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Quality of life of elderly patients with leg ulcersⁱ

Qualidade de vida de idosos com úlceras de perna Calidad de vida de pacientes ancianos con úlceras en las piernas

ABSTRACT

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Objectives: To identify compromised domains of the 36-Item Short Form Survey (SF-36) for elderly individuals with leg ulcers and correlate their clinical and sociodemographic variables with the SF-36's components. **Method:** Exploratory and cross-sectional study conducted with 50 elderly individuals with leg ulcers. The instruments were the sociodemographic and clinical form and the SF-36. The Statistical Package for the Social Sciences was used to analyze data. **Results:** Most were married, retired, and received one times the minimum wage, were Caucasians or of mixed race, and had hypertension. In regard to the SF-36, the most compromised domain was physical limitations, while social aspects and general health status were the less compromised domains. The SF-36 domains were not correlated with age, income, duration or size of the lesion or pain. **Conclusion:** The ulcer-related biopsychosocial aspects need to be considered in order to devise more effective nursing interventions.

Keywords: Health of the Elderly; Quality of Life; Leg Ulcer; Nursing.

RESUMO

Objetivos: Identificar os domínios da Escala de Qualidade de Vida (SF-36) prejudicados nos idosos com úlceras de perna e correlacionar as variáveis clínicas e sociodemográficas dos idosos com os componentes da SF-36. Método: Pesquisa quantitativa, exploratória, transversal realizada com 50 idosos com úlceras de perna. Os instrumentos utilizados foram: formulário de dados sociodemográficos e clínicos e a SF-36. Para análise dos dados, foi utilizado o *Statistical Package for the Social Science*. **Resultados:** Predomínio de idosos casados, aposentados com salário mínimo, brancos e pardos, hipertensos. Em relação à SF-36, os participantes estiveram mais prejudicados, no que se refere à limitação por aspectos físicos e menos prejudicados, nos aspectos sociais e no Estado Geral da Saúde. Os domínios da SF-36 não estiveram correlacionados a idade, renda, tempo e tamanho da lesão e dor. **Conclusão:** É necessário considerar os aspectos biopsicossociais relacionados à lesão para a elaboração de intervenções de enfermagem mais efetivas.

Palavras-chave: Saúde do Idoso; Qualidade de Vida; Úlcera da Perna; Enfermagem.

RESUMEN

Objetivos: Identificar las zonas afectadas de la Escala de Calidad de Vida (SF-36) en ancianos con úlceras en las piernas y correlacionar las variables clínicas y sociodemográficas de los ancianos con los componentes del SF-36. **Método:** Investigación exploratoria y transversal realizado con 50 ancianos con úlceras en las piernas. Los instrumentos utilizados fueron: datos forman sociodemográfico y clínico y SF-36. Para el análisis de datos se utilizó el paquete estadístico para las Ciencias Sociales. **Resultados:** Se observó un predominio de ancianos casados, se retiró con el salario mínimo, blanco y marrón, hipertenso. En relación a SF-36, los pacientes fueron los más afectados cuanto a la Limitación de los Aspectos Físicos y menos perjudicados los Aspectos Sociales y de Salud. Los dominios del SF-36 no se correlacionaron con edad, ingresos, tiempo y tamaño de la lesión y dolor. **Conclusión:** Es necesario tener en cuenta los aspectos biopsicosociales relacionados con lesiones para el desarrollo de intervenciones de enfermería más eficaces.

Palabras clave: Salud del Anciano; Calidad de Vida; Úlcera de la Pierna; Enfermería.

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Submitted on 05/10/2017. Accepted on 08/22/2017.

DOI: 10.1590/2177-9465-EAN-2017-0134

INTRODUCTION

Estimates for the coming decades are that, by 2050, a growth from 841 million to 2 billion of people over 60 years of age will take place globally, a figure that will reach close to 3 billion by 2100.¹ The Brazilian population in this age range reached more than 14.9 million (7.4% of the total) in 2013, and will exceed 58.4 million (26.7% of the total population) in 2060, according to the Brazilian Institute of Geography and Statistics (IBGE).²

From a biological perspective, aging is marked by progressive alterations in cells, tissues, and organs, impacting functional capacity and increasing susceptibility to chronic diseases.³ These factors contribute to increased risk of loss of skin integrity, and consequently, to the emergence of ulcers.

