failure

### RESUMO

**Objetivo:** Conhecer a produção científica, no período de 2009 a 2015, a respeito da qualidade de vida do portador de insuficiência renal crônica. **Método:** Revisão integrativa realizada *on-line* na Biblioteca Virtual em Saúde (BVS) na base de dados da Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), respeitando os aspectos éticos em relação às autorias dos artigos. A amostra constituiu-se de 14 artigos científicos completos. **Resultados e discussão:** Apesar da insuficiência renal crônica estar adquirindo importância no rol das doenças crônicas, existe um número reduzido de artigos relacionados à temática, entre estes o destaque é para usuários em hemodiálise e, independentemente da abordagem, os estudos analisados evidenciam que várias dimensões do portador com insuficiência renal crônica são afetadas, e essas influenciam a sua qualidade de vida. **Conclusão:** Recomenda-se novos estudos a respeito da qualidade de vida dos usuários em modalidades de tratamento como a diálise peritoneal e transplante renal.

**Descritores:** Saúde, Qualidade de vida, Insuficiência renal crônica.

- <sup>1</sup> Nurse. Master's Degree in Nursing by the Postgraduate Program in Nursing / Federal University of Rio Grande (FURG). Doctoral candidate in the Postgraduate Program in Nursing / FURG. CAPES Scholarship Holder. Member of the Ecosystem Management in Nursing Study and Research Group (GEES).
- <sup>2</sup> Nephrologist Nurse, Technical Manager in the Reference Center in Nephrology of the HUSFP/Pelotas-RS. Attending Master's Degree by the Postgraduate Program in Nursing/FURG. Member of the Ecosystem Management in Nursing Study and Research Group (GEES).
- <sup>3</sup> Nurse. Doctor in Nursing by FURG. Teacher of the Department of Nursing of the Faculty of Nursing/ UFPEL. Pelotas/RS. Member of the Ecosystem Management in Nursing Study and Research Group (GEES).
- <sup>4</sup> Nurse and Hospital Manager. Doctor in Nursing by UFSC. Emeritus Professor of FURG. Permanent professor of PPGENF/FURG. Leader of the Ecosystem Management in Nursing Study and Research Group (GEES).

## RESUMEN

**Objetivo:** Conocer la producción científica 2009-2015, relativa a la calidad de vida de los portadores de insuficiencia renal crónica. **Método:** Revisión integrada a cabo en línea a través de la Biblioteca Virtual en Salud en la base de datos de la Ciencias de la Salud de América Latina y el Caribe, respetando los aspectos éticos en relación con la autoría de los artículos. La muestra estuvo constituida por 14 artículos científicos completos.

**Resultados y discusión:** A pesar de la insuficiencia renal crónica que se cobra importancia en la lista de las enfermedades crónicas, hay un pequeño número de artículos relacionados con el tema, entre ellos, el más destacado es para los usuarios de hemodiálisis y, sin tener en cuenta el enfoque, los estudios analizados muestran que diversas dimensiones del portador con insuficiencia renal crónica se ven afectados y éstos influyen en su calidad de vida. **Conclusión:** Se recomienda más estudios sobre la calidad de vida de los usuarios en las modalidades de tratamiento como la diálisis peritoneal y trasplante renal.

**Descriptores:** Salud, Calidad de vida, La insuficiencia renal crónica.

## INTRODUCTION

Evaluation concerning the quality of life of individuals occurs by two proposals, the first one is directed to the analysis of the resources to be available, alongside the effective capability of a social group to satisfy its needs, and the second one corresponds to the manner of analysing the needs, starting from the satisfaction degree and from the desired goals<sup>4</sup>.

Despite quality of life being seen and felt in an individual way, there are quality of life indicators, which allow for the communication, in a comprehensible language, for the general public, of the health needs, taking into consideration the parameters, the objectives and the goals for improvement of quality of life. From the analysis of these aspects, there is the possibility to detect the areas in health and the respective segments of the population that need more attention and investments to achieve a better quality of life.

With the aim of improving the quality of life of the people, employing previously defined strategies and the basic requirements to obtain it, the charter of intentions was elaborated, from the Ottawa Conference, in 1986, to achieve the health needs of the industrialized countries<sup>5</sup>. However, the detected needs must take into consideration the social, cultural and economic systems of each country and region, adapt, and implement them, observing the existing possibilities.

