

## Quality of life of elderly people with chronic kidney disease in conservative treatment

*Qualidade de vida de idosos com doença renal crônica em tratamento conservador*  
*Calidad de vida de ancianos con enfermedad renal crónica en tratamiento conservador*

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### ABSTRACT

**Objective:** To describe the quality of life (QOL) of elderly people with Chronic Kidney Disease (CKD) in conservative treatment, correlating it with sociodemographic and health-related aspects. **Method:** This is a quantitative, cross-sectional, and descriptive study that used: a previously validated instrument for data collection; the WHOQOL-BREF and WHOQOL-OLD QOL scales; and the Mini-Mental State Examination. **Results:** Thirty-five elderly people (54.30% females), with mean age of 68.26 years, took part in the study. They reported, on average, 3.70 comorbidities and 5.60 complications related to CKD. Regarding QOL, the "psychological" domain ( $54.40 \pm 16.29$ ) and the "death and dying" facet ( $37.32 \pm 23.79$ ) were considered the most damaged ones; the most strengthened were "social relationships" ( $70.36 \pm 18.32$ ) and "intimacy" ( $66.61 \pm 16.80$ ). A positive correlation was verified between comorbidities and complications ( $p = 0.015$ ), and an inverse correlation between the number of complications and QOL ( $p = 0.004$ ). **Conclusion:** These results, if considered during the care planning, may help improving the quality of the care provided for elderly people with CKD.

**Descriptors:** Renal Insufficiency, Chronic; Elderly People; Quality of Life; Chronic Disease; Demographic Aging.

### RESUMO

**Objetivo:** Descrever a qualidade de vida (QV) de idosos com Doença Renal Crônica (DRC) em tratamento conservador, correlacionando-a com aspectos sociodemográficos e de saúde. **Método:** Pesquisa quantitativa, transversal e descritiva que utilizou: um instrumento pré-validado para coleta dos dados de caracterização; as escalas de QV WHOQOL-BREF e WHOQOL-OLD; e o Mini Exame do Estado Mental. **Resultados:** Participaram 35 idosos (54,30% mulheres) com média de 68,26 anos. Referiram em média 3,70 comorbidades e 5,60 complicações relacionadas à DRC. Na QV, demonstraram-se mais prejudicados o domínio "psicológico" ( $54,40 \pm 16,29$ ) e a faceta "morte e morrer" ( $37,32 \pm 23,79$ ); e mais fortalecidos o domínio "relações sociais" ( $70,36 \pm 18,32$ ) e a faceta "intimidade" ( $66,61 \pm 16,80$ ). Verificou-se correlação positiva entre número de comorbidades e de complicações ( $p = 0,015$ ), e correlação inversa entre número de complicações e a QV ( $p = 0,004$ ). **Conclusão:** Se levados em consideração durante o planejamento de cuidados, tais resultados podem auxiliar na melhoria da qualidade da assistência ao idoso com DRC.

**Descritores:** Insuficiência Renal Crônica; Idoso; Qualidade de Vida; Doença Crônica; Envelhecimento da População.

### RESUMEN

**Objetivo:** Describir la calidad de vida (CV) de ancianos con Enfermedad Renal Crónica (ERC) en tratamiento conservador, correlacionando con aspectos sociodemográficos y de salud. **Método:** Investigación cuantitativa, transversal y descriptiva que ha utilizado: un instrumento pre-validado para la recolección de los datos de caracterización; las escalas de QV WHOQOL-BREF y WHOQOL-OLD; y el Mini Examen del Estado Mental. **Resultados:** Participaron 35 ancianos (54,30% mujeres) con edad media de 68,26 años. En promedio se midieron 3,70 comorbidades y 5,60 complicaciones relacionadas con ERC. En la CV, se demostraron más perjudicadas la área "psicológica" ( $54,40 \pm 16,29$ ) y la faceta "muerte y agonía" ( $37,32 \pm 23,79$ ); y más fortalecidas la área "relaciones sociales" ( $70,36 \pm 18,32$ ) y la faceta

“intimidad” ( $66,61 \pm 16,80$ ). Hubo una correlación positiva entre el número de comorbilidades y de complicaciones ( $p = 0,015$ ), y la correlación inversa entre el número de complicaciones y la CV ( $p = 0,004$ ). **Conclusión:** Si se tienen en cuenta durante la planificación de cuidados, estos resultados pueden ayudar en la mejora de la calidad de la asistencia al anciano con ERC.

