

Relationship between quality of life, self-esteem and depression in people after kidney transplantation

Relação entre qualidade de vida, autoestima e depressão em pessoas após transplante renal
Relación entre calidad de vida, autoestima y depresión en personas después de trasplante de riñón

Francieli Lohn da Rocha¹

ORCID: 0000-0001-7570-510X

Maria Elena Echevarría-Guanilo¹

ORCID: 0000-0003-0505-9258

Denise Maria Guerreiro Vieira da Silva¹

ORCID: 0000-0003-2139-083X

Natália Gonçalves¹

ORCID: 0000-0002-9005-4381

Soraia Geraldo Rozza Lopes¹

ORCID: 0000-0002-8938-2169

Julia Estela Willrich Boell¹

ORCID: 0000-0001-5956-9590

Barbara Letícia Dudel Mayer¹

ORCID: 0000-0003-4848-9450

¹ Universidade Federal de Santa Catarina. Florianópolis,
Santa Catarina, Brazil.

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Corresponding Author:

Barbara Letícia Dudel Mayer
E-mail: barbaraldmayer@gmail.com



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ABSTRACT

Objective: to assess the relationship between health-related quality of life with depression and self-esteem of people after kidney transplantation. **Method:** a cross-sectional study of 47 outpatients from October 2016 to February 2017. The following tools were applied: The Medical Outcomes Study 36-Item Short-Form Health Survey, Beck Depression Inventory and Rosenberg Self-Esteem Scale. Descriptive statistics and Spearman correlation were used. **Results:** women had lower scores for health-related quality of life. Young adults, people with up to one and a half years of transplantation and those who had dialysis for more than one year had higher scores. **Conclusion:** the health-related quality of life of people with chronic kidney disease after transplantation ranged from good to excellent. The presence of depression was not identified. The relationship of data indicates that the higher the quality of life, the better the self-esteem assessment.

Descriptors: Kidney Transplantation; Quality of Life; Self Concept; Depression; Nursing.

RESUMO

Objetivo: avaliar relação entre qualidade de vida relacionada à saúde com depressão e autoestima em pessoas após transplante renal. **Método:** estudo transversal, com 47 pessoas em acompanhamento ambulatorial, de outubro de 2016 a fevereiro de 2017. Foram aplicados os instrumentos: The *Medical Outcomes Study 36-Item Short-Form Health Survey*, Inventário de Depressão de Beck e Escala de Autoestima de Rosenberg. Foi utilizada estatística descritiva e correlação de Spearman. **Resultados:** mulheres apresentaram pontuações mais baixas para qualidade de vida relacionada à saúde. Adultos jovens, pessoas com até um ano e meio de transplante e as que realizaram diálise por mais de um ano apresentaram pontuações mais altas. **Conclusão:** a qualidade de vida relacionada à saúde de pessoas com doença renal crônica após o transplante variou de boa a excelente. Não se identificou a presença de depressão. A relação dos dados indica que quanto maior a qualidade de vida, melhor avaliação de autoestima.

Descritores: Transplante de Rim; Qualidade de Vida; Autoimagem; Depressão; Enfermagem.

RESUMEN

Objetivo: evaluar la relación entre calidad de vida relacionada con salud, con depresión y autoestima en personas después del trasplante de riñón. **Método:** estudio transversal de 47 personas en seguimiento ambulatorio de octubre de 2016 a febrero de 2017. Se aplicaron los instrumentos: The *Medical Outcomes Study 36-Item Short-Form Health Survey*, Inventario de Depresión de Beck e Escala de Autoestima de Rosenberg. Utilizó estadística descriptiva y correlación de Spearman. **Resultados:** mujeres obtuvieron puntuaciones más bajas en la calidad de vida relacionada con la salud. Los adultos, las personas con hasta un año y medio de trasplante y las que se sometieron a diálisis durante más de un año obtuvieron puntuaciones más altas. **Conclusión:** calidad de vida relacionada con la salud después del trasplante varió de buena a excelente. La relación de los datos indica que cuanto mayor sea la calidad de vida, mejor será la evaluación de la autoestima.

Descritores: Trasplante de Riñón; Calidad de Vida; Autoimagen; Depresión; Enfermeira.