In this sense, the Ottawa Charter indicates that:

Good health is the best resource for personal, economic and social progress and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioral and biological factors could intervene either for or detrimentally to health. The objective of the action is to ensure that these conditions are favorable to promote health<sup>5</sup>.

In this context, it is inferable that health and quality of life, many times employed as synonyms, advise each other and can indicate that they are in harmony/balance with

oneself, with the other and with the environment that encompasses the multiple dimensions of the human being, allied to healthy life habits, adequate nutrition, leisure and distraction, satisfactory working activity, self-care, values and beliefs, among others. It means to have control of life, acquiring a development of the potential and building a process of living under conditions of personal satisfaction.

Following this thought, the quality of life (QoL) has become an important criterion in the evaluation of the effectivity of treatments and interventions in the health area. This serves, as well, for the presence of the indicators of quality of life to become essential, not only for being considered a basic element of health, but also to demonstrate the relation between quality of life and the mortality and morbidity rates resulting from chronic diseases<sup>7</sup>.

With this, it is possible to observe the necessity of assistance strategies guided by the approach of integrality of human beings. Those are fundamental on chronic diseases, because they will be able to provide greater autonomy related to self-care to the users and favor financial allowance to the family and the user as they face the illness progressing linked to the chronicity and the search for quality of life. Among these diseases the Chronical Renal Failure is mentioned, it is characterized by progressive, gradual and irreversible loss of the renal functions, causing metabolic disturbances and interfering in several aspects of the human living.

Chronical renal disease has been turning into a public health issue in Brazil and in the world, due to its high morbidity and mortality. The incidence and prevalence rates, as well as the evolution for the most severe stages, have increased progressively, given that it is an insidious process that evolves without grave symptoms for many years, until it reaches its final stages<sup>8</sup>. Supporting this idea, in 2011 the number of users in dialysis in Brazil was approximately of 92,000, a prevalence of 475 per million of the population (pmp) with a progressive increase in the last two years, besides a mortality rate of 19.9% per year<sup>9</sup>.

The study concerning this theme is justified because it brings with it the possibility to expand knowledge on questions that involve quality of life associated to chronic renal failure. Additionally, the analysis and the interpretation of the knowledge already produced will be able to become subsidies for the subsequent studies in this theme and, thus, assist in possible changes capable of being introduced in the process of quality of life of the chronic renal user, as well as, in the academy, offering theoretical-practical information able to assist in the construction of academic knowledge.

Therefore, correlation between quality of life and Chronical Renal Failure (CRF), detectable by using evaluation instruments, is a form of quantifying and analysing data related to the consequences of this disease for the lives of the patients, according to their own perceptions and life experiences. Thus, this research aims to contribute to the understanding of the experience lived by the users with chronic renal failure and the impact that this aggravation caused in their lives, besides investigating possible actions capable of providing/fomenting actions aimed at integral assistance to these users.

Given the exposed, the leading question is: what is the scientific production in the period of 2009 to 2015 about the quality of life of the user with chronical renal failure?

To respond to this research question, the government listed the following adjective: to know the scientific publication, in the period of 2009 to 2015, concerning quality of life of the user with chronical renal failure.

## METHOD

This study is characterized for being an integrative review, which is a research method used in the evidence-based investigations, with the aim to gather, organize and synthesize the results of researches about a certain theme in a systematic way, deepening knowledge about it<sup>10</sup>, in this paper related to quality of life and chronical renal failure.

Data collection was conducted online via the Virtual Health Library (VHL), in the database of the Latin American and Caribbean Health Sciences Literature (LILACS), searching for articles available in scientific journals from the period of 2009 to 2015 concerning quality of life of the CRF carrier. The search had as a basis the descriptors health, quality of life and Chronical Renal Failure and the observed inclusion criteria were: complete texts, written in the Portuguese language, free of charge, available online. Initially, 26 articles were selected, from which, after carefully reading the abstracts, 12 were eliminated for contemplating solely part of the theme studied. After reading and selecting each of the materials found, the respective annotations were

taken. To facilitate the record of the data captured in the articles, a specific instrument to post the information found was constructed.

Thus, the sample comprised 14 articles that were read in full, having been signaled the most relevant points about quality of life of the CRF carrier. This information was posted in the database to compose the results of the research. Afterwards, the analysis and synthesis of the data were undertaken, in order to accomplish the objective of this study.

Regarding the ethical aspects, the authorships of every author of the articles selected from the VHL were observed and respected. The Copyright Law was respected by writing down the due references, both in the direct and the indirect transcriptions.