**Descriptores:** Insuficiencia Renal Crónica; Anciano; Calidad de Vida; Enfermedad Crónica; Envejecimiento de la Población.

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## INTRODUCTION

Demographic aging is a phenomenon that may be observed in around the world, requiring society to reorganize the labor market, public policies and social programs, as well as its family dynamics and, in a specific manner, the health systems. Living more often relates to the confrontation with inabilities, dependency, need of long-term care, loss of social roles, isolation, solitude, depression and the lack of a meaning for life itself. Therefore, longevity imposes the challenge of being able to associate a longer life expectancy with an improved Quality of Life (QOL)<sup>(1-2)</sup>.

In general, regardless of specific characteristics of each population, aging is related to a higher probability of the development of Non-Communicable Chronic Diseases (NCCDs)<sup>(3)</sup>. The interaction of genetic factors, unhealthy habits, unbalanced diet, nicotine dependency, elitism and sedentary lifestyle are among the causes of the most common health problems of elderly people. The NCCDs are the main causes of death in the world, in addition to harming quality of life (QOL) and triggering limitations for the patients' activities of daily living. Among such diseases, the Chronic Kidney Disease (CKD) stands out as one of the main causes of inabilities and morbimortality worldwide<sup>(2-4)</sup>.

CKD is characterized as an irreversible and progressive syndrome that damages the kidneys' function until kidney failure. The pre-dialysis/conservative treatment revolves around drug therapy, dietetic recommendations frequently followed by water restriction and specific behaviors in attempt to decelerate CKD progression as means to postpone the Kidney Substitutive Therapy (KST)<sup>(5)</sup>.

The estimated glomerular filtration rate decreases physiologically, consonant with age, and it exposes the elderly to a higher risk of developing CKD. Half of the population with 75 years of age or older has CKD at different stages. If this information is associated to the life expectancy at birth of Brazilian people, which was 75.1 years in 2014, it is possible to clearly understand the importance of greater investments in research and improvement of the health care assistance provided for this population<sup>(2,6-7)</sup>.

This study considered the definition of Quality of Life (QOL) created by the WHOQOL group of the World Health Organization (WHO). Therefore, QOL is understood as the individual's perception of their position in life, inserted in the contexts of culture and value system in which the individuals live and in relation to their goals, expectations, standards and concerns<sup>(8)</sup>.

The main results on QOL of patients with CKD allow us to say that patients in the final stage of the disease have a worse QOL in comparison to the general population of the same age. The treatment for CKD patients aim should not be only longevity, but also the strengthening of QOL, since plain survival it is not sufficient, it is necessary to live well<sup>(9-10)</sup>.

The struggle of a chronic disease with a perspective of dependence on an invasive therapy such as hemodialysis, as well as food restrictions, the use of polypharmacy and the symptomatology for patients in conservative treatment, can generate great conflicts and difficulties of confrontation. Such aspects point that the QOL of patients who are yet to commence a KST is influenced by their physical and psychological particularities, differentiating them from patients who have commenced a KST. In this context, this study aimed to describe the QOL of elderly patients with CKD who submitted themselves to the conservative treatment and to correlate it with sociodemographic and clinical variables.

## METHOD

### Ethic Aspects

This study followed the recommendations for research with human beings, according to Resolution 466/12 of the National Health Council. The project was approved by the Research Ethics Committee of the Nursing School of Ribeirão Preto – Universidade de São Paulo (CEP-EERP/USP). Before accepting to take part in the research, the elderly signed the Informed Consent Form.

### Design, location and period of the study

Quantitative, descriptive and cross-sectional study, performed at the uremia ambulatory care unit, in a public hospital in Ribeirão Preto - SP. The data collection period occurred between October 2014 and March 2015.

