

# Quality of life and self-esteem of patients with chronic ulcers

Qualidade de Vida e autoestima de pacientes com úlcera crônica

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## Keywords

Quality of life; Ulcer; Nursing assessment; Clinical nursing research; Nursing

## Descritores

Qualidade de vida; Úlcera; Avaliação em enfermagem; Pesquisa em enfermagem clínica; Enfermagem

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## Abstract

**Objective:** To assess the Quality of Life and the Self-Esteem of patients with chronic ulcers.

**Methods:** Analytical and cross-sectional study. One hundred and fifty patients were assessed for six months, among them seventy-five patients with chronic ulcers. Patients over 18 years of age were included, male and female, hospitalized and assisted at outpatient care centers, with intact cognition.

**Results:** Patients with ulcers were predominantly male ( $p < 0.002$ ). In both groups, the average age was 62 and the most prevalent illness was hypertension (32%). The worst Functional Capacity score was observed in the group without ulcers ( $p = 0.003$ ); the group with ulcers registered the worst score for the Vitality aspect ( $p = 0.042$ ).

**Conclusion:** Patients with chronic ulcers had the worst Quality of Life in relation to activity, little energy and willingness to carry out the Activities of Daily Living. The ulcers, however, did not affect the self-esteem of these patients.

## Resumo

**Objetivo:** Avaliar Qualidade de Vida e autoestima de pacientes com úlcera crônica.

**Métodos:** Estudo analítico e transversal. Avaliaram-se, por seis meses, 150 pacientes, sendo 75 portadores de úlcera crônica. Foram incluídos pacientes dos dois gêneros, com mais de 18 anos, internados e atendidos em ambulatório, e com cognição preservada.

**Resultados:** Dentre os pacientes com úlcera, predominou o gênero masculino ( $p < 0,002$ ). Nos dois grupos, a mediana de idade foi 62 anos e a hipertensão arterial foi a doença mais prevalente (32%). Observou-se pior escore da Capacidade Funcional no grupo sem úlcera ( $p = 0,003$ ); o grupo com úlcera registrou pior escore para o domínio Vitalidade ( $p = 0,042$ ).

**Conclusão:** Pacientes com úlceras crônicas apresentaram pior Qualidade de Vida com relação à atividade, com pouca energia e disposição para realizar as Atividades da Vida Diária. As úlceras, porém, não influenciaram na autoestima desses pacientes.

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## Introduction

Chronic ulcers are those that do not respond to the initial treatment or are persistent, despite appropriate care. It is estimated that chronic ulcers affect more than six million of people in the United States and their incidence is expected to increase as the population ages and as the number of people with diabetes *mellitus* increases.<sup>(1)</sup>

Ulcers and other health prognostics are associated with mortality. However, with regard to ulcer cases, there is no relation to the area affected, but to the number of chronic ulcers, which is an important predictor of mortality at six months.<sup>(2)</sup>

Chronic venous ulcers are predominant in patients of low-income, female, black or mixed ethnic origins and who are in their fifties, being significantly recurrent in patients with ulcers of secondary etiology. Chronic venous ulcers are often difficult to heal, and only 40 to 70% are cured after six months of treatment. The surgical procedures used to reduce venous hypertension do not speed up the healing process, but studies suggest that the rate of recurrence decreases after surgery.<sup>(3,4)</sup>

The incidence of pressure ulcers ranges from 13.3%, in hospitals to 39.4% among people living in long stay institutions for the elderly. Pressure ulcers cause continuous pain and restriction to daily activities, and require that people learn to live and cope with this disease. There is evidence that patients with ulcers, when compared to those without ulcers, feel a significant impact of the disease on the physical, social and psychological scopes, besides having to live with the symptoms of the disease and general health problems, such as care interventions, high rate of depression and low quality of life.<sup>(5-8)</sup>

Ulcers, particularly those resulting from diabetes *mellitus*, vascular, venous and arterial diseases, pressure and traumas, represent a substantial number of chronic ulcers.