## RESULTS AND DISCUSSION

After analytical reading of the selected articles, relevant data was obtained regarding the theme in study. With the purpose of visualizing the data, 2 charts were elaborated.

In chart 1, the data registered is related to the distribution of the scientific articles selected in the period between 2009 and 2015, captured online according to the title of the article, its objectives and summary of the conclusions.

In chart 2, the data registered is the methodological data utilized by the authors of the articles published in journals of 2009 to 2015 about the theme in study: research characterization, research site, research participants, data collection method, analysis type and interpretation of data.

**Chart 1** – Distribution of the articles according to: article identification, article title, objectives and summary of conclusion.

Article	Title	Objectives	Summary of the conclusions
1	Evaluation of the functional capability and the quality of life in chronical renal patients subjected to hemodialysis treatment	Evaluate the functional capability and the quality of life in patients with chronical renal failure (CRF) subjected to hemodialysis treatment; Verify possible correlations between these clinical variables and age, body mass index (BMI) and hemodialysis time.	The results suggest that, with few interference of age and hemodialysis time, patients with CRF subjected to hemodialysis treatment show losses in their functional capability and QoL.
2	Quality of life in the child with chronical renal failure	Evaluate the quality of life of children with chronical renal failure and identify the most relevant fields.	The most representative dimensions were: Leisure and Family, being Autonomy the most compromised dimension. The quality of life of the child with chronical renal failure is considered satisfactory, in spite of the limitations.
3	Quality of life of patients in hemodialysis in a public hospital in Belém – Pará	Evaluate the quality of life of patients with CRF in the ambulatory hemodialysis program of a public hospital from Belém – Pará.	The analysed fields were globally compromised in the studied population, especially concerning the physical aspects, suggesting the negative influence if the presence of chronical disease, with prolonged treatment, over these scopes.
4	Mental disorders and quality of life in children and adolescents with chronical renal failure and in their caretakers	Evaluate the emotional repercussions and the impairment of quality of life in children and adolescents with CRF that may influence the prognosis and clinical control of these patients.	There is an impairment in the quality of life and in the mental health of these patients. The understanding of the psychosocial repercussions and the attempt to minimize them lessen the impact of the renal disease on the patient. This adequate, complete and humanized care may result in the improvement of adherence and of clinical control.
5	Quality of life of individuals with terminal chronical renal disease subjected to hemodialysis	Evaluate the quality of life of individuals with terminal chronical renal disease subjected to hemodialysis.	The patients with terminal chronical renal disease subjected to hemodialysis showed reduced values in the quality of life scores, especially in the fields of general state of health and limitations due to physical aspects of the SF-36.

