

Influences of health care services and clinical characteristics on the quality of life of patients with venous ulcer

Influência da assistência e características clínicas na qualidade de vida de portadores de úlcera venosa

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Keywords

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Descritores

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Abstract

Objective: To assess the impact of health care services and clinical characteristics on the quality of life of patients with venous ulcer.

Methods: Cross-sectional study with convenience sampling encompassing 100 patients with venous ulcer. The research was conducted using a structured form composed of sociodemographic and health variables, caregiving characteristics and venous ulcer characteristics, as well as a health-related quality of life instrument.

Results: The study showed a low mean for SF-36 domains and pointed out an association between health care characteristics, and functional capacity and pain domains. Clinic characteristics of the wound were associated with the following domains: functional capacity, pain, general health status, vitality, and social aspects.

Conclusion: Patients with venous ulcer present impairments in all quality of life domains. The characteristics of both the caregiving service and the wound influenced the quality of life of this group of patients, indicating that a comprehensive and high quality care may contribute towards the improvement of these patients' quality of life.

Resumo

Objetivo: Verificar a influência da assistência e das características clínicas na qualidade de vida de pacientes com úlcera venosa.

Métodos: Estudo transversal com amostragem por conveniência que incluiu 100 portadores de úlcera venosa. Utilizou-se um formulário estruturado contendo variáveis sociodemográficas e de saúde, características da assistência e da úlcera venosa e um instrumento de qualidade de vida relacionada à saúde.

Resultados: A média dos domínios do SF-36 foi baixa. Observou-se associação entre as características da assistência e os domínios capacidade funcional e dor. As características clínicas da lesão mostraram associação com os domínios: capacidade funcional, dor, estado geral de saúde, vitalidade e aspectos sociais.

Conclusão: Os pacientes com úlcera venosa apresentam prejuízos em todos os domínios da qualidade de vida. As características da assistência e da lesão influenciaram a qualidade de vida desse grupo de pacientes, sugerindo que uma assistência integral e de qualidade pode colaborar na melhoria da qualidade de vida desses pacientes.

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Introduction

Quality of life is a broad term entangling concepts that go beyond the control of symptoms, mortality reduction and enhancement of life expectancy. The objective of the treatment is no longer the cure itself, but the reintegration of individuals under the best conditions possible towards a healthy and high quality life.⁽¹⁻³⁾

Chronic venous diseases affect distinct age groups and directly impact quality of life and socioeconomic aspects, as they may withdraw individuals from their normal activities and often generate precocious retirement processes.⁽²⁾

The prevalence of the chronic venous disease (CVD) reaches up to 20% of the adult population in Western countries; 3.6% of cases relate to active or scarred ulcers, which stand out as the 14th major cause of temporary work leaves in Brazil.⁽⁴⁾ Only in the year 2000, from the 61,000 admittance processes carried out in public hospitals, 13,000 were related to open ulcers.^(4,5)

The negative impact of the chronic venous ulcer on quality of life is particularly reported regarding the domains of pain, physical functions and mobility.⁽⁶⁾ Depression and social isolation are also mentioned as related manifestations of CVD, above all by the presence of an ulcer.^(2,6)

Venous ulcer stands out as a burden in communities concerning the cost directed to health care services and the hindrances individuals face in terms of health-related quality of life. The most wanted end to such disease is a scarring status; yet, some studies also embody other outcomes, such as changes in the patient's health status and quality of life.^(7,8)

An all-embracing vision of how the disease impacts the lives of individuals would allow for a therapeutic approach, with enhanced efficacy chances.⁽⁹⁾ The aim of the present study was to assess the impacts of health care services and clinical characteristics on the quality of life of patients with venous ulcer (VU).

Methods

This cross-sectional study with convenience sampling composed of 100 patients with venous ul-

cer was carried out at the outpatient room of a teaching hospital. Inclusion criteria were: venous ulcer; 18+ age; and patients being cared for at the Onofre Lopes University Hospital. The exclusion criterion was the presentation of arterial-based or mixed ulcers.

Data were collected at the angiology outpatient room between June and November of 2011, counting on the application of a structured form and a health-related quality of life instrument, the SF-36.⁽¹⁰⁾ Sociodemographic and health variables, as well as health care characteristics and characteristics of the venous ulcer, were researched.

Health care variables included: adequacy of used materials; compressive therapy; length of treatment; place and professional in charge of the curative measure; orientation; exams; consultation with a specialist; reference and counter-reference process; and medical record reports.

The variables related to the wound were as follows: relapse; VU length of time; VU area; wound bed status; exudate; smell; tissue loss; infection signs; and swab collection/biopsy. These categories allowed for the calculation of a score, presenting positive (score=1) and negative (score=0) factors, in representation of the quantitative variables. Next, these variables were reclassified in nominal variables, taking the median score as a parameter.

