The impact on the quality of life of patients with vasculogenic ulcers
O impacto na qualidade de vida dos portadores de úlceras vasculogênicas

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Abstract

**Objective:** To analyze aspects of the quality of life of patients with vasculogenic ulcers, based on the WHOQOL-Bref instrument, and to identify the domain with the greatest impact on the quality of life. **Method:** The WHOQOL-BREF was used as a descriptive quantitative study, using Microsoft Office -Excel 2010 for the calculation of the WHOQOL-bref scores and descriptive statistics. **Results:** The four domains of the WHOQOL-Bref were analyzed, the physical domain obtained a lower score, showing that the physical dimension was the one that had the greatest negative impact on the quality of life, being considered the one that most affects the patients with vasculogenic ulcers. **Conclusion:** The study evidenced the physical dimension being the one that most affects the quality of life of patients with vasculogenic ulcers. Understanding about the quality of life provides an integral assistance.

**Key words:** Nursing; Wounds; Nursing care.

Resumo

**Objetivo:** Analisar aspectos da qualidade de vida de portadores de úlceras vasculogênicas, a partir do instrumento Whoqol-Bref, e identificar o domínio de maior impacto para a qualidade de vida. **Método:** Trata-se de um estudo do tipo quantitativo descritivo, foi utilizado o WHOQOL-BREF, utilizando-se o Microsoft Office -Excel 2010 para a realização do cálculo dos escores e estatística descritiva do WHOQOL-bref. **Resultados:** Analisou-se os quatro domínios do WHOQOL-Bref, o domínio físico obteve menor pontuação, evidenciando que a dimensão física, foi a que obteve maior impacto negativo na qualidade de vida, sendo considerada a que mais afeta os portadores de úlceras vasculogênicas. **Conclusão:** O estudo evidenciou a dimensão física sendo a que mais afeta a qualidade de vida dos portadores de úlceras vasculogênicas. Compreender sobre a qualidade de vida propicia estabelecer uma assistência integral.

**Palavras-chave:** Enfermagem; Feridas; Cuidados de enfermagem.

Introduction

The increase in the incidence of chronic ulcers in the population is alarming and this theme has become increasingly relevant, due to the fact that its morbidity is very significant, since it can interfere in several aspects of the patient's life, in the economic, social spheres, emotional, family and work (1).

Chronic ulcers are defined as long-lasting or recurrent ulcers, characterized by a more proliferative response, which may result from the non-evolution of an acute process (2).

In this context, changes caused by the wound can compromise the quality of life. If there is no adequate orientation regarding the treatment or recognition of the importance of the complications that result from this pathology, there may be damages to family, love, social life satisfaction and existential esthetics (3-4).

Combining a chronic disease with quality of life has been a challenge among health professionals, people living with the disease and their families.

Often, the professional who provides assistance to the patient with a wound does not scale the interference that this injury can cause in face of the new life condition of this patient (4).

For some time now, the treatment of tissue lesions "has ceased to be focused on performing the dressing technique, to incorporate all the assistance methodology that the nurse provides, with evaluation of the general condition of the patient, physical examination directed according to the etiology of the lesion, the choice of treatment and the coverage to be used. In addition to the nursing record and prognostic projection (4).

The care provided during the care of the chronic lesion patient should also be related to the aspects that affect the quality of life of these patients, in this study we worked with the concept of life of the WHO. The World Health Organization (WHO) based the study on three fundamental aspects related to the construct Quality of Life: subjectivity, multidimensionality and presence of positive (for example mobility) and negative (pain) dimensions, to define it as "the perception of the individual's position in life, in the context of the
culture and value system in which he lives and in relation to his goals, expectations, standards and concerns (6).

In this sense, this study aims to contribute to nursing care given to patients with vasculogenic ulcers.

The objective is to analyze aspects of the quality of life of patients with vasculogenic ulcers from the WHOQOL-BREF instrument and to identify the domain with the greatest impact on quality of life.

In view of the above, the concern with quality of life consists in valuing subjective parameters, contemplating the physical, psychological and social functioning, related to the individual beliefs and how they can affect daily life, according to the essence of the senses that people infer (7-8).

Method

This is a descriptive quantitative study. The study scenario was a Federal Hospital of the State of Rio de Janeiro, in an Ambulatory of prevention and treatment of wounds.

The research sample consisted of 20 volunteers, as inclusion criteria: patients with vasculogenic ulcers, outpatients, who received assistance from the Commission for the Prevention and Treatment of wounds of age who accepted to participate in the study, and as an exclusion criterion, patients with cognitive deficit.

After the selection, the participants who agreed to collaborate with the study signed the informed consent form.

The period of data collection occurred between January and March 2015.

The WHOQOL-BREF was developed by the WHO in 1994 to assess quality of life (11).

The first question refers to quality of life in general and the second to satisfaction with one’s health (14). The other 24 are divided into the physical, psychological, social and environmental domains (11), being an instrument that can be used both for healthy populations and for populations affected by chronic diseases and diseases (10-11). In addition to the cross-cultural character, WHOQOL instruments value individual perception of the person, and can assess quality of life in different groups and situations (12).