Feet ulcers negatively affect the quality of life of diabetic people. More than 50% of non-traumatic lower limb amputations are caused by diabetes. Ulcers on lower limbs often precede the amputations. Every year, 2 to 3% of patients develop foot ulcers and this risk is increased to 15% in the course of

their lives. Among severe hospitalization cases, 85% were caused by superficial ulcers, followed by decreased sensitivity due to diabetic neuropathy.<sup>(9,10)</sup>

Concerning external trauma, traffic accidents cause a large number of traumatic injuries in Brazil. In relation to the severity of the injuries, there is a predominance of victims of light trauma (73.1%), most of them (59.7%) suffering injuries to the lower limbs, followed by injuries to the upper limbs (58.2%) and to the head (31.3%).<sup>(11,12)</sup>

Chronic leg ulceration is a continuous cycle of skin wounds that last for decades and is associated with poor quality of life. This type of ulcer negatively affects the quality of life and the productivity of patients, representing a significant financial cost to the healthcare system. Complex psychological and social effects on patients are forgotten, but a holistic approach to venous ulcer care is important to improve the results and the quality of life.<sup>(13)</sup>

The World Health Organization defines quality of life as the perception that people have of their position in life, in the context of their culture and the value systems of the society they live in, and in relation to their objectives, expectations, standards and concerns.<sup>(14)</sup>

Self-esteem is the feeling, appreciation and consideration that people have for themselves, which means how much they like themselves, how they see themselves and what they think of themselves.<sup>(15)</sup>

The aim of this study was to assess the quality of life and self-esteem of patients with chronic ulcers.

## Methods

Analytical and cross-sectional study undertaken in a university hospital located in the Southeast of Brazil. Sampling, that is, the selection of patients, was performed in the hospitalization units and in the outpatient Stoma therapy, Nursing Care and Learning Center at the Hospital Universitário Samuel Libânio in Pouso Alegre, Minas Gerais state, using a probabilistic or simple random method.

Inclusion criteria were: people with ulcers of various etiologies, pressure, venous, arterial, diabetic or traumatic, showing intact cognition and hos-

pitalized or receiving outpatient treatment, over 18 years of age. One hundred and fifty patients were assessed and, from these, 75 formed the group without ulcers, having been hospitalized due to different medical or surgical pathologies, and 75 patients formed the group with chronic ulcers, having been assisted at the Stoma therapy Outpatient Centre. The patients included were interviewed at the units in which they were hospitalized or at the outpatient center. In order to assess their cognition, the Mini Mental State Examination (MMSE) was applied, which is an instrument used by other authors in studies involving patients with ulcers. The MMSE score may vary from a minimum of zero to a maximum of 30 points, with a cutoff score of 24 for literate and 19 for illiterate people. The cutoff score used was 19.<sup>(16,17)</sup>

For the assessment of Quality of Life, the Brazilian version of the Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36) was used. This is a generic instrument consisting of a comparative question about the current health status and that of one year ago, as well as 35 more items divided into 10 questions emphasizing the perception of people about their health in the last four weeks, and covering eight aspects: Functional Capacity, Physical Aspects, Pain, General Health Status, Vitality, Social Aspects, Emotional Aspects and Mental Health.<sup>(18)</sup>

To assess self-esteem, the Rosenberg Self-Esteem Scale-UNIFESP/EPM, an instrument consisting of ten multiple-choice questions, was used. The questionnaire score ranges from zero to 30, where zero corresponds to the best state of self-esteem and 30 the worst.<sup>(15)</sup> For the analysis of the results, the chi-square or Fisher's exact test was used. The Mann-Whitney test was used with the purpose of comparing both groups in relation to the variables studied.

The analysis was carried out using Statistical Package for the Social Sciences (SPSS) software, version 18.0. The risk of rejection of the null hypothesis was set at 0.05 or 5% ( $\alpha \leq 0.05$ ).

The development of the study complied with national and international standards for ethics in research involving human beings.

