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SOCIAL ULCER AND SOCIO-EMOTIONAL ASPECTS OF THE QUALITY OF LIFE OF PEOPLE LIVING WITH VENOUS ULCER

ÚLCERA SOCIAL E ASPECTOS SOCIOEMOCIONAIS DA QUALIDADE DE VIDA DE PESSOAS VIVENDO COM ÚLCERA VENOSA

ÚLCERA SOCIAL Y ASPECTOS SOCIOEMOCIONALES DE LA CALIDAD DE VIDA DE LAS PERSONAS QUE VIVEN CON ÚLCERA VENOSA

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ABSTRACT

Introduction: Venous ulcers are skin breakdown related to chronic venous insufficiency. Its prevalence increases with age, with a rate of 3% to 4% in people over 65 years of age. It is known that the presence of this injury in the elderly population can be a factor that negatively affects their Health-Related Quality of Life.

Objective: This study aims to analyze the the relationship between venous ulcer healing in the elderly and quality of life, considering physical, emotional, and social aspects, with an emphasis on the recognition of a social ulcer.

Methodology: This is a longitudinal study with a quantitative approach carried out from August 2020 to November 2021, which investigated Quality of Life scores at two different moments.

Results: The study identified a profile of female individuals over 60 years old, with low income and education. The emotional aspects showed worsening in the second moment, even with the healing process of part of the sample.

Conclusion: It is concluded that the emotional aspects of elderly people living with venous ulcers are not easily modified through therapeutic interventions that promote wound healing.

Keywords: Aged; Quality of Life; Nursing; Varicose Ulcer.

RESUMO

Introdução: A úlcera venosa trata-se da ruptura de pele relacionada à insuficiência venosa crônica. Sua prevalência aumenta com a idade, com taxa de 3% a 4% em pessoas com mais de 65 anos. Sabe-se que a presença dessa lesão na população idosa pode ser um fator que afete negativamente a sua Qualidade de Vida Relacionada à Saúde.

Objetivo: Este estudo tem como objetivo analisar a relação entre a cicatrização de úlceras venosas em idosos e a qualidade de vida, considerando aspectos físicos, emocionais e sociais, com ênfase no reconhecimento de uma úlcera social.

Metodologia: Trata-se de estudo longitudinal com abordagem quantitativa realizada no período de agosto de 2020 a novembro de 2021, que realizou investigação dos escores de Qualidade de Vida em dois momentos distintos.

Resultados: O estudo identificou um perfil de indivíduos do sexo feminino mais de 60 anos, de baixa renda e escolaridade. Os aspetos emocionais demonstraram piora no segundo momento, mesmo com a evolução à cicatrização da úlcera em parte da amostra.

Conclusão: Conclui-se que os aspetos emocionais em idosos vivendo com úlcera venosa não

são facilmente modificados a partir de intervenções terapêuticas que promovam a cicatrização da ferida.

Palavras-chave: Enfermagem; Idoso; Qualidade de Vida; Úlcera Varicosa.

RESUMEN

Introducción: Las úlceras venosas son lesiones de la piel relacionadas con la insuficiencia venosa crónica. Su prevalencia aumenta con la edad, con una tasa del 3% al 4% en personas mayores de 65 años. Se sabe que la presencia de esta lesión en la población anciana puede ser un factor que afecte negativamente su Calidad de Vida Relacionada con la Salud.

Objetivo: Este estudio tiene como objetivo analizar la relación entre la cicatrización de úlceras venosas en personas mayores y la calidad de vida, considerando aspectos físicos, emocionales y sociales, con énfasis en el reconocimiento de una úlcera social.

Métodos: Se trata de un estudio longitudinal con enfoque cuantitativo realizado entre agosto de 2020 y noviembre de 2021, que investigó los puntajes de Calidad de Vida en dos momentos diferentes.

Resultados: El estudio identificó un perfil de mujeres mayores de 60 años, con bajos ingresos y educación. Los aspectos emocionales mostraron un empeoramiento en el segundo momento, incluso con el proceso de curación de parte de la muestra.

Conclusión: Se concluye que los aspectos emocionales de las personas mayores que viven con úlceras venosas no se modifican fácilmente mediante intervenciones terapéuticas que promuevan la cicatrización de heridas.

Descriptores: Anciano; Calidad de Vida; Enfermería; Úlcera Varicosa.

INTRODUCTION

A Venous Leg Ulcer (VLU) can be defined as a rupture of the skin below the knee that does not heal in a timely manner and is associated with chronic venous insufficiency (CVI)⁽¹⁾. Due to the chronic nature of this condition and other relevant factors such as population aging, diabetes, and obesity, the incidence of VLU is increasing worldwide. It is estimated that 10% of the global population will develop a hard-to-heal wound during their lifetime, with 60% of these cases being VLUs^(2,3).