Chronic ulcers are currently called complex wounds and are considered a public health problem, as they contribute to increasing the frequency of early retirement; i.e., they lead to a loss of active labor force.^{4,5} In addition to being an uncomfortable condition, leg ulcers prevent elderly individuals from enjoying social life and have the potential to compromise one's functional capacity.

The aging process itself may compromise quality of life and quality of life can be worsened when an individual has a chronic lesion. The long duration of a wound imposes difficulties on individuals and such difficulties involve various aspects of life.⁶

Ulcers can affect the biopsychosocial aspects of an elderly individual, directly interfering in quality of life. According to the World Health Organization, quality of life is the perception one has of one's position in life, in the context of one's culture and system of values, and is related to one's objectives, expectations, standards and concerns.⁷

Therefore, this study's objective was to identify the main compromised domains of individuals with leg ulcers, according to the SF-36, and correlate clinical and sociodemographic variables with the components of the SF-36.

METHOD

This exploratory, cross-sectional study has a quantitative approach. A non-probabilistic sequential sample of 50 elderly patients with leg ulcers were selected within a period of five months from the Wound Repair Outpatient Clinic of a university hospital and from the Regional Polyclinic in the state of Rio de Janeiro, RJ, Brazil.

The following inclusion criteria were used: individuals aged 60 years old or older; of either sex; with one or more leg ulcers with a duration of four weeks or more; being cared for at the Wound Repair Outpatient Clinic at the university hospital or the Polyclinic at the municipality of Niterói, RJ. Those with a medical diagnosis of dementia or other psychiatric diseases that hinder comprehension of verbal language were excluded, as were those who were unable to walk due to partial or total amputation of a limb, because there was a risk this condition would distort the scores obtained in the physical domains of the SF-36.

Data were transferred to the SPSS (Statistical Package for the Social Science), version 22.0. Inferential analysis of the qualitative variables and the significance of association between two variables was performed using the Chi-square test and Fisher's Exact test. The hypothesis of normality of distributions was verified using the Kolmogorov-Smirnov and Shapiro-Wilk tests in the inferential analysis of quantitative variables. Comparison between two groups was performed using the non-parametric Mann-Whitney test; comparison for more than two groups was performed using the Kruskal-Wallis tests, with the post-hoc Student-Newman-Keuls. Correlations between quantitative variables were investigated using Spearman's Rank Order Correlation. The level of significance was established at 5% for all the analyses.

Four instruments were used to collect data: a form addressing sociodemographic and health data; a form addressing ulcerrelated clinical aspects; the Visual Analog Scale (VAS); and the 36-Item Short Form Survey (SF-36), addressing guality of life.

The variables concerning sociodemographic and health characterization included: age, sex, education, and comorbidities. The variables characterizing the lesion were: number and site(s) of ulcer(s); area of ulcers in cm²; duration of ulcers; type of tissue; amount of tissue; exudation; amount of exudation; ulcer-related pain (according to VAS); smell; and edema. The variables addressed by the SF-36 are: Functional Capacity; Limitations Imposed by Physical Aspects; Pain; General Health Status; Vitality; Social Aspects; Emotional Aspects; and Mental Health. This instrument assesses both negative (disease) and positive (wellbeing) aspects. The VAS assesses the patients' degree of pain, in which 0 (zero) corresponds to total absence of pain and 10 (ten) corresponds to the maximum pain one can bear; the closer to zero, the less intense the pain and the closer to ten, the more intense the pain is.

The study was approved by the Institutional Review Board (CAAE 52648115.8.0000.5243) according to guidelines established by Resolution No. 466/2012, Brazilian Council of Health.

