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HEALTH-RELATED QUALITY OF LIFE IN PEOPLE WITH CHRONIC WOUNDS AND ASSOCIATED FACTORS

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ABSTRACT

Objective: to assess health-related quality of life in people with chronic wounds and its association with sociodemographic and health characteristics.
Method: a cross-sectional and analytical study conducted with 85 individuals with chronic wounds in a university hospital from Paraíba, Brazil. The data were collected from June to September 2019 through interviews guided by the *Medical Outcome Study 36-item Short-Form Health Survey* generic Quality of Life assessment instruments and the *Cardiff Wound Impact Schedule* specific tool for people with chronic wounds. The *Student*'s t, ANOVA, *Mann-Whitney*'s U, *Kruskal-Wallis* and *Kolmogorov-Smirnov* tests were applied to analyze the data, with 5% significance.
Results: there was predominance of aged and married women with venous wounds not healing for over 24 weeks. The mean score of the generic instrument, which was 35.08, indicated a negative association between the physical capacity domain and female gender; as well as between vitality and age over 60 years old; between emotional aspects and marital status; of functional capacity, limitation of physical activity and emotional aspects with lack of religious practices; and of functional capacity with worse financial situation, all with $p \leq 0.042$. The specific instrument had a mean score of 45.57 and presented negative associations in the physical domain with female gender; as well as between social life without religious practices and social life with worse financial situation, all with $p \leq 0.047$.
Conclusion: the scores of the specific and generic instruments indicated low Quality of Life influenced by factors such as female gender, advanced age, being divorced/separated, lack of religious practices and having financial problems.

DESCRIPTORS: Wounds and injuries. Quality of life. Patient-centered care. Surveys and questionnaires. Comprehensive health care. Nursing practice standards.

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QUALIDADE DE VIDA RELACIONADA À SAÚDE DE PESSOAS COM FERIDAS CRÔNICAS E FATORES ASSOCIADOS

RESUMO

Objetivo: avaliar a qualidade de vida relacionada à saúde de pessoas com feridas crônicas e sua associação com características sociodemográficas e de saúde.
Método: estudo transversal e analítico, realizado com 85 pessoas com feridas crônicas de um hospital universitário da Paraíba - Brasil. Os dados foram coletados de junho a setembro de 2019, por meio de entrevistas, norteadas pelos instrumentos de avaliação da qualidade de vida genérico - *Medical Outcome Study 36-item Short-Form Health Survey* e específico para pessoas com feridas crônicas - *Cardiff Wound Impact Schedule*. Para analisar os dados, aplicaram-se os testes t de *Student*, ANOVA, Teste U de *Mann-Whitney*, *Kruskal-Wallis* e *Kolmogorov-Smirnov,* com significância de 5%.
Resultados: predominaram mulheres idosas, casadas, com feridas venosas que não cicatrizavam há mais de 24 semanas. O escore médio do instrumento genérico, que foi de 35,08, apontou associação negativa entre o domínio capacidade física e o sexo feminino; vitalidade e idade acima de 60 anos; aspectos emocionais e estado civil; capacidade funcional, limitação de atividade física e aspectos emocionais com falta de práticas religiosas; capacidade funcional com pior situação financeira, todos com p≤0,042. O instrumento específico teve escore médio de 45,57 e apresentou associações negativas no domínio físico com o sexo feminino; vida social sem práticas religiosas e vida social com pior situação financeira, todos com p≤0,047.
Conclusão: as pontuações dos instrumentos específico e genérico indicaram baixa qualidade de vida influenciadas por fatores como sexo feminino, idade avançada, estar divorciado/separado, falta de práticas religiosas e ter problemas financeiros.

DESCRITORES: Ferimentos e lesões. Qualidade de vida. Assistência centrada no paciente. Inquéritos e questionários. Assistência integral à saúde. Padrões de prática em enfermagem.