### Population or sample; inclusion and exclusion criteria

The study population consisted of the elderly in conservative treatment of CKD from an ambulatory care unit. The sample was selected for convenience, according to the period of data collection, respecting the inclusion criteria: being 60 years of age or older, having CKD, being on conservative treatment for a minimum of six months and performing ambulatory follow-up at the unit of the study; and exclusion: having an acute clinical complication and being hospitalized during the period of data collection.

### Study Protocol

For the data collection, interviews that lasted 40 minutes on average were conducted, while patients waited for their appointments. The instrument used for the patients' sociodemographic and clinical characterization was developed based on Kusumota<sup>(11)</sup>, which addresses personal data, economic, sociodemographic and clinical conditions. QOL was assessed using the WHOQOL-Bref and WHOQOL-Old scales. For the cognitive evaluation, the Mini-Mental State Examination (MMSE) was used.

The WHOQOL Project, established by a group of scholars gathered by the World Health Organization (WHO), developed

instruments for the evaluation of QOL. The WHOQOL-Bref, the abbreviated version created in 1998 and composed of 26 questions grouped into four domains: physical, psychological, social relationships and environment, was selected for the present study; in the 26 questions, two are general questions of quality of life and the others represent each of the 24 facets that make up the original instrument (WHOQOL-100). Each domain presents five possibilities of responses that follow the Likert scale, from 1 to 5. For the interpretation of the results obtained, the higher the scores, the better the quality of life<sup>(12)</sup>.

In 1999, the same group developed a specific instrument to assess QOL of the elderly, the WHOQOL-Old, which consists of 24 items attributed to six facets, with four items each: Sensory Functioning; Autonomy; Past, Present and Future Activities; Social Participation; Death and Dying; and Intimacy. For each of the facets, the possible scores can range from 4 to 20, since each item can score from 1 to 5. Thus, the higher the score, the greater the quality of life<sup>(12)</sup>.

The cognitive evaluation by MMSE comprises five areas of cognition: Temporal and Spatial Orientation; Record; Attention and Calculations; Recovery; Language; Repeat and Complex Commands. For the MMSE interpretation, the proposal suggested by Bertolucci et al.<sup>(13)</sup> was followed, in which the final score should be related to the schooling of the evaluated individual. It is important to stress that a low score in the MMSE was not an exclusion criterion in the present study.

### Results and Statistical Analysis

The data obtained through the data collection were typed twice in Excel<sup>®</sup> spreadsheet, validated and checked; then the data was transferred to the Statistical Package of Social Sciences (SPSS) version 22, in which descriptive statistical analyzes

were generated: measures of position, dispersion and variability for the quantitative variables and measures of simple frequency for the categorical variables. The Spearman Correlation coefficient was calculated for the analysis of the correlation between the general QOL scores (WHOQOL-BREF and WHOQOL-OLD) and the variables of age, years of study, number of complications and number of comorbidities.

The interpretation of the correlation analysis was performed according to Polit<sup>(14)</sup>, which classifies the correlation coefficient in: weak correlation (coefficient between 0 and 0.3), moderate correlation (coefficient between 0.3 and 0.7), and strong correlation (coefficient between 0.7 and 1). The significance level of 5% ( $p = 0.05$ ) was considered for the statistical analysis.

## RESULTS

The mean age of the 35 patients interviewed was 68.26 years, and 54.30% of them were women. The majority (57.15%) of these elderly people live with a spouse or partner. The mean in years of study was 3.94 years. As source of income, most of the elderly interviewed had a retirement pension (77.10%).

The cognitive evaluation, conducted with the MMSE, showed a cognitive deficit in 11.40% of the elderly participants. The mean time of conservative treatment of the interviewed patients was 4.62 years. On the self-reported complications related to CKD, the most appraised ones by the patients were: High pressure in 77.10%, Cramps in 57.10%, Anemia in 54.30%, Weight loss in 54.30%, Pain in 51.40%, Weakness in 48.60%, Weight gain in 48.60% and Constipation in 42.90%. The mean number of self-reported complications per elderly patient was 5.60.

