Quality of life of people with chronic ulcers

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Introduction: Patients with chronic ulcers have physical, social, and psychological changes that directly affect their quality of life.

Objectives: To evaluate the quality of life and analyze the association between personal and health characteristics in patient quality of life for those with chronic ulcers.

Method: A cross-sectional study, nonprobabilistic. The questionnaire to evaluate personal and health characteristics and the Ferrans and Power Quality of Life Index–Wound Version were used for the data collection. The sample consisted of 200 patients with chronic ulcers of several etiologies (venous ulcers, pressure ulcers, diabetic ulcers, and mixed) recruited at the basic health units in two cities in the South of Minas Gerais, Brazil.

*Results: Overall, the study found that their quality of life was rated as good. There was a positive correlation between the different ages (*P = *0.0165), number of children (*P = *0.0083), and practice of religion (*P = *0.0394) with quality of life.*
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Chronic ulcers are defined as tissue damage where the healing process is a relatively long one and damage reaches at least one of the skin layers. Its tissue renovation exceeds 6 weeks and results from physical trauma or chemical, mechanical, or clinical conditions. These tissue onsets may be from complications of originating in venous or arterial pressure, or diabetes.[1–3]

The high rates of chronic ulcers take on a particular relevance given Brazilian sociodemographic characteristics, which outline a profile of people with a longer life expectancy and less healthy lifestyle, which contributes to the onset of chronic diseases. In addition, global epidemiologic data indicates that 4 million people have some kind of chronic ulcer, ie, a percentage of 14% and which may increase in the coming years to 22.8%.[3–5]

Regarding patients with chronic ulcers these lesions cause constant fatigue, both physical and emotional, as they have similar characteristics such as discharge and odor. Such manifestations impair the quality of life of these individuals, changing their body image and interfering directly in their social relations. Some feelings such as sadness, anxiety, anger, and shame are noticeably perceptible, considering that these feelings determine a large number of difficulties regarding self care. The patient is forced to live with daily adjustments, finding themselves in situations of unemployment, abandonment, social isolation, thus compromising their life project.[6–10]

In this scenario, the role of nurses is highlighted, since these professionals are the ones who take care of wounds in the context of a multidisciplinary team. The decisions made during assistance, as well as a holistic vision, focusing attention not only on the disease but also on the psychological aspects of the patient, their socioeconomic conditions, their family and culture must be adopted by nurses to minimize the negative effects of a chronic ulcer. Such actions, when performed by these professionals, can provide a better quality of life for patients during treatment.[10–12]

Divergent and advanced therapies are constantly investigated while searching for ulcer treatment, but it is clear that pain and poor quality of life cause significant morbidity. Therefore, it is recommended that evaluation of quality of life as part of ulcer treatment is undertaken, helping to plan any assistance regarding the wound and quality of life.[13]

In light of all this, the study's goals are to assess each patient's quality of life and find links between the personal and health variables and their quality of life.

METHODS

The study is a quantitative one, with an analytical and transversal approach. The data are secondary to cultural adaptation work and an instrument for the validation of quality of life. The study included 200 patients with chronic ulcers of different etiologies, of both genders, with ulcers lasting more than 6 weeks, which were recruited in the Basic Health Units in two cities in the South of Minas Gerais, Brazil.

A personal and health characteristics were used for the data collection, consisting of the following items determined by the researchers: age, marital status, educational level (none, elementary education, secondary education, and high school), income (based on the Brazilian monthly minimum wage), number of

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children, type of ulcer, number of wounds, and duration (in months) of wound.

The Ferrans and Power Quality of Life Index–Wound Version was used to assess quality of life; the instrument was designed for the Brazilian population in 2009.[14] This instrument has 35 items that are grouped in four dimensions: health and function, psychological or spiritual, socioeconomic, and family.

The total score ranges from zero (poor quality of life) to 30 (better quality of life). The instrument allows five scores, namely one for each domain and one for the overall quality of life.[14]

The calculation of scores is obtained by recording the responses for the first part (1, 2, 3, 4, 5, and 6); then by subtracting 3.5 from each item, we thus obtain a new series of scores −2.5, −1.5, −0.5, +0.5, +1.5, and + 2.5. These new values are multiplied by the scores for the second part's items, totaling 15. Thus, one obtains a single score for each question answered. The total score is calculated through the sum of all these values divided by the total items. To calculate the score of each domain, the same rule is used.

For the personal and health information, descriptive analysis was used (mean and standard deviation) for continuous variables; relative and absolute frequency was used for categorical variables.

The correlations between quantitative and quality of life variables were performed using the Spearman Correlation coefficient, which is a nonparametric coefficient and ranges from −1 to 1. For comparisons involving categorical variables with two categories, with a relationship before the variable quality of life, we used the Student's *t*-test unpaired. The variables with normal distribution and those that do not present distribution were analyzed by the Mann–Whitney test. The comparison of categorical variables with more than two categories was carried out through the analysis of variance (ANOVA) model; for the variables whose model assumptions were met, the Kruskal–Wallis test was used.[15] For all analysis, 5% was considered a significant level, and the SAS version 9.2 statistical software was used to perform it.

This study followed the rules established by Resolution No. 466/12; of the Health Ministry, which deals with the research ethics involving humans. The study was approved by the Research Ethics Committee of the Medical Science University of UNICAMP (University of Campinas, Brazil) with number 44,175 by the Research Ethics Committee.

RESULTS

It should be observed that the average age among the participants of this study was 60–79 years old. From these, 62% were female. A marital status was represented by married (42.5%). Regarding the educational level of the participants, 48.5% finished elementary school and had an income predominantly from less than 2 minimum wages (63.0%). The religion was catholic (66.5%) and 76.5% practice their religion, as summarized in Table 1.

Regarding the health information, it was shown that 45% have venous ulcers, with ulcer duration of 2 months–5 years (65.5%), and one wound per participant (65.5%), mean of 1.3 number of recurrences, as summarized in Table 2.

The data obtained through the questionnaire related to the obtained Quality of life (QL) total score was 21.6 (standard deviation = 3.4). It is observed that the health and function dimension had a worse result (19.7). On the other hand, the psychological or spiritual and family dimensions were the evaluated items that showed the better results when referring to the QL of the participants (24.8), as summarized in Table 3.

The correlation of the quality of life when taking into consideration the variable number and the duration of wounds showed no significant differences, considering the value $P < 0.005$. Related to age, older individuals presented a better quality of life compared to those younger. Regarding the number of

TABLE 1

PERSONAL CHARACTERISTICS (N = 200) BRAZIL 2013

	n	%	*Mean*	*Standard deviation*
Age				
20–39 years old	19	9.5		
40–59 years old	78	39.0		
60–79 years old	91	45.5		
80–100 years old	12	6.0		
Age (first wound)			52.8	15.2
Gender				
Female	124	62.0		
Male	76	38.0		
Children			2.4	2.2
Marital status				
Married	85	42.5		
Single	37	18.5		
Others	78	39.0		
Schooling				
None	52	26.0		
Elementary school	97	48.5		
Secondary school	43	21.5		
High school	8	4.0		
Income*				
< 2 Minimum wages	126	63.0		
3–4 Minimum wages	59	29.5		
>4 Minimum wages	15	7.5		
Religion				
Catholic	133	66.5		
Protestant	52	26.0		
Others	15	7.5		
Practice of religion				
Yes	153	76.5		
No	47	23.5		

*One minimum wage = R$88,000.