INTRODUCTION

Chronic Kidney Disease (CKD) represents a major public health issue worldwide⁽¹⁻²⁾. The prevalence of CKD in the population is over 10%, and over 50% in high risk populations (people with high blood pressure and Diabetes Mellitus)⁽³⁾. In Brazil, data from 2013 identified approximately 100,397 patients with CKD⁽⁴⁾. The treatment modalities in CKD include the renal replacement functions, being performed by hemodialysis, peritoneal dialysis and kidney transplantation, where none of them is considered as a curative measure⁽⁵⁻⁷⁾. In this context, kidney transplantation, when successful, is considered a therapeutic modality that increases the chances of returning to the routine of life before the onset of the disease. It provides people with greater freedom, autonomy, life perspective and, consequently, a higher quality of life for the patient when compared to dialysis treatment⁽⁸⁻¹⁰⁾.

Quality of life assessment in people with chronic diseases allows the identification of aspects that influence the perception of this condition regarding their own existence and about changes attributed by the disease and treatment. Thus, health-related quality of life is a condition based on one's experience, whether due to the effects of the disease or the way the treatment impacts on one's daily life, as well as one's satisfaction with the treatment. In the case of kidney transplantation, which does not represent the cure of the disease, the person remains in the condition of chronic patient and subject to continuous treatment⁽¹¹⁻¹²⁾.

Transplantation implies changes and adaptations, especially regarding the post-transplantation period, when the person presents emotional needs in face of his new clinical condition, needing to prepare for living in family life and insertion in society⁽¹³⁾. Moreover, they also require ongoing health care assistance, such as the use of immunosuppressive drugs and outpatient follow-up, which also impacts their quality of life⁽⁸⁾. Depression is an important emotional change that is associated with impaired quality of life and increased morbidity and mortality in end-stage kidney disease patients. Little is known about the prevalence of depression in kidney transplant recipients. However, when compared to the dialysis modality, kidney transplantation is associated with better clinical outcomes, better quality of life and lower rates of psychic morbidity⁽¹⁴⁾.

Kidney transplantation offers significant survival advantages, bringing emotional and psychological benefits to patients. However, there are new concerns, such as fear of losing the new kidney and complications that can lead to emotional distress, generating feelings of expectations, feelings, uncertainties and frustrations with the transplanted kidney⁽¹⁵⁻¹⁶⁾. Furthermore, self-esteem is considered an important indicator of mental health, in the sense of intervening in the affective, social and psychological conditions of individuals, which consequently interferes with well-being and quality of life⁽¹⁷⁾. Considering the above, studying depression and self-esteem of people after kidney transplantation and its relationship with Health-Related Quality of Life (HRQoL) can point to results that contribute to early detection and intervention in the context of self-esteem and depression, besides showing results that contribute to the quality of care provided by healthcare professionals regarding HRQoL for kidney transplant recipients.

OBJECTIVE

To assess the relationship between health-related quality of life with depression and self-esteem of people after kidney transplantation in a health service in the city of Florianópolis, Santa Catarina State.

METHOD

Ethical aspects

The project was approved by the Research Ethics Committee with Human Beings of *Universidade Federal de Santa Catarina*. Patients were approached by the principal researcher in the transplant ambulatory waiting room and informed about the research objectives. Interested parties signed the Free and Informed Consent Term.

Design, place of study, and period

Trata-se de um estudo de abordagem quantitativa do tipo transversal, de amostra não probabilística, realizado no Ambulatório Pós-Transplante de Rim localizado em um hospital público no município de Florianópolis, SC, no período de outubro de 2016 a fevereiro de 2017

Population or sample; inclusion and exclusion criteria

The study population consisted of people who underwent kidney transplantation from October 2011 to October 2016. 102 people were registered for this period; of these, eight had rejection of the transplanted kidney and six died. Thus, 88 people were potential participants, and 47 had scheduled follow-up appointments during the collection period (October 2016 to February 2017). For sample composition, the inclusion criteria were men or women aged 18 years or older; being in the post-transplantation period between three months to five years; and perform outpatient follow-up at the referred hospital. The study would not include people with clinical instability (which generated the need for hospitalization); and who did not reach the minimum score in the Mini-Mental State Exam (20 points).