RESULTS

Table 1 presents the distribution of elderly individuals according to their sociodemographic and health characteristics.

The study's sample was composed of 50 participants: 23 patients (46.0%) were women and 27 (54.0%) were men. The difference between sexes was not significant considering the *p*-value = 0.672 obtained from the Binomial test.

In regard to age, a larger number of individuals were aged between 60 and 69 years old (n = 30, 60%). No statistically significant difference was found between men and women in terms of age, *p*-value = 0.407.

Most participants had Incomplete Primary-Middle School (n = 27, 54.0%); were married (n = 28, 56%); Caucasian or of mixed race (n = 37, 74%); had an income of one times the minimum wage (n = 24, 48.0%); and reported themselves to be

Variables	Participan	t's gender	Global		
Variables	Female (n)	Male (n)	(n)	(%)	
Institution					
Hospital's outpatient clinic	15	18	33	66	
Polyclinic	8	9	17	34	
Age range (years)					
60-69 years old	12	18	30	60	
70-79 years old	11	7	18	36	
Above 80 years old	1	1	2	4	
Marital Status					
Single	8	1	9	18	
Married	7	21	28	56	
Divorced	1	2	3	6	
Widowed	7	3	10	20	
Education					
Illiterate	3	0	3	6	
Incomplete/complete primary-middle school	15	16	31	62	
Incomplete/complete high school	5	10	15	30	
Incomplete/complete higher education	0	1	1	2	
Current occupation					
Non-work status	23	15	38	76	
Work status	0	12	12	24	
Race					
Caucasian	7	12	19	38	
Mixed	8	10	18	36	
Afro-descent	8	5	13	26	
Income					
< than 1 times minimum wage	1	1	2	4	
1 times the minimum wage	16	8	24	48	
1 to 2 times the minimum wage	3	5	8	16	
> 2 times the minimum wage	3	13	16	32	
Primary disease					
Hypertension	20	22	42	84	
DM	6	15	21	42	

Table 1. Participants' sociodemographic and health characterization. Niterói, RJ, Brazil 2016.

inactive in terms of employment (n = 38, 76%). The analysis also revealed that the income of men was significantly higher than that of women (*p*-value = 0.002).

Table 2 presents the distribution of elderly patients according to the characteristics of their lesions.

In regard to primary diseases, 42 (84%) participants were hypertensive, 21 (42%) had DM, while 19 (38%) presented both comorbidities. Association between these comorbidities and gender showed a significantly greater incidence of DM among men (*p*-value = 0.035). The estimated Odds Ratios (OR) was 3.5; i.e., men were 3.5 times more likely to have DM than women. The most frequent type of lesion was the venous ulcer (n = 38, 76.0%). Venous ulcers were more frequently found among women: 91.3% of the cases. In regard to the site of lesion, ulcers were more frequently located in the malleolus region (n = 23, 46.0%).

Granulation tissue predominated among the participants (n = 33, 66%), while epithelialization tissue was less common: 74% of the ulcers did not present it, while 20% presented some epithelialization tissue. Necrotic tissue is even more rare. Only

Table 2. Characterization of lesions. Niterói, RJ, Brazil 2016.