Article	Title	Objectives	Summary of the conclusions
6	Quality of life: patients with chronic renal failure in the municipality of Caruaru, PE	Describe the characteristics and analyze the possible associations between Chronic Renal Failure (CRF) and quality of life in a representative sample of the patients with the aggravation in the municipality of Caruaru, PE	The data indicates that patients with CRF show reduction in the quality of life due to musculoskeletal repercussions, such as cramps, muscular weakness and physical effort.
7	Evaluation of the quality of life in elders subjected to the hemodialysis treatment	Evaluate the quality of life of elders with chronic renal failure, subjected to the hemodialysis treatment.	Thus, the quality of life of these elders showed itself to be low, with variations according to the analyzed field. Researches towards the evaluation of quality of life are relevant and instrument the daily practice of care.
8	Comparison of the quality of life between patients in hemodialysis awaiting and not awaiting renal transplant in a poor region of Brazil	Compare the level of quality of life between patients in (hemodialysis) HD registered and not registered in the waiting list for renal transplant.	Patients in HD that do not await transplant are at risk of experiencing low QoL, especially on what refers to limitation due to emotional and physical aspects. Psychological support and physical rehabilitation are recommended for this group of patients.
9	Quality of life of patients subjected to hemodialysis	Investigate the quality of life of patients diagnosed with chronic renal failure, in hemodialysis treatment, using the SF-36 questionnaire.	It is concluded that the interviewed patients presented low quality of life, due to successive situations that compromised their physical and psychological state, with personal, family and social repercussions.
10	Analysis of the quality of life of patients in hemodialysis: a qualitative study	Understand how the patients in hemodialysis understand their quality of life and what are the factors that they believe that influence it.	This investigation was extremely relevant not only for the professionals that worked in these hemodialysis units, allowing them a better understanding of their patients, but also for the renal patient, who was benefited by the interaction with the researchers of this study, who were concerned to demonstrate the different ways to improve quality of life.
11	Analysis of the lifestyle of chronic renal patients in hemodialysis	Evaluate the lifestyle of chronic renal patients in hemodialysis treatment.	The relationship of most of the patients with the people that are close to them is perceived and evaluated as good. The researched patients can modify their life habits and, this way, contribute to improve their health and life conditions.
12	Perceptions and changes in the quality of life of patients subjected to hemodialysis	Get to know the perceptions of the patients with Chronic Renal Failure regarding the changes occurred in their life routine, due to the hemodialysis treatment, identifying the elements that affected their quality of life.	Support from family members and health professionals can contribute to overcome these limitations and adapt to the new lifestyle.
13	Factors associated to quality of life related to the health of elders in hemodialysis.	Identify factors associated to the quality of life related to the health of elder patients in hemodialysis.	The consistent association to the presence of chronic diseases shows the importance of the morbidity profile for the quality of life of this population. The identification of the associated factors, such as increase in age, female sex, number of hospitalizations and treatment time, can favor the adequate planning of the health actions to better assist this group.
14	Quality of life of the workers that perform hemodialysis	Evaluate the impact of hemodialysis in the quality of life of workers that carry chronic renal failure.	The hemodialysis therapy imposes physical limitations, hampering even the execution of daily activities of the patients. Working is important even when the worker is a chronic disease carrier, both due to the financial aspects and due to the social ones, as not having a job impacts the quality of life. The nurse can promote activities to maintain movements and preserve strength; should, therefore, stimulate self-care as much as possible.

Source: Data collected online – LILACS database, organized by the researchers



**Chart 2** – Methodological data: research characterization, research site, research participants, data collection method, analysis type and interpretation of the data.

	Research characterization	Approach employed	Research site	Research participants	Data collection method
1	Cross-sectional	Quantitative	Dialysis service of the Santa Casa de Araras	16 patients in hemodialysis	Questionnaire
2	Descriptive	Qualitative and quantitative	Kidney Institute in Fortaleza-CE	13 children in hemodialysis	Self-questionnaire
3	Cross-sectional, descriptive and comparative	Quantitative	Ambulatory hemodialysis program of the substitutive renal therapy service of the <i>Hospital de Clínicas Gaspar Vianna</i> (HCGV)	50 patients in dialysis	Interview and Questionnaire
4	Descriptive, exploratory	Quantitative and qualitative	Regional Library of Medicine - BIREME and in PUBMED	27 articles	Electronic medium and document collection
5	Cross-sectional	Quantitative	City Hospital of Passo Fundo, Rio Grande do Sul.	49 patients in hemodialysis	Questionnaire
6	Epidemiological, descriptive, cross-sectional	Quantitative	Dialysis treatment centers in the city of Caruaru	42 patients in hemodialysis	Interview and document collection
7	Descriptive, exploratory	Quantitative	Specialized Service in hemodialysis of Guarapuava - Paraná	40 elders in hemodialysis	Questionnaire
8	Descriptive, cross-sectional	Quantitative and qualitative	Renal Unit in Northern Ceará	161 patients with terminal chronic renal disease	Interview and Questionnaire
9	Descriptive, exploratory	Quantitative	Hemodialysis Unit in the Hospital Barão de Lucena	33 patients in hemodialysis	Questionnaire
10	Descriptive, cross-sectional	Qualitative	Renal clinic in the city of Cruz Alta - RS	12 patients in hemodialysis	Interview
11	Descriptive, cross-sectional	Quantitative	Nephrology Center	32 patients in hemodialysis	Questionnaire
12	Descriptive, exploratory	Qualitative	Nephrology and Dialysis Center	9 patients in hemodialysis	Interview
13	Cross-sectional	Quantitative	12 dialysis provider units, which work under the Unified Health System, available in Belo Horizonte - MG	223 patients with age > 60 years in hemodialysis	Interview and Questionnaire
14	Cross-sectional, comparative, descriptive	Quantitative	Nephrology sector of a university hospital of Pernambuco	24 patients	Interview and Questionnaire

Source: Data collected online – LILACS database, organized by the researchers

The quantity's analysis was made using the descriptive statistical analysis, aiming to evaluate the data, quantifying it according to its nature<sup>11</sup>.