Study protocol

A characterization tool developed by the researchers was used to obtain sociodemographic data (gender, age, marital status, schooling, profession, monthly income) and clinical data (type and dialysis time, type, and time after kidney transplantation). To assess quality of life, the Brazilian version of the Medical Outcomes Study 36-Item Short-Form Health Survey was used, consisting of 11 questions and 36 items organized in eight domains: functional capacity, physical aspects, pain, general state of health, vitality, social aspects, emotional aspects, mental health and one-year health changes. The scores for each domain range from zero (0) to one hundred (100), with 0 being the worst score and 100 being the best⁽¹⁸⁾. From the health-related quality of life scores in transplanted people, this was classified as low, 0 to 55 points, good, 55 to 70 points and

excellent, 70 to 100 points⁽¹⁹⁾. To assess depressive symptoms, the validated Portuguese version of the Beck Depression Inventory (BDI) was used, consisting of 21 items assessed from four response alternatives (zero to three points), reaching a total of 63. The higher the total scale values, the greater the depression. Thus, for scores greater than 15, a patient with dysphoria was included⁽²⁰⁻²¹⁾. Self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSES), used in its version adapted to Portuguese. This tool consists of 10 items, with scores from 0 to 3. As a total value, the scale can range from 10 to 40 points, and the higher the score, the higher the self-esteem⁽²²⁾.

Analysis of results, and statistics

For data analysis, the Statistical Package for Social Sciences SPSS® version 20 for Windows program was used. Descriptive analysis of data, central tendency and dispersion of quantitative variables were performed. Cronbach's alpha was obtained from each of the scales (internal consistency assessment of the scale in the study sample) and Spearman correlation. For Cronbach's alpha assessment, values above 0.50 were considered acceptable values; for the values of the correlation coefficients, it was considered as <0.30 weak; between 0.30 and 0.50 as moderate and > 0.50 as strong correlations⁽²³⁻²⁴⁾.

RESULTS

The sample of this research comprised 47 people, of which more than half were male (55%), mean age 45.47 years (SD: 10.9), married (57.4%), with high school degree, (75.6%) and had some professional activity (70.2%). The duration of dialysis treatment until kidney transplantation ranged from 0 to 7 years, and of these patients, 40.4% underwent up to 2 years. Among the dialysis treatment modalities, 93.6% underwent hemodialysis and 70.2% had been transplanted for more than one and a half years, being recipients of deceased donor organ (87.2%) (Table 1).

In assessing internal consistency by obtaining Cronbach's alpha from the HRQoL scale, high alpha was obtained (α : 0.839). With regards to means scores, they ranged from good to excellent in the 'emotional aspects' (M: 70.21; SD: 19.53), 'social aspects' (M: 78.72; SD: 26.05) and 'functional capacity' (M: 81.06; SD: 24.24). In relation to self-esteem assessment, a median score of 24.10 (SD: 3.79) was found, ranging from 17 to 35 points. Regarding depression assessment, 75% of people were not classified as dysphoria, as they had values with low means of 10.27 (SD: 10.39). Internal consistency assessment of the measurement for both scales presented a high Cronbach's alpha α : 0.866 and α : 0.916, respectively.

It was evidenced in the context of the HRQoL assessment that women obtained lower values when related to men in 'functional capacity', which showed a mean score difference of 9.24; the 'social aspect', with mean difference of 12.11 and 'physical aspect' of 7.6 points. Only 'vitality' was low for both genders (65.76 and 63.80 for men and women, respectively). Regarding the self-esteem assessment, no wide differences in means scores were observed between men and women. Women had a higher mean score in the depression assessment (M: 11.61; SD: 11.51) (Table 2).