CALIDAD DE VIDA RELACIONADA CON LA SALUD DE PERSONAS CON HERIDAS CRÓNICAS Y FACTORES ASOCIADOS

RESUMEN

Objetivo: evaluar la calidad de vida relacionada con la salud de personas con heridas crónicas y su asociación con características sociodemográficas y de salud.
Método: estudio transversal y analítico realizado con 85 personas con heridas crónicas en un hospital universitario de Paraíba - Brasil. Los datos se recolectaron entre junio y septiembre de 2019 por medio de entrevistas orientadas por el instrumentos genérico de evaluación de la calidad de vida de nombre *Medical Outcome Study 36-item Short-Form Health Survey* y la herramienta específica para personas con heridas crónicas: *Cardiff Wound Impact Schedule*. Para analizar los dados se aplicaron las siguientes pruebas: t de *Student*, ANOVA, U de *Mann-Whitney*, *Kruskal-Wallis* y *Kolmogorov-Smirnov,* con significancia del 5%.
Resultados: hubo predominio de mujeres de edad avanzada, casadas, con heridas venosas que no cicatrizaban hacía más de 24 semanas. La puntuación media obtenida en el instrumento genérico, que fue 35,08, señaló una asociación negativa entre el dominio capacidad física y el sexo femenino; entre vitalidad y edad superior a 60 años; entre aspectos emocionales y estado civil; entre capacidad funcional, actividad física limitada y aspectos emocionales y ausencia de prácticas religiosas; y entre capacidad funcional y peor situación financiera, todos con p≤0,042. El instrumento específico tuvo una puntuación media de 45,57 y presentó asociaciones negativas en el dominio físico con sexo femenino; al igual que entre vida social sin prácticas religiosas y vida social con peor situación financiera, todos con p≤0,047.
Conclusión: las puntuaciones de los instrumentos específico e genérico indicaron baja calidad de vida influenciada por factores como sexo femenino, edad avanzada, estar divorciado/separado, ausencia de prácticas religiosas y tener problemas financieros.

DESCRIPTORES: Heridas y lesiones. Calidad de vida. Atención centrada en el paciente. Encuestas y cuestionarios. Atención integral de la salud. Estándares de práctica en Enfermería.

INTRODUCTION

Chronic wounds and their repercussions on people's health have been a major challenge for public health since, in addition to causing multiple burdens for the affected person, family members, caregivers and the health system[1], they are among the health problems that can last several years due to the complex process of functional restoration, chronic inflammation and presence of underlying and refractory pathologies[2].

They are commonly referred to as hard-to-heal ulcers and do not evolve to an orderly and timely repair process to produce anatomical and functional integrity. With the increase in longevity, chronic wounds are increasingly prevalent in older adults. It is estimated that the prevalence of chronic wounds in the population is 2.2 per 1,000 inhabitants, with ulcers in the lower limbs (venous, arterial and mixed) and in the feet of diabetic people as the predominant ones[2].

People living with chronic wounds can present changes in the biopsychosocial and spiritual contexts due to the multiple physical and psychosocial factors caused by the injury[3]. The physical effects include pain, sleep and rest changes, mobility impairments, self-care deficits and inability to perform activities of daily living. Anxiety, depression, shame, changes in body image, emotional problems, discrimination and social isolation are some of the psychosocial factors also caused by the injury and that significantly compromise these individuals' Quality of Life[1,4–5].

Quality of Life (QoL) is a concept that emerges from people's perception in relation to their position in life, with regard to values, to the cultural system in which they are inserted, and to their goals, expectations, standards and worries[6].

Regarding the aspects of the health-disease process or health interventions, QoL has its own specificity, especially in chronic conditions, usually called Health-Related Quality of Life (HR-QoL). This construct represents the value that can be attributed to life or to the health status understood by the person, resulting from changes that occur due to harms caused to the functional condition, the perceptions and psychological and social factors when influenced by pathologies or diseases, treatments and health policies[7].

The HR-QoL assessment integrates subjective and multidimensional characteristics that encompass the physical, psychological, social, emotional and spiritual dimensions[8]. Therefore, it assumes an instrumental character, as it can provide health professionals with an important parameter for evaluating the impact of a given pathology, diagnostic or therapeutic intervention in the person's life, either in a positive or negative way.