It is known that the prevalence of VLUs increases with age, with a rate of 3% to 4% among those over 65 years old⁽²⁾. There are many reasons for this, which may be intrinsically connected. Older adults are more likely to have underlying conditions that impair healing, such as arterial hypertension (AH), diabetic microangiopathy, and peripheral arterial disease^(4,5). In addition to senility, which is the development of a pathological condition due to emotional stress, accidents, or illness, aging-related processes may also be present, such as an event currently referred to as “inflammaging”.

In the context of VLUs, individuals often experience repeated cycles of ulceration, healing, and recurrence, which place them in a state of chronicity. These cycles are typically costly and can impose limitations on patients’ lives, affecting various dimensions of Health-Related Quality of Life (HRQoL). Regardless of the cause, psychological stress triggers physiological changes mediated by neural, humoral, and immune systems⁽⁶⁾. Beyond this perspective, healthcare professionals must also consider the impact of emotional, social, and economic aspects on the lives of these individuals, which contribute to the severe consequences of CVI, such as ulceration and recurrence.

Based on this rationale, the present study aims to analyze the relationship between the healing of venous ulcers (VUs) in older adults and health-related quality of life (HRQoL), considering physical, emotional, and social aspects, through a longitudinal study conducted over one year. The analysis emphasizes the importance of recognizing a “social ulcer,” a concept that has been little explored within the context of older adults’ healthcare.

MATERIAL AND METHOD

This is a longitudinal study with a quantitative approach, conducted from August 2020 to November 2021. The study took place in a specialized healthcare center for the prevention and treatment of complex wounds located in the municipality of Parnamirim, Rio Grande do Norte, Brazil. Elderly individuals with venous ulcers (VLUs) were evaluated at two distinct points, with a one-year interval, assessing indicators related to quality of life, sociodemographic, clinical, and care-related aspects. The estimated population was 205 individuals with VLUs in this municipality during the period immediately preceding the study’s start. After sample calculation for a finite population, it was determined that 112 participants were required.

Inclusion criteria were: being registered in Primary Health Care (PHC); having at least one active venous ulcer, as indicated by an ankle-brachial index (ABI) greater than 0.8 and less than 1.3. Exclusion criteria included: having a mixed arteriovenous ulcer or an ulcer of non-venous origin; and being discharged from care due to death, relocation, or complete healing. Patients were evaluated in September 2020 and again in September 2021. Nine individuals were lost due to death, relocation, or complete healing, resulting in 103 participants completing the study.

Data collection involved face-to-face interviews and clinical evaluations conducted by researchers in a quiet, private environment. The following questionnaires were used to investigate quality of life scores: the Charing Cross Venous Ulcer Questionnaire (CCVUQ) and the Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36). It is important to note that the CCVUQ is specifically designed to assess quality of life in populations with venous ulcers, while the SF-36 is a general measure of health-related quality of life (HRQoL). The CCVUQ scores range from 0 to 100, with higher scores indicating worse outcomes⁽⁷⁾. In contrast, SF-36 scores also range from 0 to 100, but lower scores indicate poorer quality of life⁽⁸⁾.

The data were tabulated and organized in Microsoft Excel[®] spreadsheets and presented in tables, then exported for statistical analysis using the Statistical Package for Social Science (SPSS) for Windows, IBM version 20.0. The Kolmogorov-Smirnov test confirmed that the sample was not normally distributed. Descriptive analysis with absolute and relative frequencies was used to characterize the population based on sociodemographic and clinical variables. Percentiles and the non-parametric Mann-Whitney U test were employed to assess differences in domain scores for quality of life. The sign test was used to compare quality of life across the two evaluation points. All tests applied a 5% margin of error, a 95% confidence interval (CI), and a significance level of $p < 0.05$ ^(9,10).

The research was approved by the Research Ethics Board of the Federal University of Rio Grande do Norte (approval number 156.068). Before data collection, all participants were informed of the study's objectives and significance, as well as its risks and benefits. Those who agreed to participate signed an informed consent form. Participants were identified only by their initials, and their data were securely stored on a password-protected computer.

RESULTS

The main characteristics of the 103 individuals studied were as follows: female (72.8%, $p < 0.001$), over 60 years old (66.0%, $p = 0.001$), with income up to one minimum wage (82.5%), unemployed (79.6%, $p < 0.001$), and with education up to elementary school (79.6%, $p < 0.001$). Comparing the first assessment with the follow-up a year later, the study found that 41.7% of the patients had achieved complete healing of their ulcers. Those whose wounds did not heal showed signs and symptoms of a recalcitrant ulceration pattern, including tissue deterioration in the wound bed, worsening periwound skin, and increased exudate levels.