Table 1 - Sociodemographic characterization of the studied sample (N=47), Florianópolis, Santa Catarina, Brazil, 2017

Variables/Measures	n (%)	Mean (SD)	Median (variation)
Gender			
Female	21 (44.7)		
Male	26 (55.3)		
Age (years)		45.47 (10.9)	46 (30-71)
Schooling level			
Incomplete first year of high school	12 (25.5)		
Complete first year of high school	7 (14.9)		
High School Incomplete	2 (4.3)		
Complete second year of high school	15 (31.9)		
Incomplete third year of high school	2 (4.3)		
Complete third year of high school	6 (12.8)		
Graduate studies	3 (6.4)		
Marital status			
With companion	31 (65.96)		
Without companion	16 (34.04)		
Profession			
Retired	8 (17.0)		
Home	6 (12.8)		
Exercise professional activity	33 (70.2)		
Dialysis time			
Up to 1 year	19 (40.4)		
Above 1 year	28 (59.6)		
Type of dialysis			
Conservative treatment	2 (4.3)		
Dialysis	44 (93.6)		
Peritoneal dialysis	1 (2.1)		
Type of transplantation			
Living donor	6 (12.8)		
Dead donor	41 (87.2)		
Time after kidney transplantation			
Up to one year and half	14 (29.8)		
Above one year and half	33 (70.2)		

The HRQoL assessment showed means differences between scores in 'emotional aspect' (24.27 points), 'pain' (7.83 points) and 'mental health' (5.6 points), all with higher values in the respondents who were <60 years old. In the depression assessment, the young adult (31-50 years) presented lower mean score (M: 7.82; SD: 5.49), and in the self-esteem assessment, no differences were observed (Table 2).

In HRQoL depression and self-esteem variables assessment, considering transplantation time, it is possible to observe that people with up to one and a half years of transplant had higher mean values in all domains. 'Functional capacity' (M: 83.92; SD: 22.80), 'vitality' (M: 66.07; SD: 19.62) and 'general state of health' (M: 73.85; SD: 13.69) had a higher transplant time score of up to one and a half years. When compared to transplant time longer than one year, HRQoL variables obtained lower values in all domains, plus self-esteem (Table 3).

In the context of HRQoL assessment, related to dialysis time of up to one year, lower mean values were evidenced for 'vitality' (M: 60.26; SD: 25.30) and 'general state of health' (M: 60.89; SD: 13.56). There was an increase in the low score mean of ≤ 9.36 (SD: 9.58) in the depression assessment and mean score in relation to

Table 2 – Distribution of SF-36 scores, Beck Depression Inventory (BDI*) and Rosenberg Self-Esteem Scale (RSES**) by gender and age variables, Florianópolis, Santa Catarina, Brazil, 2017

Scales	Gender			
	Man (n: 26)		Woman (n: 21)	
	Mean (SD)	Median (min-max)	Mean (SD)	Median (min-max)
SF36				
Func. Cap.	85.19 (19.05)	95 (25.00-100.00)	75.95 (29.13)	85 (15.00-100.00)
Physical Asp.	73.07 (36.00)	100 (0.00-100.00)	65.47 (44.35)	100 (0.00-100.00)
Pain	67.61 (32.96)	74 (10.00-100.00)	70.61 (26.90)	72 (22.00-100.00)
Gen. State of Health	65.96 (16.68)	64.50 (37.00-100.00)	66.09 (16.68)	67 (32.00-100.00)
Vitality	65.76 (23.73)	75 (20.00-95.00)	63.80 (20.36)	65 (25.00-100.00)
Social Asp.	84.13 (22.79)	93.75 (12.50-100.00)	72.02 (28.75)	75 (25.00-100.00)
Emot. Asp.	71.79 (41.83)	100 (0.00-100.00)	68.25 (40.10)	100 (0.00-100.00)
Mental Health	66.30 (22.31)	68 (16.00-92.00)	69.52 (15.77)	72 (40.00-92.00)
BDI*	9.19 (9.48)	5 (1.00-43.00)	11.61 (11.51)	7 (1.00-43.00)
RSES**	23.42 (6.82)	24 (5.00-35.00)	22.96 (3.80)	24 (9.00-27.00)
	Young adult (n: 23)		Middle-age (n:24)	
SF36				
Func. Cap	84.37 (19.44)	95 (30.00-100.00)	77.91 (28.16)	87.50 (15.00-100.00)
Physical Asp.	68.47 (37.85)	75 (0.00-100.00)	70.83 (42.13)	100 (0.00-100.00)
Pain	72.95 (26.43)	74 (22.00-100.00)	65.12 (33.40)	73 (10.00-100.00)
Gen.State of Health	65.82 (15.50)	67 (32.00-100.00)	66.20 (17.01)	64.50 (37.00-100.00)
Vitality	66.30 (21.06)	65 (20.00-95.00)	63.54 (23.38)	72.50 (25.00-100.00)
Social Asp.	83.15 (19.44)	87.50 (37.50-100.00)	74.47 (30.94)	93.75 (12.50-100.00)
Emot. Asp.	82.60 (31.57)	100 (0.00-100.00)	58.33 (45.13)	83.33 (0.00-100.00)
Mental Health	70.60 (17.58)	68 (28.00-92.00)	65 (21.23)	68 (16.00-92.00)
BDI*	7.82 (5.49)	7 (1.00-18.00)	12.62 (13.24)	7 (1.00-43.00)
RSES**	24.43 (3.57)	24 (20.00-35.00)	23.79 (4.04)	23 (17.00-34.00)