HR-QoL assessment results are used contemporaneously as measures of patient-reported outcomes (PROs)[3] and are generally applied to quantify health in dimensions or domains, such as functional capacity, well-being, mobility, mental state, sensory function, cognition, social life and pain pattern, which can be generic or specific[9].

In the clinical practice, assisting people with chronic wounds is an almost exclusive responsibility of the Nursing team. For such purpose, in addition to developing technical skills and using technologies for the treatment, it is indispensable to know the effects of wounds on the patients' life. Due to its characteristics, a chronic wound alters the individuals' biopsychosocial and spiritual domains as well as the family structure, the team of professionals involved and, consequently, their HR-QoL[1].

Research on the HR-QoL of people with chronic wounds has helped to identify the challenges of having a wound and to create adaptive strategies, as wounds can cause significant changes in people's lives due to the time they take to heal, the etiology and the extent of the injury, with a significant impact on the well-being domain[3,5,10].

Although there are some studies on the assessment of HR-QoL in people with chronic wounds[3–4,10–11], practical application of the results of these evaluations, mainly using generic and

specific instruments, is still incipient to the present day. In the Brazilian Northeast region, no research study was found on HR-QoL in which the global and specific assessment of the problem was used in people with chronic wounds.

Thus, measuring HR-QoL in people with chronic wounds is a way of knowing how they feel about their health condition, which has been increasingly encouraged in the clinical practice, in auditing and in research. Its results are important health system performance indicators and can measure treatment efficacy in clinical trials and track the progress of an evidence-based treatment, as they provide significant information to guide clinical decision-making in the assessment, treatment, prognosis and the person's perception in relation to the care provided.

Therefore, the health professional's understanding about the importance of considering the HR-QoL assessment and incorporating this technological tool to the clinical practice is fundamental to promote comprehensive and holistic care centered on the person who experiences a chronic disease or condition. Thus, the objective of this study was to assess Health-Related Quality of Life in people with chronic wounds and its association with sociodemographic and health characteristics.

METHOD

This is a cross-sectional and analytical study, produced in accordance with the recommendations set forth in the *Strengthening the Reporting of Observational Studies in Epidemiology* (STROBE) checklist[12], at the outpatient and inpatient environments of a university hospital from João Pessoa, Paraíba - Brazil, and whose target audience were people with chronic wounds undergoing specialized treatment at a university hospital.

A total of 434 individuals were considered to comprise the sample, which corresponds to the total number of people with chronic wounds treated at this hospital in the last twelve months prior to data collection. In order to determine sample size, the simple random sampling method was used, considering a 95% confidence interval, a desirable margin of error of 5% and an estimate of 15.69%. Thus, the study sample consisted in 85 participants.

The following inclusion criteria were adopted: being 18 years of age or older, having a chronic wound for more than four weeks and being under specialized care by health professionals who are members of the service's skin commission during the data collection period. The subjects excluded were those affected by wounds of a neoplastic origin, due to the specificity of the healing process.

The data were collected from June to September 2019. To operationalize collection, an initial contact was made with the Nursing professionals from the sectors where the people undergoing monitoring for the treatment of wounds were assisted, in order to explain how the research would be carried out and its objectives.

In the outpatient sector, the patients were recruited before performing the dressing and, in the hospitalization units, while such dressing was applied. In the first place, those who met the selection criteria were invited to participate in the research and informed about its importance, objectives, risks and benefits and that they could withdraw from participating without any cost at any time. After accepting to participate in the research, the subjects signed the Free and Informed Consent Form (FICF), and individual interviews were conducted immediately after that, preserving their privacy.

All the information was collected by means of a structured questionnaire that included sociodemographic and clinical variables. The Visual Analogue Scale (VAS) was also used to measure intensity of the pain reported by the patient on a scale from 0 to 10.

