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QUALITY OF LIFE IN PEOPLE WITH LEG ULCER, INTEGRATIVE REVIEW

Daniela Alves - Nurse, Graduated in Wound Management Intervention, UCCLDM São Tiago de Urra

Inês Nunes - Nurse, Graduated in Wound Management Intervention, Unidade Local de Saúde do Norte Alentejano

Maria do Céu Mendes Pinto Marques - PhD in Psychology. Professor Coordinator. Universidade de Évora/Department of Nursing

Maria Vitória Casas Novas - Master in Human Ecology. Associate Professor. Universidade de Évora/ Department of Nursing

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ABSTRACT

Objective: To identify the main changes in the daily life of people with leg ulcer and how that affects the person's quality of life. **Methodology**: We used the methodology PI [C] OD and selected four research articles, taken from EBSCO, PubMed, and EWMA. **Results**: The main changes identified in the people's daily live with leg ulcers are physical (pain, decreased mobility, presence of exudate, bad smell from the wound and change in the style of clothing), psychological (sleep disorders, depression, anxiety, feelings of rejection and low self-steem), social (isolation, restriction in leisure activities, inability to perform household chores). **Conclusions**: The literature about the person's quality of life with leg ulcer reported a significant impact in the daily life. The care provided by nurses should be centered on the person, integrating all the kind of needs and the leg ulcer must not be the sole focus of care.

Descriptors: Quality of life, Chronic leg ulceration, wound.

INTRODUCTION

The review of concepts refers to the definition of ulcer/wound as a tissue injury usually associated with physical or mechanical damage; crust formation and tissue funneling; serous, bloody or purulent drainage; erythema of the skin; edema; vesicles; macerated and abnormal surrounding skin; increased skin temperature; odor; increased pain sensitivity(1).

Leg ulcer is usually defined as a chronic ulcer of variable etiology that appears below the knee(2). Leg ulcers may be provoked by many conditions, including venous hypertension, infection, diabetes mellitus, malignant disease, connective tissue disorders, rheumatoid arthritis, and injury to deep vein thrombosis or venous stasis. External injurious agents such as trauma, pressure and insect bites are other possible causes(3). In Portugal, it is estimated that there is a prevalence of 1.42 (1.3 for men and 1.46 for women) per thousand inhabitants, with most of the patients with leg ulcers being followed in an outpatient health care setting(4). In Portugal, it is estimated that there is a prevalence of 1.42 (1.3 for men and 1.46 for women) per thousand inhabitants, with most of the patients with leg ulcers being followed in an outpatient health care setting(4). Venous leg ulcers can have a profound impact on the quality of life of a person who has an open ulcer that takes years to heal(5).

Quality of life can be defined with an individual sense of life satisfaction and well-being; it is a dynamic concept that changes from day to day. It comprises a physical, emotional and psychological state that is influenced by its role in work and relationships(6).

In the late 1980s, the health-related term quality of life emerges. This is defined as the impact of illness and treatment on the inability to live daily or as the impact of the state of health perceived by the person in the ability to lead a fulfilled life. This is the key to the concept of health-related quality of life, since it is common sense the importance of the well-being of the patients and not the medical opinion about their clinical state(7,3). The main impacts of having a venous ulcer have been described in the physical, psychological and social areas(5). Within the physical area we can include several aspects such as:

- Pain is considered the first and most dominant experience associated with an ulcer, it is often continuous, difficult to control with analgesia and easily exacerbated at rest or in movement(7,9).
- Most investigated cases shows that the patients mobility is seriously affected due to leg ulcers(10,4). As a result of decreased mobility, patients leave home less frequently and become more dependent on friends and family. Changes in mobility are due to pain or loss of function as a result of the ulcer. This becomes the focus of their lives because it leaves them immobile or makes them difficult to walk(8,9).
- Odor and exudate release were identified as the major factor in the restriction of social activities in patients with leg ulcers resulting in social isolation. This may be exacerbated by personal inability of personal hygiene and physical limitations that impair one's ability to work, travel, wear appropriate clothing, and participate in hobbies, which can profoundly affect one's psychological state(9). Self-image can be destroyed by feelings of shame, disgust and embarrassment. The users may report that the ulcer odor makes they feel dirty, so they feel the necessity to apologize to others about the odor(8,5). Physical, financial, and medical restrictions may result in limitations in the ability of the patient to perform life activities. These can impact and be affected by the psychological and emotional ramifications of experience with an ulcer(8,5). Physical, financial, and medical restrictions may result in limitations in the ability of the patient to perform life activities. Psychological changes include negative emotional reactions caused by the ulcer which transmits to patients the feeling of being controlled by their illness. Most patients have a pessimistic view of the future and experience changes in their body image(9,5). Feelings of regression, depression, loss of will power, loss of control and feelings of lack of help and hope are reported by the patients(2).