What was found, in relation to the year of publication and quantity, respectively, was 1 article (7.14%) in 2009, 5 articles (35.71%) in 2010, 7 articles (50%) in 2011 and in 2012 only 1 article (7.14%). Greater production about the researched subject can be seen in 2010 and 2011, with a significant decline in 2012. However, it was not possible to verify the motives and, besides that, the increase in the number of published articles is not significant either. It is understood that, in the course of the researched period, the publications related to this theme continue to be minor.

On what refers to the journal in which the articles were published, there are 3 in the Brazilian Journal of Nephrology (21.42%), 1 in the *Fisioterapia e Pesquisa* magazine (7.14%), one in the Anna Nery magazine (7.14%), 1 in the *Scientia Medica* (7.14%), 1 in the *Fisioterapia e movimento* (7.14%), 1 in the *Revista Gaúcha de Enfermagem* (7.14%), 1 in the Nursing magazine of UERJ (7.14%), 1 in the *Arquivos Catarinenses de Medicina* (7.14%), 1 in the *o Mundo da saúde* magazine (7.14%), 1 in the Brazilian Magazine of Nursing (7.14%), 1 in the Public Health Magazine (7.14%) and 1 in the Medical Sciences Magazine (7.14%).

Observing the titles, it can be seen that 10 (71.42%) speak about the quality of life in chronic renal patients subjected to hemodialysis, 1 (7.14%) about the quality of life of the child with chronic renal failure, 1 (7.14%) refers to mental disorders and the quality of life of children and adolescents with chronic renal failure and their caretakers, 1 (7.14%) involves the quality of life of patients with chronic renal failure, and 1 (7.14%) addresses the quality of life of workers that perform hemodialysis.

Regarding the title, it was verified that 12 (85.7%) articles of the study address the adult population, and only 14.3% sought to study children in dialysis treatment. Another important fact is that a great portion of the studies sought to evaluate the quality of life of the hemodialysis user, despite there having other modalities of treatment.

According to the objectives present in the articles, it is highlighted that 9 (61.28%) aimed to evaluate the quality of life of patients subjected to hemodialysis; 1 (7.14%) evaluate the quality of life in children with chronic renal failure, 1 (7.14%) seeks to evaluate the emotional repercussions and the quality of life of chronic renal children and adolescents, while 1 (7.14%) aims to know how the patients in hemodialysis perceive their quality of life, in order to encourage the team and the family in their search for means to overcome the difficulties imposed by the treatment.

On what refers to the key words, the following results were obtained: 9 (64.38%) used renal dialysis, 12 (85.71%) chronic renal insufficiency, 12 (85.71%) quality of life, 3 (21.42%) chronic renal failure, 3 (21.42%) nursing cares, 2 (14.28%) elderly, 2 (14.28%) kidney transplant, and the words child health, pediatrics, cross-sectional studies, hemodialysis, disease impact profile, retirement, employment, worker health, adverse effects, lifestyle and qualitative study appeared 1 single time (7.14%) each.

On what concerns the summary of the conclusions of the studied researches, it is understood that, in general, there is an impairment of the quality of life of chronic renal patients, however in children the quality of life was considered satisfactory in spite of the limitations. The conclusions also stressed that the chronic renal users can modify their life habits in order to improve their quality of life, and that to do so they could count on their relatives and health professionals. What prevails in the conclusions of the articles is the importance of further studies for better comprehension and guidance before this theme. It is emphasized that the authors highlight the physical and psychosocial limitations of these users and the need of social support as well as from the family and from the multi-professional teams involved in the treatment.

Chart 2 seeks to visualize the data related to the methodology utilized in the 14 analyzed researches.

Regarding the methodology type, 3 (21.42%) articles are cross-sectional, 3 (21.42%) descriptive cross-sectional, 4 (28.57%) exploratory descriptive, 1 (7.14%) cross-sectional descriptive epidemiologic, 1 (7.14%) descriptive and 2 (14.28%) descriptive and comparative cross-sectional.

When considering the approach employed, there are 9 (61.28%) quantitative studies, 3 (21.42%) quanti-qualitative ones and only 2 (21.42%) with a qualitative approach.

In relation to the method employed in the data collection, it can be seen that 2 (14.28%) used interviews, 1 (7.14%) used electronic medium and documents, 5 (35.71%) utilized the questionnaire, 4 (28.57%) made use of a questionnaire and interview, 1 (7.14%) used questionnaire and document collection and 1 (7.14%) utilized interview and document collection.