HR-QoL was measured using two instruments validated in Brazil, namely: the generic HR-QoL instrument - *Medical Outcome Study 36-item Short-Form Health Survey* (SF-36) - adapted for Brazil[13], and the specific instrument to measure HR-QoL in people with wounds: *Cardiff Wound Impact Schedule* (CWIS)[14], Brazilian version.

Choice of the aforementioned instruments is due to the fact that the generic Quality of Life instruments assess physical, social, emotional and spiritual dimensions in a global way, and can be applied to healthy and sick individuals, regardless of the type or severity of the disease. On the other hand, those of a specific nature related to a condition or disease are considered more sensitive because they contain questions aimed at detecting particular effects of that disease on the HR-QoL of the people affected[15].

SF-36 consists of 36 items distributed into eight domains, namely: Functional capacity, Physical aspects, Pain, Overall health status, Vitality, Social aspects, Emotional aspects and Mental health). The final SF-36 score is obtained through the scores of the items in each domain, and the results are values that vary from 0 to 100 points, in which higher scores correspond to better Quality of Life[13].

CWIS has 47 items distributed across three domains: Well-being, Physical symptoms and everyday life, and Social life. For its calculation, the scores are transformed so that the values of the domains vary from 0 to 100, where higher values indicate better HR-QoL[14].

The variables investigated were the following: gender, age, marital status, schooling, religious practice, family arrangement, income and financial situation, comorbidities, presence and intensity of pain, and characteristics of the lesion (etiology, time of occurrence, size, tissue involvement, type of tissue in the wound bed, characteristics of exudate and edema). The data were entered into *Microsoft Office Excel* 2016 electronic spreadsheets, by double entry, and exported to the *Project for Statistical Computing* software (free statistical R program), version 3.5.2, to perform the statistical analyses.

The sociodemographic and clinical characteristics were analyzed using descriptive statistics such as means, medians, standard deviation, interquartile range, minimum and maximum, for the quantitative variables; and frequencies were employed for the qualitative variables.

Cronbach's *alpha* coefficient was used to assess internal consistency of the HR-QoL instruments. In the inferential analysis, the *Kolmogorov-Smirnov* test was performed to verify data normality; as well as *Kruskal Wallis* and *Mann-Whitney*'s U (nonparametric tests) and *Student*'s t and Analysis of Variance (ANOVA) (parametric comparative tests). A p-value ≤ 0.05 was adopted.

The research was approved by the Ethics and Research Committee of the Lauro Wanderley University Hospital, meeting the principles set forth in Resolution No. 466/2012 of the National Health Council.

RESULTS

Of the 85 participants, 45 (52.9%) were women and 40 (47.1%) were men; 39 (45.9%) were over 60 years of age; 48 (56.5%) were married or in a stable union, and 70 (82.4%) practiced some religion. As for schooling and income levels, 38 (44.7%) had Elementary School, 63 (74.1%) earned incomes of up to three minimum wages, and 39 (45.9%) considered that their income met, on a regular basis, both their needs and those of their family members.

In relation to the clinical data, 45 (52.9%) were hypertensive and 33 (38.8%) were diabetic. At the time of the interview, 73 (85.9%) stated pain intensity with 3 to 7 points in VAS, indicating moderate pain. As for the wound characteristics, venous ulcers, 23 (27.1%), were the most frequent; 53 (62.4%) had a non-healing wound time of more than 24 months, and 69 (81.2%) had lesions smaller than 50 cm^2. Regarding the aspect of the lesion, 59 (69.4%) presented compromise up to the hypodermis; 53 (62.4%), with serous exudate; 42 (49.4%), in a moderate amount; and 48 (56.5%) had local edema.

The SF-36 and CWIS instruments presented good to excellent internal consistency levels, with *Cronbach*'s α coefficients of 0.85 and 0.93, respectively.

The mean HR-QoL score, presented in Table 1 below, were 35.08 for overall HR-QoL (SF-36) and 45.57 for specific HR-QoL (CWIS). Both of them indicated low HR-QoL levels.