Sleep disturbance is another common problem in patients with chronic ulcer and is often associated with uncontrolled pain that will interfere with the patient's sense of well-being(10). Another factor that contributes to sleep disturbance is the inability to adopt a comfortable sleeping position(2).

In the social domain, it has been demonstrated that venous ulcers occur mainly in low-income populations, being present for long periods and frequently recurrent. This can have a significant impact on the patient's working capacity, further affecting their economic situation(11).

The perception of changes in body functioning, and consequently of the daily activities caused by the presence of ulcers, mean a conditioned and increasingly restricted social life. People have less energy and less motivation to maintain their social life(12).

In fact, the decline in social contacts, as well as distancing from friends, is sometimes associated with the fact that people do not want to show their injured limbs because of the presence of large quantities of dressing material, as well as fear of liquids extravasation and unpleasant odor emanating from ulcers(11,12). Frequently, these bodily changes associated with a restricted social life are responsible for the development of feelings of hopelessness, uncertainty and frustration towards the future(12).

In this context, the fact of having an ulcer can often imply feelings of rejection and repulsion, even if unconscious, on the part of others and even motivate feelings of social isolation and depression, given the negative impact that this phenomenon can assume in the personal and work relationships of individuals as well as in many other fields of their lives(12-16).

Thus, we can affirm that the impact of the population lifestyle alteration affected by ulcers directly affects the quality of life, since this is marked by subjectivity, and involves all the essential components of human condition, whether physical, social, cultural or spiritual(17). It should also be mentioned that the more chronic the injury, the more negative changes will occur in the patient quality of life with leg ulcer(18).

It is therefore crucial that nurses reflect and investigate on which factors affect the patients' quality of life with leg ulcers in order to be able to detect possible problems and intervene early to minimize the ulcer impact in their daily lives.

OBJECTIVE

To identify the main changes in the daily life of the person with leg ulcers and how they affect their quality of life.

METHOD

An integrative review of the literature has been carried out, consisting of a critical examination of a set of publications relevant to the researched field(19). Thus, through the information obtained from the studies, common and divergent elements were identified, and a reflection on them was made.

This integrative review had as its central question: *"What is the impact of leg ulcers on the patient's quality of life?"*, which was elaborated taking into account the Participants, Interventions, Comparisons, Outcomes and Study Design (PI(C)OD), as can be seen in Table 1.

Table 1 - Criteria used to formulate the research question

				Descriptors
P	Participants	Who was studied?	Patients with leg ulcer	*Quality of life, Chronic leg ulceration*
I	Interventions	What was done?	Assessment of the patients' quality of life	
(C)	Comparisons	Can they exist or not?		
O	Outcomes (results)	Results/effects or consequences	Identification of changes in the patients' quality of life	
D	Study design	How was the evidence collected?	Qualitative approach: integrative review of the literature	

Thus, the following search descriptors were chosen in line with the question raised: Quality of life, Chronic leg ulceration, wound.

In order to gather current and credible scientific literature for research, the following computerized databases were consulted:

Code S1 – Observed electronic database: EBSCO (eBook collection (EBSCOhost), Nursing Reference Center, CINAHL Plus Full text, Medline with full text, Cochrane Database of systematic reviews, Nursing & Allied Health Collection: Comprehensive, MedicLatina). They were consulted taking into account the time interval between April 2008 and March 2012, applying the following descriptors: Quality of life AND Chronic leg ulceration researched in the Abstract. Result: 5 articles.

Code S2 – Observed electronic database: PubMed. It has been consulted for the last five years by inserting the following descriptors: Quality of life AND Chronic leg ulcer. Result: 291 articles.

Code S3 – Observed electronic database: EWMA. It was consulted by inserting the following descriptors Quality life and leg ulceration. Result: 113 articles.

In order to obtain articles that met the aims of the study, a set of inclusion and exclusion criteria were established, which are presented in Table 2.

Table 2 – Criteria for inclusion and exclusion of research articles

Selection criteria	Inclusion criteria	Exclusion Criteria
Participants	-Patients with leg ulcer - Assessment of the quality of life of the patient with leg ulcer	
Intervention	- Identification of changes in the quality of life of the patient with leg ulcer	- Nurses' experience in care - Application of compressive therapy and other treatments - Effect of dressings on leg ulcer
Design	- Quantitative and qualitative studies of the last 5 years	- Case study - Validation of quality of life assessment scales - All research findings that do not meet the inclusion criteria

Initially, from a total of five research articles from the EBSCO database, two were analyzed, as they corresponded to the inclusion criteria. An integral reading of them and a critical analysis were carried out, having being considered pertinent to the study.