Note: BDI - Beck Depression Inventory; RSES - Rosenberg Self-Esteem Scale.

Table 3 – SF-36 score distribution, Beck Depression Inventory (BDI*) and Rosenberg Self-Esteem Scale (RSES**) according to the variables kidney transplantation time and dialysis time, Florianópolis, Santa Catarina, Brazil, 2017

Scales	Transplantation time			
	Up to one year and a half (n:14)		Above one year and a half (n:33)	
	Mean (SD)	Median (min-max)	Mean (SD)	Median (min-max)
SF36				
Func. Cap	83.92 (22.80)	95.00 (15.00-100.00)	79.84 (25.07)	90.00 (25.00-100.00)
Physical Asp.	82.14 (28.46)	100.00 (0.00-100.00)	64.39 (42.86)	100.00 (0.00-100.00)
Pain	83.14 (18.32)	84.00 (51.00-100.00)	62.93 (32.29)	62.00 (10.00-100.00)
Gen. State of Health	73.85 (13.69)	73.50 (45.00-90.00)	62.69 (16.08)	62.00 (32.00-100.00)
Vitality	66.07 (19.62)	72.50 (25.00-90.00)	64.39 (23.31)	65.00 (20.00-100.00)
Social Asp.	82.14 (23.87)	93.75 (25.00-100.00)	77.27 (27.14)	87.50 (12.50-100.00)
Emot. Asp.	78.57 (36.06)	100.00 (0.00-100.00)	66.66 (42.49)	100.00 (0.00-100.00)
Mental Health	74.00 (17.66)	76.00 (44.00-92.00)	65.09 (19.93)	64.00 (16.00-92.00)
BDI*	9.64 (8.64)	7.00 (1.00-28.00)	10.54 (11.16)	7.00 (1.00-43.00)
RSES**	25.42 (4.87)	23.50 (20.00-35.00)	23.54 (3.15)	24.00 (17.00-33.00)
	Up to 1 year (n: 19)		Above 1 year (n: 28)	
SF36				
Func. Cap	81.05 (23.89)	90.00 (25.00-100.00)	81.07 (24.92)	95.00 (15.00-100)
Physical Asp.	61.84 (41.13)	75.00 (0.00-100.00)	75.00 (38.49)	100.00 (0.00-100.00)
Pain	64.21 (35.07)	62.00 (10.00-100.00)	72.17 (26.44)	74.00 (22.00-100.00)
Gen. State of Health	60.89 (13.56)	62.00 (37.00-87.00)	69.50 (16.99)	67.00 (32.00-100.00)
Vitality	60.26 (25.30)	65.00 (20.00-95.00)	68.03 (19.45)	75.00 (25.00-85.00)
Asp. Social	75.00 (25.34)	75.00 (25.00-100.00)	81.25(26.67)	100.00 (12.50-100.00)
Emotional Asp.	77.19 (36.93)	100.00 (0.00-100.00)	65.47 (43.01)	100.00 (0.00-100.00)
Mental Health	64.21 (21.05)	64.00 (16.00-92.00)	70.14 (18.42)	70.00 (20.00-92.00)
BDI*	9.36 (9.58)	5.50 (1.00-43.00)	10.89 (11.03)	10.0 (1.00-37.00)
RSES**	24.78 (4.42)	24.00 (17.00-35.00)	23.64 (3.30)	23.00 (20.00-27.00)

Note: BDI - Beck Depression Inventory; RSES - Rosenberg Self-Esteem Scale.