The SF-36 is a multidimensional questionnaire composed of 36 items divided into eight components: functional capacity; physical aspects; pain; general health status; vitality; social aspects; emotional aspects; and mental health. Moreover, it displays one question that poses a comparative assessment between current health conditions and the conditions found one year before. This instrument evaluates both negative (disease) and positive (well-being) aspects.⁽¹⁰⁾

Collected data were transferred to a database, then exported and analyzed by software, aiming to achieve a statistical data analysis. The program runs descriptive analyses, showing absolute and relative frequencies, standard deviation, minimum and maximum, besides an inferential analysis of variable interactions, with a statistical significance level of p-value ≤ 0.05 . The Mann Whitney Test was applied in order

to assess the difference between the mean scores in quality of life domains and the characteristics of both the health care service and the wound itself.

The development of the study complied with national and international ethical guidelines for studies involving human beings.

Results

The characterization of the sample pointed out a predominance of people aged 60+ (55.0%); female (69.0%); married (62.0%); with a low educational level (83.0%); an occupation (56.0%); and income lower than one minimum salary (76.0%).

Table 1 presents the mean score in the SF-36 domains, which has been found low in all domains, especially in the physical aspect, functional capacity and social aspects domains.

Table 1. Mean, standard deviation (SD), maximum and minimum scores of SF-36 domains

SF-36 domains	Mean(SD)	Minimum	Maximum
Functional capacity	14.85(20.20)	0	100
Physical aspect	4.75(16.16)	0	100
Pain	33.97(27.43)	0	100
General health status	36.01(15.68)	5	77
Vitality	42.25(23.91)	5	100
Social aspect	27.38(24.29)	0	100
Emotional aspect	32.00(45.92)	0	100
Mental health	55.84(24.58)	8	100

Table 2 shows the mean scores of the SF-36 domains, according to the number of positive health care characteristics.

Health care characteristics influenced functional capacity (p=0.005) and pain (p=0.001). Patients who showed from 4 through 10 positive health care characteristics presented improved functional capacity and lower impact of pain on their quality of life scores.

The impact of the clinical characteristics of the venous ulcer on the life of patients was also assessed (Table 3). Wound characteristics affected functional capacity (p=0.001), pain (p=0.001), general health status (p=0.014), vitality (p=0.001) and social aspects (p=0.022). Patients showing more VU positive

characteristics presented improved functional capacity, less pain, superior health general status, more prominent vitality and lower impact of the ulcer on their social activities.

Table 2. Mean of domains and dimensions of the SF-36 according to the number of positive health care wcharacteristics

SF-36 domains	Positive health care characteristics	n	Mean	p-value
Functional capacity	1-3	69	45.25	0.005
	4-10	31	62.19	
Physical aspect	1-3	69	48.62	0.074
	4-10	31	54.69	
Pain	1-3	69	42.92	0.001
	4-10	31	67.37	
General health status	1-3	69	47.26	0.095
	4-10	31	57.71	
Vitality	1-3	69	47.16	0.085
	4-10	31	57.94	
Social aspects	1-3	69	47.25	0.083
	4-10	31	57.73	
Emotional aspects	1-3	69	49.85	0.685
	4-10	31	51.95	
Mental health	1-3	69	47.02	0.073
	4-10	31	58.24	

Table 3. Mean of the SF-36 domains and dimensions, according to the clinical characteristics of the venous ulcer

SF-36 domains	VU positive clinical characteristics	n	Mean	p-value
Functional capacity	1-4	50	39.54	0.001
	5-10	50	61.46	
Physical aspect	1-4	50	49.09	0.371
	5-10	50	51.91	
Pain	1-4	50	37.34	0.001
	5-10	50	63.66	
General health status	1-4	50	43.35	0.014
	5-10	50	57.65	
Vitality	1-4	50	40.91	0.001
	5-10	50	60.09	
Social aspects	1-4	50	44.12	0.022
	5-10	50	56.88	
Emotional aspects	1-4	50	46.70	0.114
	5-10	50	54.30	
Mental health	1-4	50	46.17	0.135
	5-10	50	54.83	

Discussion

This study revealed a prevalence of women and people over 60 years of age among its participants; such data are similar to those found by other studies, showing a stronger trend for the occurrence of VU in women and elderly people.⁽¹¹⁻¹³⁾

The study also identified a low educational level among patients, a common factor among patients with venous ulcer. The low educational level may directly interfere in the comprehension and assimilation of health care processes, especially those related to the wound itself and those related to the change of conducts and attitudes at home.⁽¹⁴⁻¹⁷⁾

As per the occupation of participants, the following activities stood out: housekeeper; laundry worker; agriculturist; cook; chambermaid; among others. Similar occupations were found by other studies, with prevalence of activities with reduced mobility, long periods in an orthostatic position and short periods of rest, which may become risk factors towards unleashing venous hypertension on lower limbs, emergence and chronicity of VU.^(12,13)

As per the income, the study showed that the majority of patients had low income rates. Such fact was also identified by other authors as a risk factor towards the development of leg ulcers, even though it is controlled for factors such as age and sex.⁽¹⁸⁾ The presence of a venous ulcer is an additional source of expenses, essentially as a result of the pharmacologic treatment and materials for dressings. In face of a poor economic situation, the presence of the wound and its demanded care are capable of destabilizing the family's financial balance, and may also affect the quality of life of these individuals.