Considering the analysis and the interpretation of data of the 14 analyzed works, 10 (71.42%) used descriptive statistical analysis, 2 (14.28%) relied on thematic analysis, 1 (7.14%) document analysis and 1 (7.14%) content analysis.

Analyzing the site in which the research was performed, it was found 3 (21.42%) in hemodialysis services, 3 (21.42%) in hemodialysis units, 4 (28.57%) in nephrology centers, 1 (7.14%) in the kidney institute, only 1 (7.14%) in electronic medium, 1 (7.14%) in a hospital and 1 (7.14%) in a clinic.

Most of the authors of the 14 analyzed researches, in general, consider that, in spite of all the technological advances, with the modernization of equipment and inputs of superior quality to what was available a few years ago, the user that carries chronic renal disease in dialysis treatment shows low quality of life. This weighting, maybe, finds explanation in the difficulties, in many aspects, faced by the users of chronic renal failure, as well as the limitations imposed by the disease. The compiled results of virtually all of the studies in which adult participants were analyzed led to the conclusion that the quality of life of the user with chronic renal disease is compromised in several dimensions, especially in the physical aspects related to the functional capacity, besides affecting other dimensions such as the social and psychological ones in a lesser degree.

One of the conducted studies brings up that the functional capability evaluated by testing the distance crossed in 6 minutes, strength of the respiratory muscles and feeling of fatigue showed to be impaired, especially on what refers to expiratory strength<sup>12</sup>. Likewise, another research indicated that the patients with CRF presented reduction in quality of life due to the musculoskeletal repercussions, among which stood out muscle pain (69.4%), cramps (89.8%), muscular weakness (73.5%) and working capability (75.5%)<sup>13</sup>.

Taking into consideration the social and psychological dimensions, the living experience with the diagnosis of chronic renal disease is one of the most difficult moments for the user and the family members, due to countless feelings that emerge, such as anguish of the unknown and the fear of death, but there is also the spiritual dimension, the faith of the patient to face the situation that presents itself and this becomes a driving force to search for the strength necessary to confront what is to come<sup>14</sup>. Thus, as in other researches, this one, previously mentioned, retakes the social domain as one of the most elevated, even with the relationship problems of the individuals with renal diseases on what refers to aspects of shyness and suffering when facing prejudice. Besides that, it brings up the strengthening of the family and social support networks after the discovery of the renal insufficiency, what will provide strength and courage to the patient to give continuity to the treatment<sup>15</sup>.

In relation to children, the main domain affected is the one of autonomy, but their quality of life is considered satisfactory in most cases, stressing that this aspect can be a reflection of the difficulties imposed by the disease, which influence the usual activities of childhood, such as the act of playing<sup>16</sup>. Additionally, the pediatric patients are more affected by mental disorders than the general population, due to the disturbances of the family dynamics, painful treatment

and the chronic disease itself, besides causing poor school performance, low self-esteem and relationship difficulties<sup>17</sup>. Besides that, these children have their daily life altered by several limitations resulting from the disease, requiring a greater capability to adapt and face the diverse situation to which they are exposed. Besides that, the children in hemodialysis for more than a year had improvements in the levels of mastery in the social aspects and there was positive correlation between the time in dialysis and the functional capability.<sup>17</sup>

The age and time in hemodialysis factors were not relevant in most of the fields evaluated by the evaluative instrument of the quality of life, but a point to be stressed was that the patients with more than 60 years of age showed better results in the field of mental health than those with inferior age<sup>12</sup>. Contrary to this previous data, another study stresses that the age factor had a negative correlation to the functional capability<sup>18</sup>.

With relation to the sexual gender factor, men had worse scores than women regarding physical and vitality aspects<sup>18</sup>. In contrast, in another research both men and women had a reduction in the scores of quality of life, especially in the general state of health and physical limitations<sup>19</sup>. The study highlights that in the findings related to gender, women that kept working managed to maintain a good quality of life<sup>20</sup>.

Another important dimension in the quality of life of the chronic renal patient involves the working capability, in which, in spite of the physical limitations, it becomes essential that the user keeps working whether for financial and/or for social issues<sup>20</sup>. In this research, the quality of life score in the fields of social aspects in the studied population was greater than in those that performed work activities than in those that interrupted them<sup>20</sup>. The lack of paid activity created psychological conflicts that interfere in the clinical evolution of the users<sup>21</sup>. Thus, limitation of the performance of daily activities depresses quality of life, because work is a form by which individuals express and identify themselves and feel fulfilled in the world<sup>14</sup>.