Table 4 – Correlations between SF - 36 domains, Beck Depression Inventory (BDI*) and Rosenberg Self-Esteem Scale (RSES**), Florianópolis, Santa Catarina, Brazil, 2017

Variables	Func. Cap	Physical Asp.	Pain	Gen. State of Health	Vitality	Social Asp.	Emoti. Asp.	Mental Health	BDI	RSES
Func. Cap		0.379**	0.401**	0.542**	0.425**	0.495**	0.326*	0.124	-0.150	0.301*
Physical Asp.			0.442**	0.449**	0.425**	0.670**	0.364*	0.128	-0.042	0.680
Pain				0.477**	0.598**	0.473**	0.241	0.414**	-0.346*	0.357*
Gen. State of Health					0.511**	0.458**	0.358*	0.390**	-0.350*	0.337*
Vitality						0.522**	0.470**	0.627**	-0.477**	0.473**
Social Asp.							0.478**	0.297*	-0.308*	0.282
Emoti. Asp.								0.432**	-0.426**	0.427**
Mental Health									-0.533**	0.503**
BDI										-0.606**
RSES										

Note: ** $p < 0.01$; * $p < 0.05$ Spearman correlation; BDI - Beck Depression Inventory; RSES - Rosenberg Self-Esteem Scale.

the self-esteem assessment (M: 24.78; SD: 4.42) (Table 3). When analyzing HRQOL assessment related to dialysis time above one year, lower mean values were found for 'emotional aspect' (M: 65.47; SD: 43.01), 'vitality' (M: 68.03; SD: 19.45) and 'general state of health' (M: 69.50; SD: 16.99). Regarding depression and self-esteem assessments, both evidenced low (Table 3).

By analyzing the relationship between the values obtained in the HRQoL domains and those of depression, moderate and negative correlations were identified, which ranged from -0.308 ($p < 0.05$) for 'social aspect' to -0.477 ($p < 0.01$) for 'vitality'. 'Mental health' had a strong negative correlation -0.533 ($p < 0.01$). With regards to correlations between the values of the HRQoL and self-esteem domains, moderate and positive correlations were identified, ranging from 0.301 ($p < 0.05$) for 'functional capacity' to 0.483 ($p < 0.01$) for 'vitality'. 'Mental health' had a strong negative correlation -0.503 ($p < 0.01$). The scores obtained by correlating depression with self-esteem were strong and negative (-0.606; $p < 0.01$) (Table 4).

DISCUSSION

Sociodemographic characteristics of the studied population, such as male gender, marital status, professional activity, are similar to study results that aimed to assess HRQoL after kidney transplantation⁽⁸⁾. Likewise, age and education, presented by respondents in a study conducted to assess variables that influenced the quality of life of people after kidney transplantation, was similar to the study population, presenting mean age of 44.5 years and complete high school⁽²⁵⁾. Moreover, it is important to highlight that low schooling and inequalities in access to information are determining factors when it comes to people with chronic noncommunicable diseases⁽²⁶⁾.

Regarding dialysis time, the present study highlighted a time of less than two years, which shows the participation of people with short hemodialysis, since previous studies include the participation of people with greater time. A study aimed at analyzing the association between the duration of pre-transplant replacement renal therapy in relation to patient and transplant survival found that the mean time of hemodialysis in the study population ranged from five to 10 years (31.2%), followed by three to five years (27.2%) and zero to three years (23.8%)⁽²⁷⁾. Furthermore, research on transplant waiting time showed that

the dialysis time for living donor transplant recipients and for deceased donor transplantation was from one year and six months to three years and seven months⁽²⁸⁾.

The Brazilian national health system performance has focused on actions aimed at reducing the waiting time of patients on the transplant list, contributing to the improvement of the quality of life of patients waiting for the procedure. High organ transplantation rates give Brazil a prominent role in the world, as 87% of these transplants are done with public resources⁽²⁹⁾.