## Results

The average age of people from both groups was 62 ( $p=0.838$ ). Concerning gender, the group without ulcers was predominantly female ( $n=49$ ; 65.3%) and, in relation to the group with ulcers, most participants were male ( $n=45$ ; 60%), with  $p=0.0019$ . Concerning the level of education, there was a predominance in both groups of people with incomplete primary school or who were illiterate, accounting together for 76% and 70.6% in the groups without and with ulcers respectively ( $p=0.8871$ ). Among the illnesses, arterial hypertension was predominant (32%), followed by diabetes *mellitus* (17.3%).

Venous ulcers were also predominant (30.7%), followed by diabetic foot (24%), traumatic ulcers (22.7%), pressure ulcers (8.0%) and others (9.3%). Regarding the site of the ulcers, legs and feet prevailed; in length, ulcers between 4 and 7cm were predominant and, according to the clinical signs, 80% had no exudate (Table 1).

**Table 1.** Features of ulcers as for the type, site, extension and the presence or not of exudate

Ulcers	n(%)
Venous	23(30.7)
Diabetic foot	18(24.0)
Traumatic	17(22.7)
Others	7(9.3)
Pressure	6(8.0)
Arterial	4(5.3)
Site	
Leg	35(46.7)
Foot	26(34.7)
Others	11(14.6)
Sacrum	3(4.0)
Length (cm)	
4 to 7 (average)	40(53.3)
1 to 3 (small)	21(28.0)
> 8 (large)	14(18.7)
Presence of exudate	
No	60(80.0)
Yes	15(20.0)

The data in table 2 show that there was no significant association between the groups in relation to the MMSE scores and the Rosenberg Self-Esteem Scale-UNIFESP/EPM.

**Table 2.** Scores of the Mini Mental State Examination (MEEM) and the Rosenberg Self-Esteem Scale-UNIFESP/EPM from the group with ulcers and the group without ulcers

	Gw/oU	GwU	Gw/oU versus GwU
MMSE			
Average	23.8	23.7	0.964*
Median	24.0	24.0	
Rosenberg Self-esteem Scale-UNIFESP/EPM			
Average	8.36	9.48	0.174*
Median	9.00	10.00	

Legend: Mann-Whitney test used to compare both groups regarding the MMSE and the Rosenberg Self-Esteem Scale-UNIFESP/EPM; \*p-value; Gw/oU: group without ulcers; GwU: group with ulcers

Table 3 displays the comparison between the scores in the eight domains of the SF-36 in the two groups.

**Table 3.** Aspects of the Medical Outcomes Study 36-Item Short Form Health Survey (SF-36)

Aspects	Gw/oU (n)	GwU (n)	Gw/oU versus GwU p-value
Functional capacity			
Average	40.6	57.2	0.003*
Median	45.0	55.0	
Physical aspect			
Average	20.7	30.3	0.120
Median	0.0	0.0	
Pain			
Average	57.5	53.7	0.623
Median	42.0	41.0	
General health status			
Average	69.4	69.8	0.611
Median	72.00	75.00	
Vitality			
Average	60.3	54.3	0.042*
Median	65.0	55.0	
Social aspect			
Average	55.7	56.2	0.759
Median	50.0	50.0	
Emotional aspect			
Average	12.0	19.9	0.249
Median	0.0	0.0	
Mental Health			
Average	62.7	57.5	0.100
Median	64.0	56.0	

Legend: Mann-Whitney test used to compare the groups regarding the SF-36 aspects; \*p-value <0.05; Gw/oU: group without ulcers; GwU: group with ulcers

## Discussion

The limitations of this study's results relate to the cross-sectional design, which does not permit the establishment of cause and effect relations, but suggests important associations.

The practical applicability of this study's results supports the recovery of strategies in relation to patients with ulcers, especially concerning the reduction of Vitality and energy, and this is a reminder for a preventive approach, preparing professionals to cope with this process and promoting the maintenance and improvement in the Quality of Life.