Table 1 – Mean and standard deviation of the SF-36 and CWIS domains. João Pessoa, PB, Brazil, 2019. (n=85)

Domains	SF-36				
	Mean	Median	Standard Deviation	Minimum	Maximum
Functional capacity	14.82	5.0	19.39	0	100
Physical aspects	2.35	0.0	13.15	0	100
Pain	58.25	52.00	32.16	0	100
Overall health status	49.91	50.00	12.74	17.00	80.00
Vitality	51.12	50.00	14.21	15.00	90.00
Social aspects	38.53	37.50	18.62	0	100
Emotional aspects	5.09	0.0	21.52	0	100
Mental health	60.56	60.00	14.62	20.00	92.00
Overall mean	35.08				
Domains	**CWIS**				
	Mean	Median	Standard Deviation	Minimum	Maximum
Well-being	40.76	39.30	17.43	0	89.30
Physical symptoms and everyday life	51.61	52.10	18.70	12.50	93.80
Social life	44.35	42.90	18.52	10.70	89.30
Overall mean	45.57				

Table 2 shows the associations between the variables and the HR-QoL instruments. In relation to the sociodemographic variables, SF-36 indicated that the female gender presented the worst score in the functional capacity domain when compared to males (p=0.023). Aged patients obtained higher scores in the vitality domain (p=0.016), and the separated/divorced participants had higher scores for the physical aspects (p=0.042) and emotional aspects (p=0.014) domains when compared to the other patients.

Absence of a religious practice exerted a negative influence on the scores of the functional capacity (p=0.019), physical aspects (p<0.01) and emotional aspects (p=0.012) domains. The participants who described their financial situation as ‘excellent’ and ‘very good’ obtained the highest scores in the functional capacity domain (p=0.010) and in overall health status (p=0.026) when compared to the interviewees who declared having fair, bad or extremely low financial situations.

In CWIS, the sociodemographic variables also presented significant differences between the domains. Female individuals obtained the worst score in the physical symptoms and everyday life domain (p=0,046). Absence of a religious practice exerted a negative influence on the score of the social life domain (p=0.025). The participants who described their financial situation as excellent obtained higher scores in the social life domain (p=0.006), and those who reported having a regular or bad situation had the lowest scores (Table 2).

With regard to the clinical profile, as shown in Table 3, only systemic arterial hypertension was significantly associated with the SF-36 vitality domain (p=0,039). As for the characteristics of the wounds, the SF-36 instrument indicated that patients who had lesions larger than 150 cm^2 had lower scores in the functional capacity (p=0.003), vitality (p=0.001), social aspects (p=0.006) and mental health (p=0.006) domains. In relation to the type of tissue, necrotic lesions presented the lowest scores in the overall health domain (p=0,011), and the participants with wounds with high amount of exudate drainage had low scores in the functional capacity domain (p = 0.044).

Table 2 – Association between the sociodemographic variables of the people with chronic wounds and the SF-36 and CWIS domains. João Pessoa, PB, Brazil, 2019. (n=85)

Variable	SF-36							CWIS			
	FC‖	PA¶	Pain	OHS**	VITA††	SA‡‡	EA§§	MH‖‖	WB¶¶	PSEL***	SL†††
	p	*p*	*p*	*p*	*p*	*p*	*p*	*p*	*p*	*p*	*p*
Female gender	**0.023***	0.629*	0.186*	0.154‡	0.121*	0.271*	0.222*	0.585‡	0.118*	**0.046**‡	0.057*
Age (≥ 60 years old)	0.621†	0.486†	0.315†	0.516†	**0.016**§	0.998†	0.968†	0.069§	0.614§	0.891§	0.065†
Marital status (Divorced)	0.597†	**0.042**†	0.258†	0.686§	0.624†	0.684†	**0.014**†	0.875†	0.091§	0.687§	0.587†
Schooling (Illiterate)	0.112†	0.551†	0.568†	0.749§	0.527§	0.174†	0.691†	0.931§	0.369§	0.490§	0.775†
Religion (No practice)	**0.019***	**<0.01***	0.130†	0.386*	0.125*	0.761*	**0.012**§	0.626‡	0.355*	0.092‡	**0.025***
Living with someone (Alone)	0.726†	0.524†	0.444†	0.696§	0.714†	0.548†	0.753†	0.914†	0.967§	0.438§	0.567†
Monthly income (≤ 1 minimum wage)	0.395†	0.585†	0.541†	0.547§	0.519†	0.907†	0.459†	0.519†	0.364§	0.056†	0.098†
Financial situation (Excellent/Very good)	**0.010**†	0.831†	0.154†	**0.026**§	0.837†	0.059†	0.775†	0.155§	0.393§	0.069§	**0.006**§