**Table 1** – Sociodemographic characterization of the elderly in conservative treatment of Chronic Kidney Disease

Variables	n	%	Minimum	Maximum	Mean
Age (years)	35		60	87	68.26
Sex					
Male	16	45.70			
Female	19	54.30			
Marital Status					
Never got married or lived with a partner	5	14.30			
Lives with spouse or partner	20	57.15			
Separated or divorced	4	11.40			
Widow	6	17.15			
Years of study			0.3	14	3.94
Source of Income*					
Retirement pension	27	77.10			
Pension	5	14.30			
Rent	3	8.60			
Work	3	8.60			
Benefit of the National Institute of Social Security	1	2.90			
Total	35	100.00			

Note: \*More than one answer is allowed.

The comorbidities most reported by the patients were: Visual Deficit (65.70%), Systemic Arterial Hypertension (SAH) (62.90%), Diabetes mellitus (DM) (51.40%), Cataract (45.70%) and Acute Myocardial Infarction (31.40%). The mean number of reported comorbidities was 3.70 per elderly.

Regarding Quality of Life, the results obtained by the application of the WHOQOL-BREF showed the highest mean score for the "Social Relationships" domain ( $70.36 \pm 18.32$ ) and the lowest mean score for the "Psychological" domain ( $54.40 \pm 16.29$ ). For the WHOQOL-OLD, the highest mean score was obtained in the "Intimacy" facet ( $66.61 \pm 16.80$ ) and the lowest mean score in the "Death and dying" facet ( $37.32 \pm 23.79$ ).

The results obtained through the Spearman correlation test pointed a moderate positive correlation, with statistical

significance of  $p = 0.015$ , between the number of comorbidities and the number of complications, i.e., as the number of comorbidities increased, so did the number of complications.

There was a moderate inverse correlation, with a statistical significance of  $p = 0.004$ , between the number of complications and the WHOQOL-BREF general quality of life score, which indicates that the higher the number of complications, the lower the WHOQOL-BREF general quality of life.

A strong positive correlation, with a statistical significance of  $p = 0.000$ , was identified between the WHOQOL-BREF general quality of life scores and the WHOQOL-OLD general score. Thus, the higher the WHOQOL-BREF general quality of life score, the greater the WHOQOL-OLD general quality of life score, which demonstrates compatibility between the results of the two instruments.

**Table 2** – Clinical Characterization of Elderly People in Conservative Treatment of Chronic Kidney Disease, Ribeirão Preto, São Paulo, Brazil, 2015

Variables	n	%	Minimum	Maximum	Mean
Years of Treatment			0.50	21	4.62
Complications in Chronic Kidney Disease*			2	11	5.60
High pressure	27	77.10			
Cramps	20	57.10			
Anemia	19	54.30			
Weight loss	19	54.30			
Pain	18	51.40			
Weakness	17	48.60			
Weight gain	17	48.60			
Constipation	15	42.90			
Cardiac arrhythmia	12	34.30			
Headache	10	28.60			
Itch	10	28.60			
Repetitive infections	8	22.90			
Arterial hypotension	4	11.40			
Comorbidities*			1	7	3.70
Visual Deficit	23	65.70			
Systemic Arterial Hypertension	22	62.90			
Diabetes mellitus	18	51.40			
Cataract	16	45.70			
Acute Myocardial Infarction	11	31.40			
Varicose veins	9	25.70			
Hearing loss	7	20.00			
Cerebrovascular disease	5	14.30			
Osteopathy	5	14.30			
Malignant neoplasm	4	11.40			
Cardiac Disease	3	8.60			
Benign neoplasm	1	2.90			
Malnutrition	1	2.90			
Asthma	1	2.90			
Tendinitis	1	2.90			
Labyrinthitis	1	2.90			
Thrombosis	1	2.90			

Note: \*More than one answer is allowed.