However, given the limited number of studies concerned and the fact that the information was insufficient for consistent conclusions, a survey was conducted in other databases. In the survey of the PUBMED database, three articles that fit the inclusion criteria were selected. However, only one was analyzed, since the other two were already in the previous research. In the EWMA database search, an article was selected because all the others did not meet the inclusion criteria.

Thus, in total, the review contemplates four research articles, three of them by nurses and one by doctors.

RESULTS AND DISCUSSION

After selecting scientific articles, they were analyzed and scrutinized considering the objectives of the study and the central issue elaborated. The information gathered from the articles were grouped in two tables (3 and 4), elaborated in order to systematize the data, facilitating their analysis and interpretation.

Methodologically, four articles of quantitative nature, mixed and a case-control study were analyzed. As participants in the study, adult/elderly patients with leg ulcer appear.

Table 3 – Participants, methodology and aim of study of research articles

Title	Author	Year	Participants	Methodology	Aim of study
Psychological factors in leg ulceration: a case-control study	Moffatt, C.J. et al	2009	95 patients with leg ulcer in control group	Case Study Control	To examine the psychological health and perception of social support in patients with chronic leg ulcer
Impact of exudate and odor from chronic venous leg ulceration	Jones J.E. et al	2008	Phase 1: completion of the HADS questionnaire with 196 patients over 18 years, active ulcer with a minimum of 3 months' duration Phase 2: 20 participants selected from the previous group	Quantitative and qualitative approach	To explore depression in people with chronic venous ulcer and to assess the impact of exudate and odor on their daily living, health and quality of life
Assessing the impact of venous ulceration on quality of life	Palfreyman, S. et al	2008	152 patients with leg ulcer	Quantitative approach	Assessment of the venous ulcer impact on quality of life in patients with this pathology
Quality of life in the patients with chronic leg ulcers	Slonkova, V.; Vašku, V.	2008	30 patients aged 47-87 years old, mean leg ulcer duration of 29.3 months.	Quantitative approach	Quality of life data collection in patients with leg ulcers

Table 4 – Changes in quality of life in patients with leg ulcers (results)

Title	Participants	Changes in quality of life (Results)		
		Physical	Psychological	Social
Psychological factors in leg ulceration: a case-control study	95 patients with leg ulcer in the control group	• Decreased Mobility • Present pain • Decreased energy	• Sleepiness • Depression	• Limitation in social life
Impact of exudate and odour from chronic venous leg ulceration	Phase 1: completion of the HADS questionnaire in 196 patients older than 18 years, active ulcer with a minimum of 3 months duration. Phase 2: 20 participants selected from the previous group.	• Exudate (83%) • Odor(55%)	• Feelings of disgust • Self-hate • Low self-esteem • Anxiety (26%) • Depression (27%)	• Loss of ability to participate in family and social activities • Social isolation
Assessing the impact of venous ulceration on quality of life	152 patients with leg ulcer	• Pain (80%) • Exudate (75%) • Bad smell (65%)	• Depression (65%) • Insomnia (65%) • Decrease in satisfaction and quality of life	
Quality of life in the patients with chronic leg ulcers	30 patients aged 47-87 years, average leg ulcer duration of 29.3 months	• Pain (97%) • Clothing style change (44,6%)	• Sleep disturbance (43,7%)	• Restrictions on leisure activities (74.9%) • Social isolation (80.6%) • Restricted household chores (53.9%)

In the assessment of the quality of life in people with leg ulcers, epidemiological studies show the extent and complexity of the problem in patients with many decades of ulcer evolution, and a new appreciation of the impact that this condition can have in many aspects of the patients' lives(20). These aspects are evidenced in the articles analyzed. In order to synthesize the results obtained in the studies, the terminology was adopted by Persoon et al., in which the main impacts of having a leg ulcer have been described as being physical, psychological and social(2).

Regarding the physical dimension, three of the articles highlight pain as one of the major problems in leg ulcers. One of the studies considers pain as the most common and most valued symptom in the person with leg ulcer (80%)(5). Another states that 97% of30 patients reported pain, of whom 66% reported persistent pain, 19.5% reported pain with activity and 36% reported pain during dressing change(21). The analysis of the studies shows that patients with ulcer experience show that pain is one of the factors that causes deficits in their quality of life, as well as changes in energy, sleep and mobility(11). To confirm this fact, patients describe pain as the worst thing about having a leg ulcer, because the cruel nature of pain leads them to feel that they have no control over their lives(22).