Variables	Participa		Global		
	Female (n)	Male (n)	(n)	(%)	
Ulcer's etiology	-			-	
Arterial ulcers	0	1	1	2	
Diabetic ulcers	1	8	9	18	
Mixed ulcers	0	1	1	2	
Venous ulcers	21	17	38	76	
Venous and diabetic ulcer	1	0	1	2	
Site of ulcers					
Circular and malleolus	0	2	2	4	
Circular and foot	1	0	1	2	
Anterior surface of lower third	1	1	2	4	
Malleolus	13	10	23	46	
Valleolus and foot	1	0	1	2	
Foot	1	9	10	20	
Type of tissue					
Granulation tissue					
Absent/some	6	4	10	20	
Voderate	5	3	8	16	
_arge/Predominant	13	20	33	66	
Epithelialization tissue					
Absent	18	19	37	74	
Some	3	7	10	20	
Moderate/Large	2	1	2	4	
Necrotic tissue					
Absent	23	26	49	98	
Some	0	1	1	2	
Type of exudate	•	-	-		
Absent	3	3	6	12	
Some and serous	7	11	18	36	
Some and serosanguineous	, 1	1	2	4	
Moderate and purulent	1	1	2	4	
Moderate and serous	7	4	12	24	
Noderate and serosanguineous	, 1	4	1	24	
	0		2		
arge and purulent		2		4	
arge and serous	3	4	7	14	
Site of lesion	7	45	22		
< 1 to 20 cm ²	7	15	22	44	
21 to 40 cm ²	3	3	6	12	
11 to 60 cm ²	4	0	4	8	
51 to 100 cm ²	2	1	3	6	
101 to 300 cm ²	5	4	9	18	
Above 300 cm ²	3	3	6	12	
Duration of ulcer					
L to 4 years	4	9	13	26	
5 to 8 years	4	4	8	16	
eto 12 years	6	2	8	16	
13 to 24 years	3	2	5	10	
25 to 48 years	3	2	5	10	
Symptoms of ulcers					
tching	14	10	24	48	
Edema	10	5	15	30	
Smell	2	0	2	4	
Heat	0	1	1	2	

* Note that the area of lesion for those with more than one ulcer corresponds to the total lesion area.

one man (2.0%), who had a diabetic ulcer on his foot, presented a "little" of necrotic tissue.

Exudate is common in lesions, with a prevalence of 88.0%. Both in the global analysis and the analysis considering both genders, the most prevalent amount and type of exudate was "some and serous" (n = 18, 36%).

The most frequent size of ulcers found was from 1 to 20 cm^2 (n = 21, 42%). No statistically significant difference was found between the size of ulcers and gender (*p*-value = 0.235).

The duration of ulcers varied greatly among the participants, ranging from 0.08 to 43 years. Ulcers with duration from 1 to 4 years were the most frequently found (n = 13, 26%).

The female subgroup presented a different pattern, in which older ulcers, from 9 to 12 years, were more frequently found. A significant difference concerning the duration of ulcers in men and women was found (p-value = 0.035). The mean and medians of the ulcers among women reveal that ulcers among women are significantly older than those found among men.

The most common symptoms include itching and edema, the incidences of which are n = 24 (48%) and n = 10 (20%), respectively. Even though these symptoms occur more frequently among women, no significant association was found between the incidence of symptoms and gender (*p*-values > 0.05). Likewise, no significant differences were found between genders in regard to the incidence of the symptoms heat and smell (*p*-values > 0.05).

Figure 1 presents the distributions of frequencies concerning the participants' degrees of pain.

Figure 1. Distribution of frequencies concerning degrees of pain reported by the participants according to VAS.

MILD			MODERATE					INTENSE			
	0	1	2	3	4	5	6	7	8	9	10
N	6	0	2	2	2	10	9	3	5	3	9
96	12%	096	496	496	496	2096	696	696	1096	696	18%

In the VAS presented in Figure 1, 40% of the participants classified their pain as moderate. The mean global score of pain was equal to 6.0, with high variability in the distribution of pain among the participants. The mean and median scores were greater among women, though differences were not statistically significant (*p*-value = 0.100).

Table 3 presents the main statistics concerning the scores obtained by this study's participants on the SF-36.

Table 3 shows the most and least compromised domains of the SF-36 among the participants. Both the mean and median reveal that the participants are most affected in terms of Limitation Due to Physical Aspects (mean 21.0 and median 0.0). The other two most compromised domains are Pain and Functional Capacity, while the least compromised domains are Social Aspects, and General Health Status.

The distribution of scores obtained by the participants according to the institution from which they received care was compared to verify the hypothesis that participants from different institutions would obtain different scores. All *p*-values were greater

than 5%; thus, no statistically significant differences were found between the scores obtained by the participants from the different institutions.