**Table 3** – Quality of Life Description, according to WHOQOL-BREF domains and WHOQOL-OLD facets of the elderly in conservative treatment of Chronic Renal Disease, Ribeirão Preto, São Paulo, Brazil, 2015

Variables	Mean	Standard Deviation	Median	Minimum	Maximum
<b>WHOQOL-BREF DOMAINS</b>					
Physical domain	56.7347	15.77746	57.1429	21.43	89.29
Psychological domain	54.4048	16.29308	54.1667	12.50	91.67
Social Relationships domain	70.3571	18.32362	75.0000	25.00	100.00
Environment domain	60.0893	14.18119	62.5000	25.00	87.50
General Quality of Life	58.9117	12.76934	59.3750	32.29	87.50
<b>WHOQOL-OLD FACETS</b>					
Sensory abilities	42.8571	17.29282	43.7500	6.25	87.50
Autonomy	58.5714	19.76922	56.2500	0.00	93.75
Past, Present and Future Activities	63.3333	20.70549	62.5000	12.50	100.00
Social participation	64.7619	18.01650	68.7500	31.25	100.00
Death and dying	37.3214	23.79860	37.5000	0.00	93.75
Intimacy	66.6071	16.80766	68.7500	25.00	100.00
General Quality of Life	55.5888	13.02793	55.2083	27.08	81.25

**Table 4** – Spearman correlation test between independent variables and WHOQOL-BREF general quality of life score and WHOQOL-OLD general quality of life score of elderly patients in conservative treatment of Chronic Kidney Disease, Ribeirão Preto, São Paulo, Brazil, 2015

Variables		Age (years)	Years of study	Nº of complications	Nº of comorbidities	WHOQOL-BREF general Quality of life	WHOQOL-OLD general Quality of life
Age (years)	Correlation coefficient	1.000	-0.287	-0.169	-0.022	0.026	0.164
	p		0.112	0.331	0.899	0.882	0.346
Years of study	Correlation coefficient	-0.287	1.000	-0.218	-0.048	0.057	0.041
	p	0.112		0.230	0.795	0.756	0.822
Nº of complications	Correlation coefficient	-0.169	-0.218	1.000	0.409*	-0.471*	-0.248
	p	0.331	0.230		0.015	0.004	0.151
Nº of comorbidities	Correlation coefficient	-0.022	-0.048	0.409*	1.000	-0.249	-0.165
	p	0.899	0.795	0.015		0.149	0.343
WHOQOL BREF general Quality of life	Correlation coefficient	0.026	0.057	-0.471*	-0.249	1.000	0.711**
	p	0.882	0.756	0.004	0.149		0.000
WHOQOL OLD General Quality of life	Correlation coefficient	0.164	0.041	-0.248	-0.165	0.711**	1.000
	p	0.346	0.822	0.151	0.343	0.000	

Note: \*Moderate Correlation; \*\*Strong Correlation.

## DISCUSSION

In this study, the characterization of the participants according to sex connects with the profile of the Brazilian elderly people, since in our country women represent 55.7% of

the population. When the numerical differences between the sexes in the elderly population are analyzed, it is possible to observe that the more the population ages, the more female it becomes<sup>(7,15)</sup>. In comparison to men, women have a greater continuous medical supervision; according to Rembold et

al.<sup>(16)</sup>, the predominant presence of women in the pre-dialysis phase can be explained by the fact that they are more attentive to their health. The authors believe that, in the pre-dialysis phase, the presence of women is superior because somehow the patient still non-dependent on a KST has a greater possibility of having or not having medical follow-up, which, in the dialysis phase, characterizes the maintenance of life.

The mean time of study among Brazilian elderly people increased from 3.50 in 2004 to 4.80 years in 2014<sup>(7)</sup>, a phenomenon which was not observed in this study's population. Generally, low educational level hinders the empowerment and the social participation. Reflecting on the broad definition of QOL, one can empirically consider low schooling as a potential risk. However, in the present study no correlation with statistical significance was found between QOL scores and years of study.