Such findings corroborate those found by other studies, which point out that the socioeconomic condition may lead patients either to other informal work activities or to becoming dependent upon family members, thus generating disruptions in family ties.^(16,18)

The low quality of life scores observed in this study confirm the findings of other studies, which affirm that the venous ulcer should be considered as a substantial threat to various quality of life dimensions.^(9,19,20)

The present study assessed the impact of health care characteristics on the quality of life of patients with venous ulcer and came across a significant association among the quality of the rendered service, functional capacity and pain. Such finding suggests that a high quality health care service may produce a positive impact on both the functionality and perception of pain, thus confirming the findings of another study, which concluded that improved health care services promoted significant reduction of pain and enhanced independence in the daily activities of patients with chronic ulcers.⁽²¹⁾

As per the influence of the characteristics of the wound on the quality of life of this group of patients, the study showed that the functional capacity, pain, general health status, vitality and social aspects domains were associated with the characteristics of the wound, thus inferring that eventual improvements in the status of the wound may have a direct impact on the improvement of these quality of life aspects. By comparing the quality of life of patients with active and scarred ulcers, a study concluded, however, that the ulcer's scarring process did not contribute to the improvement of the quality of life of patients, a finding that opposes those found in this present study.⁽²²⁾

Hence, if the health care characteristics and the characteristics of the wound are associated with functional capacity, the creation of actions focused on improving these factors is expected to produce positive impacts on this quality of life dimension. Such trend should be investigated by further studies.

Pain is a frequent symptom in patients with venous ulcer and presented a significant association with the health care characteristics and the characteristics of the wound, thus suggesting that the employment of interventions directed to the improvement of these characteristics may positively influence this quality of life domain. Pain in patients with VU is even more intense in the night shift, restricting their mobility, disturbing their sleep and being described by many patients as a factor that greatly influences their quality of life.^(16-18,23)

The expectation for the association between the general health status and the characteristics of the wound was confirmed, as the improvement of the wound status is reflected on an improvement in the general health perception of the patient. Nevertheless, a study that analyzed the quality of life of patients with mild and serious chronic venous disease did not find a significant difference in the general health status domain in the two groups of patients.⁽²⁾

The vitality domain was significantly associated with the characteristics of the wound, thus inferring that a wound with more positive aspects may have a positive impact on the perception of vitality in these patients. Other studies also found low scores in the vitality domain of patients with venous ulcer; nonetheless, no study was found to have associated this domain with health care characteristics and/or the characteristics of the wound.^(1,24)

This study also observed a significant association between social aspects and characteristics of the ulcer. Such feature was also expected, as exudative wounds or wounds with a strong smell directly affect the patient's social life, often provoking social isolation, according to the findings of other authors.^(2,6) Beyond the physical hindrances and the financial expenses, chronic wounds bring about psychological and social implications encompassing family and social spheres, thus ratifying the complexity of this problem.

The limitations caused by the venous ulcer in the patient's personal life affect several aspects of his/her health-related quality of life. The impact of such chronic condition goes far beyond the body parts affected by the disease: it is extended to all other constitutive dimensions of his/her being.

In conclusion, the enhancement of the quality of life of patients with venous ulcer fundamentally depends both upon improvements in the clinical characteristics of the ulcer and in the offering of high quality health care services counting on a continuous, multiprofessional care planning that is capable of responding to the multiple aspects affected by the presence of the wound.

Conclusion

Overall, the quality of life of patients with venous ulcer was low. A special highlight should be given to the physical aspect and functional capacity. Health care characteristics influenced both the functional capacity and pain. The characteristics of the wound impacted the functional capacity, pain, general health status, vitality and social aspects. These results demonstrate the relevance of the quality of the rendered health care service, as well as the aspects of the wound towards the perception of quality of life of the person with venous ulcer.

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Collaborations

Dias TYAF, Costa IKF and Torres GV have contributed to the project conception, analysis and interpretation of data, drafting of the article, relevant critical review of the intellectual content, and final approval of the version to be published. Salvetti MG and Mendes CKTT collaborated with the analysis and interpretation of data, drafting of the article, and relevant critical review of the intellectual content.

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