The distribution of scores obtained by men and women was compared to verify the hypothesis that scores would be related to the participants' gender and the *p*-value revealed that only Vitality was related to gender (*p*-value = 0.028). The means also suggest that the male participants with leg ulcers scored significantly higher in Vitality than their female counterparts.

The distribution of scores obtained by participants classified into three different racial categories was also compared to check for a potential correlation between score and race. The *p*-values were greater than 5%; thus no significant difference was found among the scores obtained by individuals from different racial categories.

To investigate the possibility of scores being related to one's marital status, the distribution of scores according to three classifications was compared and the *p*-values, all greater than 5%, reveal no statistically significant difference between scores based on the participants' marital statuses.

To verify the hypothesis that scores would be related to the incidence of hypertension, the distribution of scores of the participants with and without hypertension was compared. Even though the means were lower among those with hypertension, suggesting that those with hypertension would have more compromised domains than those without hypertension, the differences between the scores obtained by participants with and without hypertension were not statistically significant (*p*-values > 5%).

The hypothesis that scores would be associated with the incidence of DM was also verified by comparing the distributions of scores obtained by participants with and without DM. The *p*-values revealed that only General Health Status is related to the incidence of DM (*p*-value = 0.008). The means show that the participants with leg ulcers and DM scored significantly lower than those with leg ulcers but without DM.

In order to verify whether the incidence of itching was related to the participants' scores, the distribution of scores of the participants with and without itching was compared. According to the *p*-values presented, only General Health Status was related to the incidence of Itching (*p*-value = 0.011). The means show that patients with leg ulcers that present itching scored significantly higher in General Health Status than individuals whose ulcers did not itch.

To investigate the hypothesis that scores were associated with the incidence of edema, the distribution of the scores of those with edema and of those without edema was compared. According to the *p*-values, the Pain domain is related to the incidence of edema (*p*-value = 0.008). The mean reveals that the participants with edema presented significantly lower scores for Pain than those who do not experience edema.

The hypothesis that scores were related to the etiology of lesions was also verified by comparing the distributions of the scores of participants with different etiologies. The *p*-values

Domain	Mean	Median	Minimum	Maximum	Standard Deviation	C.V.
Functional capacity	42.0	25.0	0	100	36.00	0.86
Limitation due to physical aspects	21.0	0.0	0	100	38.58	1.84
Pain	39.3	31.5	0	100	29.47	0.75
General health status	76.0	82.0	32	100	18.43	0.24
Vitality	64.1	65.0	0	100	29.93	0.47
Social aspects	74.8	100.0	0	100	37.67	0.50
Limitation due to emotional aspects	46.0	33.3	0	100	46.61	1.01
Mental Health	68.7	72.0	20	100	23.31	0.34

reveal that the General Health Status domain is related to the etiology of lesions (p-value = 0.009). The analysis shows that the participants with a venous or arterial leg ulcer scored significantly higher than those with diabetic or mixed ulcers.

DISCUSSION

Most participants in this study were males, a finding that is similar to that reported by a study conducted with individuals who were 60 years old on average; most of its male population, 73.8%, presented vasculogenic ulcers.⁸ The mean age found in this study was 68.4 years old. Another study reports that 100 participants were aged 60.6 years old, on average. These findings show that most patients with leg ulcers are elderly individuals.⁹

In regard to income, most individuals, 48%, had a monthly income of one times the minimum wage. Men's income was significantly higher than that of women, a finding similar to what is reported by a similar study in which the income of men was approximately four times that of women.¹⁰

In regard to marital status, most of the interviewees were married. This proportion is also reported by a study addressing individuals with venous ulcers, in which most participants were married or had a stable union, 63.7% of the sample.¹¹ Note that many of elderly individuals with leg ulcers depend on others to perform daily living activities and also to change dressings, which grants married individuals a certain level of security and support.