Regarding the origin of the transplanted organ, considering important aspects as a result of the prognosis, it confers greater survival of people after living donor transplantation. Authors point out that most of the transplanted organs come from deceased donors, giving a longer time after transplantation from living donors⁽³⁰⁾. However, many factors prevent organs from being obtained from a living donor, including the donor's short and long term health risks, without any apparent health benefit, operative trauma, stress, and financial and occupational disadvantages⁽³¹⁾.

Regarding HRQoL and post-kidney transplantation, the domains presented scores that ranged from good to excellent quality of life, highlighting "vitality", with the lowest score and "functional capacity" with the highest score. It is noteworthy that the sample studied had the largest number of participants whose score was rated excellent for the eight domains of the SF-36 tool. Results similar to those identified in a study in which HRQoL, as assessed by SF-36 before transplantation and after two years afterwards, presented high values in all previously mentioned domains, totaling 1,137.9 points before transplantation and 1,458, respectively, 9 points at 2 years after transplantation⁽³²⁾. A study in which the HRQoL of people on hemodialysis was assessed from the application of SF-36, when compared to 'functional capacity' scored lower (40.2), followed by 'vitality' (41, 2) and 'general state of health' (43.1). These results suggest that the experience of hemodialysis has a negative impact on HRQoL, which improves after kidney transplantation⁽³³⁾.

The present study showed that the studied population did not present scores for the dysphoria classification. This result is in line with research in the area that evidenced in both pre and post-kidney transplant people a medium severity risk for depressive symptoms, given the application of the Hospital Anxiety and Depression Scale (HADS) scale, with lower prevalence of depressive symptoms in transplanted individuals⁽¹⁴⁾. These results, when

compared to patients on hemodialysis, show a 22% proportion of patients with increased BDI indexes, suggesting a high rate of depression for patients on hemodialysis compared to kidney transplantation⁽³⁴⁾. Thus, it can be inferred that, as HRQoL scores increase after kidney transplantation, the manifestation of depression and anxiety would improve (lower scores) in this condition.

In this sense, the present study showed higher values in HRQoL assessment in patients with dialysis time above one and a half years, compared to people with shorter time. Studies show that people who have had long-term hemodialysis treatment have greater capacity for post-transplant care, even in the early period. People with less time on hemodialysis show greater difficulties in the new treatment, because they have not experienced the physical and social deterioration that CKD can bring⁽³⁵⁾.

In the correlations study between the studied variables, it was possible to verify the existence of significant moderate negative correlations, specifically between 'pain', 'general state of health', 'vitality', 'social aspect', 'emotional aspect'. There was a strong negative correlation in 'mental health' associated with BDI. These results reinforce the inference that the better the HRQoL assessment, the better the depression assessment. In other words, the lower values will be identified when it is assessed. Psycho-emotional preparation is an important aspect to be considered by health and nursing professionals in the transplantation process, since this procedure is also mediated by anxieties and anguish⁽³⁵⁾.

Study limitations

There is an emphasis on the need for replication of the present research with larger sample groups, as well as in different economic and social realities.

Contributions to nursing, health or public policy

The study highlights the importance of orientation to transplanted people that should be performed by health professionals, especially the nursing staff. It is considered necessary for it to play the role of health education for transplanted people and their families in the preoperative period, preparing them and informing them about their responsibilities, as well as clarifying any doubts. Nevertheless, it should establish the line of communication between patient and family with the multidisciplinary team in order to establish a care planning in order to minimize the challenges arising from the transplant and compromise the quality of life of these people.

CONCLUSION

Health-related quality of life scores ranged from good to excellent across all SF-36 domains, with 'vitality' being the most affected domain. Best HRQoL ratings are presented by young adults, except for 'physical aspect' and 'general state of health'. People with up to one and a half years of transplantation who underwent dialysis for more than one year had higher scores in all domains, except for 'emotional aspect' in the latter case. There were correlations between the SF-36 domains and BDI. Moderate and negative were: 'pain', 'general state of health', 'vitality', 'social aspect', 'emotional aspect'. There was a strong negative correlation for 'mental health'. Regarding the correlations between the SF-36 domains and RSES, moderate and positive correlations were identified for 'functional capacity', 'pain', 'general state of health', 'vitality', 'emotional aspect' and negative strong correlation for 'mental health'.

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