While characterizing patients in relation to age group, it could be noted that they were over 62 in the group of patients with ulcers. This information confirms the fact that, with the increase of the population's life expectancy, the predominance of chronic-degenerative illnesses and their complications, such as loss of autonomy and functional independence with subsequent ulcerations, pose challenges for the society and the healthcare system.<sup>(19)</sup>

The predominance of male patients among those with ulcers was similar to that observed by other authors in a study involving cancer patients under palliative care.<sup>(20)</sup> This fact could be associated with restricted movements of men resulting from their physical structure, or with the fact that men do not admit the need to be cared for.

The level of education is certainly an important factor in relation to self-care and is sometimes a hindrance for proper treatment. In the present study, most patients had not completed primary education and this often interferes with the applicability of care, mainly among elderly patients with chronic illnesses, who need to deal with medications, dressings and diets.

There was a predominance of venous ulcers among the patients interviewed and this is similar to the observations of another study, which showed that most leg ulcers are due to vascular problems, mainly venous insufficiency.<sup>(21)</sup>

The scores of the Rosenberg Self-Esteem Scale-UNIFESP/EPM show people's ability to deal with the situation. In this study, both groups

had similar scores concerning self-esteem. A study involving patients with burns showed that their self-esteem was not low and emphasized that the type of care delivered after the incident and the support received minimized the problem. This indicates that wounded patients have managed to have a good view of themselves and have not allowed this setback to make their lives difficult, especially their social lives.<sup>(22)</sup> However, other authors found that there were depressive symptoms and low Quality of Life among elderly patients with pressure ulcers living at home.<sup>(7)</sup>

Brazilian authors, while assessing the intensity of depressive symptoms in diabetic patients with foot ulcers, found varying degrees of depressive symptoms.<sup>(23)</sup> In assessing the quality of life and self-esteem of paraplegic patients being assisted at an outpatient care center in the city of Sao Paulo (SP), also using the SF-36, the authors observed a low score on Functional Capacity, Physical and Emotional Aspects.<sup>(24)</sup>

Other studies show that ulcers may not only be a physical injury, since it may have various meanings to people: something that hurts without necessarily having sensorial stimuli, a mark, an irreparable loss or even an incurable disease. The significant factors for life satisfaction related to health problems are social relationships, financial resources and self-esteem.<sup>(25,26)</sup>

The SF-36 in this study showed lower scores in the Vitality aspect in relation to the group with ulcers and Functional capacity in relation to the group without ulcers.

It is interesting to add that these findings were similar to the results observed by other researchers, who found that patients suffering from diabetes *mellitus* with foot ulcers also had alterations to their Functional Capacity.<sup>(27,28)</sup>

The scores for the Vitality aspect were lower, compromising people's energy and willingness to perform their daily activities, which are significant to wounded people. A study involving a patient living with a pressure ulcer found two important categories: firstly, the physical, which involved pain, the level of exudate and the loss of independence; and secondly, the psychological, showing emotional problems such

as a concern with the healing process, social relationships, body image and also social isolation.<sup>(29)</sup>

In a literature review, researchers showed significant impacts on the Physical, Social and Psychological Aspects and General Health Problems of patients with pressure ulcers.<sup>(8)</sup>

In a recent prospective study involving patients with traumatic ulcers and using the SF-36, it was found that the Physical Aspects, Activity and Mental Health were compromised.<sup>(30)</sup>

Living with an ulcer brings several changes to people's lives and, consequently, their families. Difficulties often arise which the person, the family and the healthcare team are not prepared to deal with or understand all of the aspects involved in the problem.<sup>(25)</sup>

## Conclusion

Patients with ulcers have little energy and willingness to perform their daily activities (Vitality aspect). The presence of ulcers does not affect the self-esteem of the patients studied.

## Collaborations

Souza DMST; Borges FR; Juliano Y; Veiga DF and Ferreira LM participated in the design of the project, analysis and interpretation of data, drafting of the article, relevant critical review of the intellectual content and final approval of the version for publication.

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