Exudate and odor are the most frequently reported physical symptoms as reported by two studies, 75% and 83% exudate and 65% and 55% odor(5,23). The presence of odor is associated with the amount of exudate present in the ulcer, these can have an adverse effect on the person's psychological state of mind(23). The release of odor and exudate are identified as the main factors that restrict social activities in patients with leg ulcers, resulting in social isolation(9). Isolation may be exacerbated by the individual's incapacity to take care of personal hygiene and by physical limitations that affect a person's ability to work, travel, wear appropriate clothing, and participate in social activities, all of which may have a negative effect on the person's psychological state of mind(9).

One of the studies shows that changing the style of clothing is another physical conditioning for leg ulcer patients, in which 44.6% of the sample reported partial or complete change in their style of clothing (especially women) and 38.9% % have completely changed the type of footwear used, while 41.6% have modified it only partially(21). On the other hand, there was no difference in the group studied for the item related to alteration of the style of clothing, which has been reported in studies that used qualitative techniques(5). The patients report difficulty in acquiring shoes given the volume of the bandages and pick the clothes with the purpose of hiding the ulcer(2). Women are sensitive to the perceived loss of femininity(21).

In the psychological domain, sleep disturbances are present in 43.7% of patients with leg ulcers(5,21). These disorders are mainly caused by episodes of pain and fear of the development of new ulcers(13).

In two studies, depression is present in patients with leg ulcer, in 27% and 65% of the participants, respectively(23,5). Anxiety is also very present in patients with leg ulcers, as one study reports 26%(23). Anxiety and depression related to mobility, living alone, pain, exudate and odor, are identified as key factors for high levels of depression(23). It should be added that the same study recognized that these factors can cause feelings of repulsion, self-hatred and low self-esteem(23). Feelings of low self-esteem and depression are reported by 44% of study participants, with decreased self-confidence and frustration due to the fact that the ulcer does not heal(24). The presence of an ulcer results in a significant decrease in personal satisfaction and quality of life(5).

Concerning obstacles in the field of social life, the presence of odor can lead to isolation due to the constraint of social stigma, the fear that others may smell the ulcer is enough to reduce or restrict social activities(23). The users tend to isolate themselves socially, but it is not possible to determine if the level of social support reduced is a consequence of the leg ulcer or the fact that it is a chronic health problem(11). There is evidence that patients voluntarily withdraw from social contacts because they are aware of people's reactions to their problem. Long-term debilitating symptoms such as pain and mobility problems, severe in this type of patients, may also interfere with social interaction(11).

Leg ulcers often limit the patient's mobility by making it difficult to perform simple activities such as climbing stairs. Pain can also limit daily activities such as housework and personal hygiene. All these factors promote social isolation, in which the user has the sensation of being trapped at home(25). Accordingly, another study shows that 80.6% of the patients studied reported social isolation caused by problems related to their leg ulcer. Also 74.9% of the users studied experienced moderate restrictions on leisure activities and 59.3% and reported moderate restrictions on household tasks(21). Curiously, one of the studies found affirms that there were no changes in the level of social isolation and personal relationships, contradicting what has been reported in studies using qualitative techniques. This author, however, says that in his study, the percentage of lost data was higher in the item related to personal relationships. Personal relationships, either are not a problem for this group of patients, or the question was too personal to be answered through a postal questionnaire(5).

CONCLUSION

The realization of this integrative review allowed us to gauge some interesting aspects related to the quality of life in patients with leg ulcers. People suffering from this pathology frequently refer to pain, restriction of mobility, which, along with alteration of body image, bad odor and exudate released by the ulcer, will lead to serious social isolation. Leg ulcers also have a strong psychological impact on the person inciting negative emotions, sleep disorders, depression and anxiety.

In order to overcome these problems, the various studies reinforce the importance of health professionals, in the different areas of intervention, to better understand the impact of these symptoms on the patients' quality of life. In order to equate an integrated approach to the patient with leg ulcer that includes relief of physical symptoms and treatment directed to the ulcer, as well as psychological and social support, it is essential to consider a multidisciplinary intervention with the person, making possible the reconstruction of life plans, hopes and dreams stagnated by the chronic illness situation.

All the knowledge gained from the elaboration of this work contributed to developing new skills, adopting better practices and acquiring greater sensitivity when caring for the patient with leg ulcers, seeking to invest in improving their quality of life.

We consider that the quality of life of the patient with leg ulcers is a fundamental issue, but little valued thus far, as an object of study in the investigation of health sciences. In this way, it would be essential to continue to promote the development and dissemination of studies in this area, in order to foster the development of the profession and progress in the quality of care.

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Corresponding author: mcmarques@uevora.pt