Many factors may be related to the cognitive deficit detected in 11.40% of the participants; in addition to low schooling, aging itself can be cited as a cause, since it is accepted that the elderly have a slower speed for the information processing such as reading, writing and memorizing<sup>(17)</sup>. Regarding this public, CKD itself can be cited as a possible cause, since the individuals affected by it constitute a population at high risk for cognitive decline due to the use of polypharmacy and the more frequent comorbidities (DM and SAH)<sup>(18)</sup>.

The mean time evaluated in conservative treatment was 4.62 years which shows superior time when compared to other units that have the same ambulatory service<sup>(19)</sup>. In addition to regional issues, social, political and cultural aspects may be involved with this difference, however, the growing expansion of ambulatory care, in the country, must be considered<sup>(20)</sup>.

As for the complications of CKD, reported by more than half of the elderly, high blood pressure, cramps, anemia, weight loss and pain were highlighted. The prevalence of complications on this disease increases as the renal function decreases about 50% or more<sup>(21)</sup>. A study conducted simultaneously, in the same ambulatory and with the same target group of the present study, that evaluated the level of fragility of the elderly with CKD in conservative treatment, verified that in this group the patients presented some degree of fragility, and that a greater fragility is correlated with a greater number of clinical complications<sup>(22)</sup>.

Although in this study, patients were not classified regarding the stage of CKD, the elderly patients attended to in the ambulatory unit present 70% or more of impaired renal function, which characterizes the final stages of the disease. In these advanced stages, the disease presents a similar or even greater symptomatology than in patients undergoing hemodialysis treatments.

The visual deficit was expressed as the most present comorbidity among the patients. In general, in Brazil, it affects a large number of people; among the elderly over 65 years of age, the incidence of the visual deficit is 49.8%<sup>(23)</sup>.

Hearing loss was reported by 20% of the studied patients. The auditory deficit affects 25.6% of the Brazilian elderly people<sup>(23)</sup>. Regardless of expected physiological loss in the aging process, studies show that adult patients with CKD undergoing conservative treatment have greater hearing loss compared to the healthy population and to chronic kidney patients undergoing dialysis. It is suggested that auditory damage

occurs due to pathological characteristics and the drugs used in the treatment<sup>(24)</sup>.

There are several causes that lead to CKD, but at the global level, SAH and DM are the major underlying diseases that trigger it<sup>(3)</sup>. Consonant to this datum, after visual deficit, SAH and DM were the other two comorbidities reported by the majority of the study participants.

A common clinical finding in elderly with CKD is the occurrence of multiple comorbidities<sup>(21)</sup>. In the present study, the mean number of comorbidities reported by the elderly was 3.7. A positive relationship between the number of comorbidities and the number of complications was confirmed by the Spearman correlation coefficient, i.e., as comorbidities increase, the complications of CKD also increase. Consequently, as the complications increase, the quality of life decreases.

QOL is worse for chronic renal patients with various symptoms<sup>(9)</sup>. In this sense, in this study, an inverse correlation was found between the number of complications and the WHOQOL-BREF general QOL score. This is consonant to the results of a study that evaluates QOL of patients on conservative treatment using the SF-36 questionnaire and points to the same correlation between the variables "comorbidities" and "QOL." The authors of the aforementioned study report that the presence of three or more comorbidities impacted negatively the physical functioning, physical aspects and physical review domains<sup>(25)</sup>.

Few studies that treat QOL in groups of patients on conservative/pre-dialysis treatment exist<sup>(10)</sup>. More limited are studies of this type with a focus on the elderly patient. Through the application of the WHOQOL-BREF, the present study verified that the domain "social relationships" was the most strengthened, reaching a higher mean score, corroborating with the results of studies that evaluated the QOL of older people in general<sup>(26)</sup> And hemodialysis patients<sup>(27-28)</sup>.

Due to the scarcity of articles evaluating QOL of elderly through WHOQOL-BREF and WHOQOL-OLD, for comparison, studies that assessed the health-related quality of life of pre-dialysis patients, with the *Medical Outcomes Study 36 - Short Item - From Health Survey* (SF-36) were used. For the comparison to be possible, we consider the "social relationships" domain of the SF-36 similar to the "social relationships" domain of the WHOQOL-BREF.