**Mann-Whitney* test; †*Kruskall-Wallis* test: ‡t test; §ANOVA; ‖FC: Functional Capacity; ¶PA: Physical Aspects; **OHS: Overall Health Status; ††VITA: Vitality; ‡‡SA: Social Aspects; §§EA: Emotional Aspects; ‖‖MH: Mental Health; ¶¶WB: Well-Being; ***PSEL: Physical Symptoms and Everyday Life; †††SL: Social Life.

Table 3 – Association between the clinical characteristics of the people with chronic wounds and the SF-36 and CWIS domains. João Pessoa, PB, Brazil, 2019. (n=85)

Variable	SF-36								CWIS		
	FC‖	PA¶	PAIN	OHS**	VITA††	SA‡‡	EA§§	MH‖‖	WB¶¶	PSEL***	SL†††
	p	*p*	*p*	*p*	*p*	*p*	*p*	*p*	*p*	*p*	*p*
Arterial hypertension	0.867*	0.659*	0.296*	0.665¹	**0.039**‡	0.651*	0.222*	0.698‡	0.312*	0.593‡	0.591*
Diabetes Mellitus	0.974*	0.337*	0.765*	0.662‡	0.405‡	0.903*	0.991*	0.935‡	0.438‡	0.900‡	0.925*
Heart diseases	0.806*	0.648*	0.290*	0.598‡	0.268*	0.964*	0.542*	0.936‡	0.169*	0.680*	0.594*
Stroke	0.240*	0.683²	0.403*	0.865‡	0.479*	0.304*	0.583*	0.793‡	0.358‡	0.449*	0.375*
Pain (Intense)	0.798†	0.527†	**0.001**†	0.269§	0.126†	0.103†	0.335†	0.392§	0.064†	**0.017**§	0.141§
Etiology	0.529†	0.739†	0.464†	0.690†	0.414†	0.252†	0.303†	0.166†	0.972§	0.247§	0.306†
Injury time (≥24 weeks)	0.541†	0.396†	0.555†	0.935†	0.849†	0.482†	0.319†	0.954§	0.180§	**0.033**§	0.9955†
Size (> 150 cm^2)	**0.003**†	0.690†	0.620†	0.117§	**0.001**§	**0.006**†	0.919†	**0.006**†	0.100†	0.066§	**0.049**§
Tissue impairment (Hypodermis)	0.170†	0.508†	0.242†	0.093§	0.654§	0.565†	0.315†	0.738†	0.249§	0.064§	**0.006**§
Type of tissue (Necrotic)	0.092†	0.424†	0.067†	**0.011**§	0.151§	0.849†	0.372†	0.456§	0.149§	**0.047**§	0.365§
Exudate (Serous)	0.385†	0.972†	0.120†	0.318§	0.829§	0.399†	0.058†	0.873†	0.193§	0.093§	0.175§
Exudate volume (High)	**0.044**†	0.711†	0.090†	0.083§	0.671§	0.553†	0.894†	0.297§	0.135†	**0.026**†	0.132†
Edema	0.939*	0.127*	0.177*	0.389‡	0.368‡	0.779*	0.896†	0.729†	0.085*	0.369‡	0.696*

**Mann-Whitney* test; †*Kruskall-Wallis* test: ‡t test; §ANOVA; ‖FC: Functional Capacity; ¶PA: Physical Aspects; **OHS: Overall Health Status; ††VITA: Vitality; ‡‡SA: Social Aspects; §§EA: Emotional Aspects; ‖‖MH: Mental Health; ¶¶WB: Well-Being; ***PSEL: Physical Symptoms and Everyday Life; †††SL: Social Life.