Considering the dialysis treatment modalities that are offered, national and international literature considers the renal transplant as the first option in the aspect of improvement of quality of life, but the others also provide advantages to the users, in a certain way, taking them out of the critical situation of organic imbalance caused by chronic renal failure. The dialysis treatments adapt the kidneys efficiently, maintaining corporal homeostasis until the terminal stages in the process of the chronic renal disease, although this adaptation creates a debility in the long term on the general state of health of the individuals, impairing quality of life<sup>21</sup>.

In this sense, dialysis treatment, although it has a limiting component of the quality of life of the patients in daily activities, also acts as an optimizer given that these people evaluate the impact of the treatment in the improvement of their life and health conditions when compared to the problems previously presented<sup>15</sup>. The feeling of well-being provided by the treatment was mentioned as a form of support to face the restrictions and negative feelings, in which

the valorization of the treatment and the acknowledgement of the new health condition provide a gradual improvement in the quality of life. Besides, in spite of all technological advances of medicine and increased life expectancy, a change is needed in concepts and preliminary concepts of users and companions concerning the pathology and the treatments such as hemodialysis, in order to improve quality of life<sup>15</sup>. The ill person recognize hemodialysis as a treatment that, despite being restrictive and limiting activities, is a factor of survivor and guarantee of well-being<sup>14</sup>.

Concluding the analysis of the listed articles, a few authors stressed the importance of the involvement of health professionals and family members in adapting and facing process of the chronic patients, who become the agents of their own care, aiming towards a change in conceptions and paradigms in benefit of a better quality of life in the face of their own chronicity. Thus, in an attempt to minimize the impact of the renal disease and improve the adherence of the patient, a more complete and humanized care is essential<sup>17,22,23</sup>.

In this sense, the nurse can promote activities for stimulation of self-care, assisting in the preservation of strength and maintenance of movements<sup>20</sup>. There is yet that the support of family members and health professionals can contribute for the overcoming of the limitations and adaptation to the new lifestyle of the users<sup>15,20</sup>.

## CONCLUSION

Chronic renal failure (CRF) is a complex pathology that largely impairs the quality of life of individuals, especially in the physical dimension evaluated by the instruments used in the analyzed articles. The limitations imposed by the disease invariably weaken the users and their family, an adequate assistance support being essential to give opportunity of adapting to the new health conditions and to stimulate the person towards self-care.

This research gave opportunity to expand knowledge about the scientific production related to quality of life and chronic renal failure, allowing further information about this subject, while giving instruments to health professionals to provide care for these clients.

Additionally, it confirmed the suppositions that the quality of life of users with chronic renal failure is impaired in several dimensions, but what destabilizes them the most are the physical limitations imposed by the pathology and that the substitutive renal therapies have relevant aspects known to the users that affect positively the unfolding of the daily activities.

The method of integrative revision kept up with the purpose of getting to know the scientific productions about quality of life and CRF. It was possible to observe that, although CRF is taking on major proportions in the list of chronic diseases, there is a reduced number of articles related to the theme. Among these articles the focus is on users in hemodialysis, yet regardless of the approach, the studies presented here succeeded in associating the several dimensions of the chronic renal users that influence their quality of life.

It is concluded that stimulating the discussion about quality of life and chronic renal failure allows the health services, education institutions and even the professionals themselves to identify the real necessities of the users and relatives, in order to provide a more objective work and an effective use, by all the involved, in the improvement of the quality of life of CRF carriers.

Further development of this theme is recommended so that there is a collective awareness about the subject, understanding the real importance of this discussion for the benefits that it is able to provide for the life of the population and, especially, for the CRF carriers in substitutive treatment of the renal function.