A previous analysis of the global quality of life characteristics from both instruments revealed that physical aspects were not only the most severely impacted when all patients had open wounds but also the most responsive to improvements following wound healing (after one year). On the other hand, emotional aspects showed a curious pattern between the two time points. After one year, even though more than 40% of the patients had achieved healing, emotional aspects remained nearly unchanged, as reported by the CCVUQ, or even worsened, as indicated by the SF-36, a finding that deserves special attention. Interestingly, emotional aspects were among the worst-scoring indicators in both questionnaires.

Table 1⁷ highlights the quality-of-life aspects related to the emotional and social well-being of individuals with VLUs: emotional aspects, mental health, and social role, as extracted from the SF-36; and emotional state and social interaction, as obtained from the CCVUQ. Additionally, the table presents the total scores from both instruments and compares the results between the initial assessment and the follow-up after one year.

As shown in the table above, the sign test revealed a decline in emotional aspects after one year, as evaluated by the SF-36 ($p < 0.001$). The CCVUQ showed a slight decline in emotional state after one year, though without statistical significance ($p = 0.920$). Mental health (SF-36) showed a minimal improvement, and social role (SF-36) demonstrated statistically significant improvement ($p < 0.001$) after one year. The overall quality-of-life scores improved in both instruments, which can be attributed to other quality-of-life domains not represented here, such as physical and functional aspects.

DISCUSSION

From the presented results, it is noteworthy to observe the deterioration of emotional aspect scores in older adults with venous ulcers (VLUs) after one year, even when a relevant portion of these individuals progressed to complete healing. Understanding the specifics of healing hard-to-heal wounds in the elderly population is not a simple task, especially within a complex socioeconomic and psychological context. In this scenario, the clinical manifestations of the ulcer interact with biological factors, such as the presence of comorbidities and the chronicity of these conditions; with psychological factors, like social isolation and self-efficacy; and they also interact with the social and spiritual factors of the person with an ulcer.

In agreement with the findings of this research, a study investigating the relationship between quality of life (QoL) and the severity of VLUs revealed that one of the main findings was that emotional aspects had the most significant impact on quality of life⁽¹¹⁾. The average score obtained through the Charing Cross Venous Ulcer Questionnaire (CCVUQ) was 60.58 ± 16.04 , with an average emotional state score of 77.67 ± 17.34 ⁽¹¹⁾. The authors argued that the concern over non-healing wounds and the time spent thinking about healing generate constant worries and emotional stress.

It is also relevant to recognize that the causal relationship between emotional stress and wound healing can be bidirectional. In this way, both psychological stress leads to clinically relevant delays in wound healing, and deficient healing generates emotional deficits^(12,13). Biologically, the influence of emotions on healing is mediated by the regulatory response of the immune system, which is responsible for maintaining a dynamic balance between the biological functioning of body systems and the environment⁽⁶⁾. Disturbance of this balance can be precipitated by psychological stress, which may lead to delayed healing⁽⁶⁾. Thus, emotions have a direct impact on wound healing as well as on health-related quality of life (HRQoL).

The finding that greater severity of symptoms related to chronic venous insufficiency (CVI), or greater severity of ulcer manifestations, directly and negatively affects quality of life indicators is well established in the literature^(11,14,15). In a longitudinal study with VLU patients, it was identified that individuals with a higher degree of ulcer severity had significantly worse QoL indicators⁽¹⁴⁾. Furthermore, 42% of the variance in QoL was explained by demographic factors, clinical characteristics of the lesion, and disease severity⁽¹⁴⁾. In the present study, individuals who did not progress to complete healing within a year exhibited clinical characteristics of greater complexity in the wound bed, and consequently, greater tissue deterioration or severity of the ulcer.

In a recent study on HRQoL in people with VLUs, it was demonstrated that the lower the patient's socioeconomic status, the lower the quality of life scores. Moreover, the more severe the ulcer, the lower the scores related to the physical and mental aspects of QoL⁽¹⁵⁾. Thus, there is a certain convergence in the literature suggesting that characterizing an unfavorable socioeconomic profile, greater clinical severity, and chronicity of the ulcer have a significant correlation with quality of life. It is also noted that the physical health of the population with VLUs is more directly affected by the presence of the wound than their psychological health⁽¹⁵⁾.

When discussing the relationship between social factors, emotional aspects, and QoL, it is important to consider the entire life context of these individuals, which includes social status, education level, occupation, and feelings of personal achievement. It is common for studies involving populations with VLUs to find samples with low educational levels, which is consistent with the present study^(11,14-16). The definition of stress encompasses the relationship between the person and the environment in which they live, being evaluated by the individual as exhausting or exceeding their resources and putting their well-being at risk⁽⁶⁾.