The participants presented a poor level of education. This finding is similar to that presented by another study addressing individuals with venous ulcers, in which most of its participants presented a low level of schooling with a median of five years of study. Poor education is an important factor to characterize the participants' lifestyle. One's lifestyle and appropriate self-care depends on knowledge accumulated over a lifetime. Individuals with a higher educational level tend to understand, for instance, the guidance provided by health professionals and, therefore, are able to use it in daily life. In regard to current occupation, most individuals did not have any type of job. Most were retired and potential discrimination on the part of society should be taken into account, because it seriously impacts the quality of life of elderly individuals. Assistance should be provided to these individuals in consideration of their fragile role in society.

In regard to the race, most participants were Caucasian or of mixed race. Participants of mixed race were more predominant in one study conducted with 43 individuals with leg ulcers, while those of Afro-descent were less prevalent. The low percentage of Afro-descendants may be explained by their anatomophyisiological characteristics, as the stratum corneum of black skin is composed of more layers of cells than the skin of Caucasians. It thus is a more effective barrier against external stimuli, consequently being less vulnerable to the development of ulcerations.^{12,13}

Based on the high prevalence of chronic venous insufficiency, it is key to provide guidance regarding this disease to individuals with ulcers, as well as regarding its association with other primary diseases. A recent study reports that 44% of a sample of 50 individuals with venous ulcers presented hypertension.¹⁴

In regard to the significantly increased risk for men to develop DM in comparison to women, another study also reports a greater prevalence of men presenting a high risk to acquire DM in comparison to women.¹⁵

In regard to the site of the ulcers, most ulcers were located in the (lateral and medial) malleolus region. A cross-sectional study conducted in Fortaleza assessed 43 lesions and 21 (49%) of these were located in the lateral malleolus, while 18 (42%) were located in the medial malleolus.¹⁶ In regard to etiology, the leg ulcers addressed in this study were predominantly of venous etiology. A study conducted with individuals with chronic ulcers also reports that venous ulcers were more prevalent (30.7%) in the 75 individuals assessed.¹⁷

The highest prevalence of venous ulcers was among women. Other authors have explained that venous ulcers more frequently affect women due to pregnancy and the presence of female hormones that lead to venous insufficiency.^{18,19} In this study, the first lesion appeared an average of 8.97 years prior. Another study reports a similar mean in a total of 55 volunteers; 5.5 years was the average duration of ulcers.¹⁶ In this study, 44% of the participants experienced the onset of their first ulcer more than 5 years ago. These findings show that most of the participants had a leg ulcer for years, whether they were relapses or not. Note that the duration of lesions, when the individual had more than one ulcer, corresponded to the oldest ulcer. This result is in agreement with a recent study in which the median duration of venous ulcers was 120 months (equivalent to 10 years), with a minimum of 15 days and a maximum of 37 years.¹⁴

A significant difference was found in this study between the duration of ulcers of men and women. Women's ulcers were significantly older than those of men. Another study reports a similar result in which women's ulcers were approximately one year older that those of men.²⁰

In regard to the area of the lesions in cm², the most frequent sizes of lesions were from 1 to 20 cm² with a mean of 119.22 cm². The mean was so high because more than one area of lesion was considered in the same individual, as 30% of the participants had more than one ulcer. Authors report there is no consensus as to what would be a small, moderate or large ulcer. There is a study that considers a large lesion to have an area greater than 60 cm^2 , while another study asserts that a large area would have more than 150 cm^{2.21}

In regard to the presence of tissue on the ulcer bed, most participants predominantly presented granulation tissue. The bed of venous ulcers is generally formed by granulation tissue.²² In regard to the type and amount of exudate, the most prevalent type was serous exudate in small amounts. In a study addressing 31 participants with leg ulcers, 25 presented ulcers with serous exudate and 22 presented it in small amounts.²³

In regard to pain, the mean score obtained on the VAS was 5.96 (moderate). Most studies report pain as being one of the main problems affecting individuals with leg ulcers, which negatively affects their quality of life. Pain is one of the main complaints of individuals experiencing a continuous skin lesion, affecting from 28% to 65% of those with a leg ulcer.²⁴⁻²⁶ Therefore, healthcare professionals should incorporate pain assessment into routine ulcer care and assist patients in using coping strategies in order to minimize psychological distress.²⁷