According to Table 3, the results of the CWIS instrument for clinical variables showed that intense pain (p=0.033) and lesions present for ≥ 24 weeks (p=0,033) were significant for the physical symptoms and everyday life domain. Regarding the degree of tissue impairment, the wounds affecting the hypodermis level obtained low scores in the social life domain (p=0.006). Necrotic-type tissue (p=0.047) and wounds with intense exudate amount (p=0.026) obtained scores indicative of worse QoL in the physical symptoms and everyday life domain.

DISCUSSION

As an indicator of the result of interventions in the health area, studies on the impact of wounds on people's Quality of Life represent an international trend that can also be applied to Brazilian reality. This research presents QoL scores obtained by people with chronic wounds and the main factors that can be correlated to the change in the HR-QoL levels.

The sociodemographic and clinical profile found in this study corroborates the findings of other surveys, including a systematic review carried out with people with chronic wounds[16–17], in which it was highlighted that this type of injury is more recurrent among women, aged individuals, people who live with partners and family members, with a low schooling and income levels below the minimum standard, as well as with pre-existing chronic diseases such as arterial hypertension, metabolic diseases and cardiovascular impairment.

The results obtained in this research showed that most of the individuals presented a negative perception of HR-QoL, as measured with the SF-36 (generic) and CWIS (specific) instruments. This data corroborates those of a comparative study that evaluated HR-QoL in patients with venous ulcers treated in Primary Care in two cities from Brazil and Portugal, which presented a lower mean score across the SF-36 domains in both samples, although the means were significantly lower in Brazil[4].

The assessment of HR-QoL integrates subjective and multidimensional characteristics in the issues related to the health-disease process determining and conditioning factors. In this context, the presence of chronic wounds is directly related to QoL due to the alterations in the individual's physical and psychosocial functioning[10,18].

Regarding the sociodemographic characteristics, the female gender was negatively correlated with the functional capacity SF-36 domain and to the physical symptoms and everyday life and social life CWIS domains. A multicenter study found that women with chronic wounds have worse overall HR-QoL scores when compared to men, although, by etiology group, men had lower scores in the physical dimension[19]. This fact can be explained by the smaller amount of muscle mass, hormonal conditions, gender-specific comorbidities and their social role in society[20].

Advanced age was significantly associated with the vitality and mental health SF-36 domains and with the social life CWIS domain. From a biological point of view, aging is signaled by progressive cellular and tissue changes, which may come to exert impacts on aged people's functional capacity and predispose them to chronic diseases. These factors contribute to increasing the risk of the skin losing its integrity and, consequently, of ulcers appearing[21]. Therefore, in addition to aged people presenting these characteristics of senescence, the emergence of a chronic wound will potentially affect the quality of their life, both in terms of physical, mental and social health.

Separated or divorced people presented scores indicative of worse QoL in the physical aspects and emotional aspects SF-36 domains an in the well-being CWIS domain. A study points out that, as a source of social support network, the family is an important factor for HR-QoL[22]. Perceptions of healthy family functioning were predictors of better mental Quality of Life[23]. Therefore, the study indicated that family relationships can provide psycho-emotional and social support both for coping with the disease and for therapeutic adherence.

Lack of religious practice was associated with lower scores in the functional capacity, physical aspects, emotional aspects SF-36 domains, as well as in physical symptoms and everyday life and social life CWIS domains. Religion/Spirituality is part of the health context and was identified as a strategy to face critical life situations, as well as a source of support that can increase the purpose and meaning of human existence, favoring adaptation to adverse situations, such as physical diseases, psychological distress and social issues[24–25].

The problems caused by the financial situation presented a negative association with the functional capacity and overall health status SF-36 domains and with the social life CWIS domain. It is believed that the economic situation can directly interfere with healing, therapy and rehabilitation of patients with chronic wounds, as poor socioeconomic conditions interfere both with access to health services and with the use of therapeutic technologies[26].