## REFERENCES

1. Brasil. Constituição da República Federativa do Brasil. Brasília: Senado Federal; 1988.
2. Kluthcovsky ACGC, Takayanagui AMM. Qualidade de vida – aspectos conceituais. *Revista Salus-Guarapuava-PR* 2007;1(1):13-15.
3. Santos MC, Siqueira HCH, Silva JRS. Saúde coletiva na perspectiva ecossistêmica: uma possibilidade de ações do enfermeiro. *Rev Gaúcha Enferm* 2009;30(4):750-4.
4. Herculano SC. Qualidade de vida e seus indicadores. In: Herculano SC, Porto MFS, Freitas CM, organizadores. *Qualidade de vida e riscos ambientais*. Niterói: Eduff; 2000.
5. World Health Organization. *Health Promotion - The Ottawa Charter*. Geneva: WHO; 1986.
6. Martins MRI, Cesarino CB. Qualidade de vida de pessoas com doença renal crônica em tratamento hemodialítico. *Rev Latino-am Enfermagem* 2005;13(5):670-6.
7. Machado LRC. A dialética da vida cotidiana de doentes com insuficiência renal crônica em hemodiálise: entre o inevitável e o casual. Dissertação [Mestrado] – Universidade de São Paulo; 2001.
8. Riella MC. *Princípios de nefrologia e distúrbios hidroeletrólíticos*. 4. ed. Rio de Janeiro: Guanabara Koogan; 2003.
9. Sesso R, Lopes AL, Thomé FS, Lugon JR, Watanabe Y, Santos DR. *Diálise crônica no Brasil - relatório do Censo Brasileiro de Diálise* 2011. *J Bras Nefrol* 2012;34(3):272-277.
10. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e enfermagem. *Texto Contexto Enferm* 2008;17(4):758-64.
11. Lakatos EM, Marconi MA. *Fundamentos de metodologia científica*. São Paulo: Editora Atlas; 2007.
12. Cunha ME, Andrade V, Guedes CAV. Avaliação da capacidade funcional e da qualidade de vida em pacientes renais crônicos submetidos a tratamento hemodialítico. *Fisioterapia e Pesquisa* 2009;16(2):155-60.
13. Costa PB, Vasconcelos K, Tassitano RF. Qualidade de vida: pacientes com insuficiência renal crônica no município de Caruaru, PE. *Fisioter. Mov* 2010;23(3):461-471.
14. Takemoto AY, Okubo P, Bedendo J, Carreira L. Avaliação da qualidade de vida em idosos submetidos ao tratamento hemodialítico. *Rev Gaúcha Enferm* 2011;32(2):256-62.
15. Silva ASD, Silveira RSD, Fernandes GFM, Lunardi VL, Backes VMS. Percepções e mudanças na qualidade de vida de pacientes submetidos à hemodiálise. *Rev Bras Enferm* 2011;64(5):839-44.
16. Frota MA, Machado JC, Martins MC. Qualidade de vida da criança com insuficiência renal crônica. *Esc Anna Nery* 2010;14(3):527-533.
17. Marciano RC, Soares CMB, Diniz JSS. Transtornos mentais e qualidade de vida em crianças e adolescentes com doença renal crônica e em seus cuidadores. *J Bras Nefrol* 2010;32(3):316-322.
18. Silveira CB, Pantoja IKO, Marques AR. Qualidade de vida de pacientes em hemodiálise em um hospital público de Belém – Pará. *J Bras Nefrol* 2010;32(1):39-44.
19. Mortari DM, Menta M, Scapini KB. Qualidade de vida de indivíduos com doença renal crônica terminal submetidos à hemodiálise. *Sci Med* 2010;20(2):156-160.
20. Santos TMBD, Frazão IDS. Qualidade de vida dos trabalhadores que realizam hemodiálise. *Rev. Ciênc. Méd* 2012;21(1-6):5-14.
21. Frazão CMFDQ, Ramos VP, Lira ALBDC. Qualidade de vida de pacientes submetidos à hemodiálise. *Rev. Enferm UERJ* 2011;19(4):577-82.
22. Braga SFM, Peixoto SV, Gomes IC, Acúrcio FDA, Andrade ELG, Cherchiaglia ML. Fatores associados com a qualidade de vida relacionada à saúde de idosos em hemodiálise. *Rev Saúde Pública* 2011;45(6):1127-36.
23. Santos PR. Comparação da qualidade de vida entre pacientes em hemodiálise aguardando e não aguardando transplante renal em uma região pobre do Brasil. *J Bras Nefrol* 2011;33(2):166-172.

Received on: 15/07/2016

Required for review: No

Approved on: 04/01/2017

Published on: 25/10/2017

### Contact of the corresponding author:

Juliana Marques Weykamp

Rua Visconde de Ouro Preto, 258

ZIP-code: 96077-000

Pelotas/RS, Brazil

E-mail: <julianaweykamp@gmail.com>