In regard to the presence of edema, 30% presented some level of edema in the perilesional region or in the limbs. A study conducted with 34 individuals with leg ulcers presents similar results. Perilesional edema was identified in 38.2% of the sample.²⁸ Additionally, this study found an association between edema and pain among those with leg ulcers. Venous hypertension may lead to excessive accumulation of fluid and fibrinogen in the subcutaneous tissue, resulting in edema, with consequent pain, as previously noted.²⁹ This association is shown in a study conducted with individuals with venous ulcers in which the use of compression sleeves facilitated venous return and lymphatic circulation, decreasing the edema and alleviating pain.³⁰

In regard to the presence of an odor, only two individuals (4%) presented a fetid smell after the occlusive cover was removed and while the dressing was being changed. Odor is not usually present in lesions and its presence indicates local infection.

The absence of itching in the area of the lesion or in areas adjacent to the lesion was reported by 52% of the participants. Even though most participants reported no itching, this symptom is still present in almost half of the sample. Statistical results show that participants with leg ulcers who experience itching scored significantly higher in the General Health Status than those who experienced no itching. Note that biochemical mediators are released during the inflammatory phase of the healing process to cause vasodilation and increase blood flow in the site. A consequence of this process is itching, the main mediator of which is histamine.

In regard to the results obtained in the scale addressing quality of life, the SF-36, the domains in which low scores were obtained were Functional Capacity, Limitation due to Physical Aspects, Pain and Limitation due to Emotional Aspects; that is, these domains were, in general, responsible for harming the quality of life of the elderly participants with leg ulcers. The domains in which the highest scores were obtained were General Health Status, Vitality, Social Aspects, and Mental Health; that is, these were domains that maintained good quality of life among elderly individuals with leg ulcers.

Studies assessing the quality of life of individuals with ulcers report that the most affected domains include Functional Capacity, Limitations due to Physical Aspects and also Limitations due to Emotional Aspects, and Pain; the lowest scores are obtained in Functional Capacity and Limitations due to Physical Aspects.^{11,28}

The male participants in this study scored significantly higher in the Vitality domain in comparison to female participants with leg ulcers. Considering that vitality is measured by items related to peacefulness, energy and the disposition to perform tasks, the men addressed in this study may have presented greater vitality because they were younger than their female counterparts.

In regard to General Health Status, the mean scores of the participants with DM are significantly lower than those obtained by individuals who did not have DM. Additionally, those with venous or arterial ulcers scored higher than participants with diabetic or mixed ulcers.

In this study, the scores obtained for the SF-36 domains were not related to the participants' age, income, duration of ulcer, size of ulcer, or pain classified according to the VAS. Nonetheless, other studies addressing patients with leg ulcers report that the variables: higher levels of pain, being younger, having a larger ulcer or of longer duration, and having impaired mobility, were associated with low levels of quality of life, while the cause of the lesion, ulcer-related pain, duration of ulcer, and severity of depressive symptoms also influenced quality of life.^{31,32}

This study's limitations include its small sample size, which limits generalization, and its cross-sectional design, which hinders the establishment of relationships among cause, exposure and outcome. Future studies addressing the quality of life of elderly individuals with leg ulcers should assess quality of life before and after applying compressive therapy for venous ulcers and assess pain during consultations using validated scales, while a professional from the field of psychology should provide emotional support to patients.

CONCLUSION

The presence of a leg ulcer causes various problems that interfere in the quality of life of elderly individuals. For this reason, investment in care programs directed to the elderly intending to reduce the impact caused by the biopsychosocial changes caused by leg ulcers is necessary.

This study presents the most compromised domains of the SF-36 so that care can be directed to the needs of these individuals, improving their quality of life.

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ⁱ Article extracted from research entitled "Qualidade de vida em idosos com úlceras de perna: método misto", from Program in Health Care Sciences, with a scholarship from CAPES - Coordenação de Aperfeiçoamento de Pessoal de Nível Superior.