Regarding the influence exerted by comorbidities, systemic arterial hypertension was negatively correlated with the vitality SF-36 domain. It is known that chronic conditions are predictive factors for the development of chronic wounds or delays in healing, with a consequent impact on HR-QoL[26].

The pain reported by the participants of this study was associated with the pain SF-36 domain. In some studies[27–28], pain is described as a negative factor that affects HR-QoL, as it restricts mobility, causes discomfort and sleep deprivation, interferes with interpersonal relationships and social and family life, and causes the emergence of psychological disorders such as depression and anxiety[1].

The time and lesion size, tissue involvement, type of tissue and exudate characteristics tissue were associated with physical symptoms and everyday life and social life (CWIS). In turn, according to SF-36, type of tissue and exudate volume presented significant associations with its functional capacity and overall health status domains. The clinical profile of the chronic wound can predict signs of infection, such as exudate aspect and predominance of necrotic tissue, which exert a significant impact on HR-QoL[29–30]. Thus, a detailed clinical assessment of the key symptoms can provide appropriate treatment management and contribute to improving the HR-QoL level.

Chronic wounds can last for many years and, consequently, cause physical (pain frequency and intensity, insomnia, lack of appetite), psychological (low self-esteem, apathy, lack of motivation) and social (inability for work, constraints, social isolation) harms, which may have repercussions on low Quality of Life and contribute to the person coming to believe less in the possibility of a cure[18,23].

A number of research studies suggest that, when measuring HR-QoL in people who are facing adverse health situations, especially chronic conditions, it is possible to identify, in an objective and standardized way, factors that influence QoL. This is a standard that can be implemented both in clinical care and in health research, as it presents the potential to guide effective strategies and care, adherence to the treatment, produce result indicators on performance of the health system and guide public health policies that prioritize improvements in care[30–31].

Choice of a HR-QoL questionnaire should be based on the profile and health conditions of the clientele. The set of items to be measured correspond to the requirements of the context to be used and/or of the research study to be conducted. In addition to that, HR-QoL instruments must be adapted to the local reality and be validated with psychometric, statistical and performance properties evidenced in previous studies that provide better evidence to select the instrument.

As a limitation, this study presented findings from a single setting, which may not reflect the reality of other Brazilian states and, consequently, precluding generalizations. Although it is not possible to point out causal relationships due to the cross-sectional design, this study made it possible to explore associations and raise hypotheses to guide future research studies, as it pointed out that low HR-QoL levels in people with chronic wounds are determined by multidimensional aspects. For this reason, follow-up research about socioeconomic and clinical aspects that influence HR-QoL in the clientele under study should be encouraged and deepened.

CONCLUSION

The participants presented low scores in specific and overall HR-QoL. However, the specific Quality of Life domains proved to be more sensitive than the generic ones to evidence an association between chronic wounds and HR-QoL. Age over 60 years old, not practicing religious rites, low economic conditions, presence of pain and extensive wounds in terms of size and with an intense amount of exudate drainage were the variables associated with worse HR-QoL.

The study results indicated that health professionals involved in the therapeutic process of people with chronic wounds, especially nurses, can include the assessment of HR-QoL in their professional routine, using questionnaires through which they can identify indicators that affect QoL, and plan and direct preventive actions, diagnostic and therapeutic interventions focused on the needs identified, with a view to valuing uniqueness of the person aiming at comprehensive care.

The research was carried out with a generic questionnaire and a specific one, which provides a more comprehensive assessment of HR-QoL, as both have substantial reliability and validity evidence and are culturally adapted in a variety of populations, even in Brazil.

It is concluded that understanding the correlations between chronic wounds and the Quality of Life dimensions will help create strategies to improve the managerial processes of the management of chronic wounds beyond the local wound treatment, not only to reduce the risks of complications and establish physiological healing, but also to increase the health potentialities within the person's life contexts.

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NOTES

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CONFLICT OF INTEREST

There is no conflict of interest.

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