In agreement with this study's results, among the pre-dialysis patients evaluated in other studies, the "social relationships" domain obtained a higher mean score<sup>(29-30)</sup>. A study that divided individuals into three groups in the pre-dialysis phase (according to the stage of CKD) and compared the QOL scores between them (G1 = stages 1 and 2, G2 = stage 3, G3 = stages 4 and 5). For G1 and G2, the highest mean score was also of the social relationships dimension, and G3 had a higher mean score of the emotional aspect, and the social relationships was the second highest<sup>(25)</sup>.

In our study, the lowest mean score of WHOQOL-BREF was found in the "Psychological" domain and the "physical" domain had the second lowest score. Results found in other studies indicate a lowest score in the "physical/physical dimension" domain<sup>(26-29)</sup> and "general health"<sup>(30)</sup>. The results of the study that separated pre-dialysis patients in 3 groups<sup>(25)</sup>

point to G2 and G3 as the components of the “physical” review as the lowest mean score. However, for patients in G3, which may be considered the most similar patients to this study's patients, the “mental” domain (SF-36) received the lowest mean score, which is similar to the results in the present study as the “mental” domain was considered compatible with the “psychological” domain (WHOQOL-Bref).

Regarding the evaluation of QOL through the WHOQOL-OLD questionnaire, the literature is even scarcer. Only studies that evaluated the QOL of the elderly with other approaches were located. In this study, we detected a higher mean score for the Intimacy and Social Participation facets. The lowest mean scores were evaluated in the Death and Dying and Sensory Ability facets. These results are compatible with those found in a study that evaluated the quality of life and the fragility of 131 elderly people living in communities in the city of João Pessoa - PB, with a higher mean score in the Intimacy facet and lowest mean score for Death and Dying<sup>(31)</sup>.

The results showed that the majority of the elderly live with their spouse or partner. If the Social Participation facet, which obtained the second best score of the WHOQOL-Old, is considered it can be related to the Intimacy facet of the same questionnaire and to the Social Relationships domain of the WHOQOL-Bref, it is possible to infer that the support of close people has an important role for quality of life.

The psychological aspect can be affected by sociodemographic and individual conditions, however it is a fact that depression is a common condition among patients in the final stage of renal disease. There is evidence that depression and anxiety are related to lower QOL scores, lower adherence to treatment and higher mortality for hemodialysis patients<sup>(32)</sup>.

A study conducted with 208 patients undergoing pre-dialysis treatment evaluated the association of depression and anxiety with QOL, it was verified that 47.6% of them presented depression. In the same study, among other variables, age and comorbidities showed a positive correlation with depression<sup>(32)</sup>. Associating this data with the present study, it is possible to infer that the comorbidities and the age range of the present sample are related to the lowest scores found through the two instruments of evaluation of the QOL.

### Study's Limitations

The limitation of the present study is the lack of data collection on the nutritional status of patients as well as on the stage of CKD and results of laboratory tests. The authors may also consider a limitation having only the patient as a source of information.

### Contributions to the nursing, health or public policy areas

The present study evidenced greater impairment in the psychological dimension of the elderly with CKD in conservative treatment. Knowing in depth the most impaired aspects of the quality of life of this population contributes to a more effective planning of health care services, focusing on the main points to be worked on in order to improve the quality of life of this population. The finding of a correlation between the number of complications and the quality of life emphasizes the need to be more attentive towards the symptomatology in therapeutic field and, thus, to increase the quality of life of these elderly people.

### CONCLUSION

The psychological dimension is the one that is most impaired in the studied group, interfering in its QOL. It is necessary to include in the health care of these patients proposals aimed at strengthening the psychological aspect care. It was evidenced that a worse QOL is correlated with a greater number of complications, and a greater number of complications is correlated with a greater number of comorbidities. The therapeutic choice must consider the complications of CKD, because reducing the symptomatology would favor the QOL. To better understand the QOL of the elderly patients submitted to conservative treatment, further studies are needed, which will allow a better adequacy of the treatment to the real needs of these patients.

### FUNDING

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