Having clarity regarding these elements that involve the life of a person with a VLU is essential for understanding the impact of treatment-related actions. According to what has been pointed out by other researchers, it can be inferred that the physical aspects constituting QoL are directly caused by the wound and can be more easily modified through healing interventions aimed at the lesion. In contrast, emotional aspects, while related to the lesion, are deeply rooted in the individual's life issues that go beyond the ulcerative dimension. Thus, emotional deficits seem to persist even when the wound is healed.

Considering all these aspects, there is literature that recognizes intrinsically social issues as maintainers of active ulcers⁽¹⁷⁾. The isolation and need for socialization of vulnerable individuals may indicate a need for a support network and emotional support. Thus, there are cases where the patient does not wish for the wound to heal in order to maintain contact with the healthcare provider, which can be particularly relevant for patients who are already at risk, such as the elderly. Additionally, considering the economic context, there are cases where maintaining the lesion may also imply the continuation of a financial benefit. Finally, the author contributes to defining this causality of maintaining the active ulcer as a social ulcer, highlighting a concept that has a certain invisibility in the eyes of political authorities and health professionals⁽¹⁷⁾.

CONCLUSION

From the current research, it is concluded that emotional aspects in older adults living with VLUs are not easily modified through therapeutic interventions promoting healing in its biological dimension: the healing of the wound. The dimension of emotional aspects and social interaction should be a pressing concern in the comprehensive care of individuals with chronic wounds, especially among the elderly. This population is naturally at greater risk for isolation and reduced social participation.

Knowing that social participation and emotional aspects have a significant impact on well-being and quality of life, it becomes necessary to rethink the therapeutic model offered to elderly patients with venous ulcers. Care should focus not only on clinical aspects but also on other often-neglected dimensions, such as psychological and emotional support and social assistance. Society as a whole should be concerned with the integration of these individuals into social life, which can be minimally provided by ensuring appropriate referrals within the health system, such as the need for psychological and social support.

In addition to attention to these issues by professionals and the healthcare system, the results of these studies suggest the relevance of reflecting on the interaction between economic and social factors in maintaining an active ulcer. Thus, public policies should anticipate the influence of this context on the perpetuation of the cycle of chronicity of lesions, as well as propose plausible resolutions to the problem of a social ulcer.

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Authors' contributions/Contributos dos autores

MLO: Conceptualization, conduct of the research, and writing of the original manuscript.

MMO: Conduct of the research, data analysis.

IA: Discussion, reviewing, and editing of the original manuscript.

ST: Conceptualization and revision of the original manuscript.

AC: Conceptualization and revision of the original manuscript.

GT: Methodology, project administration, revision of the original manuscript.

All authors have read and agreed with the published version of the manuscript.

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Table 1 - Comparison of social and emotional aspects of quality of life in elderly individuals with venous leg ulcers after one year. Parnamirim, Brazil, 2024.[^]

| Percentiles of quality of life(qol) | 1 st moment Percentiles | | | 2 nd moment Percentiles | | | Signal test | | | p-value |
|-------------------------------------|------------------------------------|------|------|------------------------------------|------|------|-------------|-------------|-------------|-------------------|
| | 25 | 50 | 75 | 25 | 50 | 75 | + | = | - | |
| SF-36 | | | | | | | | | | |
| Emotional aspects | 33.3 | 66.7 | 66.7 | 00.0 | 00.0 | 66.7 | 25.0 | 17.0 | 61.0 | < 0.001 |
| Mental health | 52.0 | 56.0 | 64.0 | 48.0 | 60.0 | 64.0 | 44.0 | 19.0 | 40.0 | 0.743 |
| Social function | 12.5 | 37.5 | 37.5 | 50.0 | 50.0 | 62.5 | 79.0 | 12.0 | 12.0 | < 0.001 |
| Total SF | 28.0 | 33.6 | 40.0 | 35.2 | 38.4 | 57.4 | 72.0 | 00.0 | 31.0 | < 0.001 |
| CCVUC | | | | | | | | | | |
| Emotional state | 37.9 | 57.5 | 70.4 | 20.7 | 56.8 | 78.7 | 48.0 | 05.0 | 50.0 | 0.920 |
| Social interaction | 43.7 | 65.4 | 71.8 | 21.6 | 51.7 | 75.7 | 46.0 | 03.0 | 54.0 | 0.484 |
| Total CCVUQ | 44.6 | 56.0 | 66.7 | 21.0 | 52.5 | 77.0 | 52.0 | 01.0 | 50.0 | 0.921 |