The validation of this instrument showed good internal consistency, discriminant validity, concurrent validity, content validity and test-retest reliability, using a heterogeneous sample of patients with different diseases and treated both in an outpatient and hospital setting, making it a useful alternative to be used in studies that aim to evaluate the quality of life in Brazil (6).

The 26 WHOQOL-BREF questions assess the general, physical, psychological, social and environmental aspects of the individual in the last two weeks. The score of each item is Likert type (1 to 5) arranged so that the highest values are related to a better quality of life, except for the items Q3 "physical pain", Q4 "treatment" and Q26 "negative feelings" with inverse punctuation.

The facets analyzed were as follows: The facet, Q3 - Pain, was measured by the question: "To what extent do you think your (physical) pain prevents you from doing what you need?" In the Q4 facet "How much do you depend on treatment in order to live comfortably?" Q10- "Do you have enough energy for your daily life?" The Q-16 facet asks "How satisfied are you with your sleep?". Q-17 "How satisfied are you with your ability to perform the activities of your day-to-day life?" The Q18-questioned “How satisfied you are with your ability to work?” Q1-“How do you evaluate your quality of life?” And Q2-“How satisfied are you with your health?”.

The questions were asked by the researchers in this study. Patients, who agreed to participate in the study, were individually approached at the unit’s facilities to respond to the WHOQOL-BREF instrument.

The patients were selected depending on the type of lesion presented, patients with
vasculogenic lesions were approached before the nurses from the Commission of Prevention and Treatment of Wounds, to explain the objectives of the research and those who agreed to participate signed the TCLE (13).

After finalizing the data collection, they were treated statistically so that the importance of the results in numbers is not lost through the quantitative analysis. Therefore, in this research, the answers were grouped and categorized for the formation of a database, using Microsoft Office - Excel 2010- to perform the calculation of the scores and descriptive statistics of the WHOQOL-bref.

The statistical treatment was performed by introducing the data in the program Microsoft Office - Excel 2010 - and presented through tables, graphs, as well as organized by group of variables according to the objectives of the study.

From the quantitative data, the interpretation of the scores was performed in order to obtain data regarding the aspects most affected in the Quality of life of patients with vasculogenic lesion.

Ethical aspects were observed in accordance with CNS Resolution 466/2012, the research was approved by the Ethics Committee and received an opinion from the Federal University of the State of Rio de Janeiro, with approval under the number of opinion 478.386, under CAAE 22930813.0000. 05285. Participation in the research was voluntary, occurring after the guidelines, clarifications, authorization and signing of the Term of Informed Consent.

**Results**

Twenty patients from the Federal Hospital of the State of Rio de Janeiro participated in the research, all whom attended the outpatient clinic and are assisted by the Commission for the prevention and treatment of wounds.

As for sex, 30% were men and 70% were women. This fact makes us say that in this service a large part of the assisted clientele is female, as leg ulcers are considered a problem that predominantly affects women. The average age found in the present study was 61.67.

There was a higher incidence of venous ulcers observed in the consulted sample, of the 20 patients treated, 15 (75%), had venous lesions, and 5 (15%), artery lesions.

The results of the variables found among the facets that make up the four domains follow below:

**Table 1- WHOQOL-BREF physical domain scores**

<table>
<thead>
<tr>
<th>Facets</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLQ-Pain and Discomfort</td>
<td>2 2 2 3</td>
</tr>
<tr>
<td>QLQ-Dependency on Treatments</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>QLQ-Energy and Fatigue</td>
<td>3 3 3 3</td>
</tr>
<tr>
<td>QLQ-Mobility</td>
<td>1 1 1 1</td>
</tr>
<tr>
<td>QLQ-Rent and Sleep</td>
<td>2 2 2 2</td>
</tr>
<tr>
<td>QLQ-Daily Tasks</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>QLQ-Able to work</td>
<td>3 3 3 3</td>
</tr>
</tbody>
</table>

In almost all the variables that make up the four domains of the Whqol-Bref instrument, we observe the dispersion of the subjects.

In the present study we quantified the mean of the four domains that make up the instrument, thus the WHOQOL-bref: physical, psychological, social relations and environment described in the chart:

**Graph 1- Average of the four domains**

Among the four domains that make up the Whqol-Bref quality of life instrument, the physical domain obtained a lower average, lower scores are related to poorer quality of life.

Thus, the present study addressed the analysis of the physical domain, since it evidenced a
worse score, thus affecting the quality of life of patients with chronic injury, the physical domain is composed of 7 facets, the following graph shows the averages of the facets.

Graph 2 - Facets of the Physical Domain

The facet, Q3 - Pain was measured by the question: "To what extent do you think your (physical) pain prevents you from doing what you need?" got a 2.90 score with a variable that compromises quality of life. In the Q4 facet "How much do you depend on treatment in order to live comfortably?" got a score of 2.50, a negative score. In the Q10 facet- "Do you have enough energy for your day-to-day life?", Scored low at 2.75. The Q-16 facet asks, "How satisfied are you with your sleep?", scored 3.05, a regular score. The Q-17 facet "How satisfied are you with your ability to perform the activities of your day-to-day?" Got a regular score, 3.20. The Q-18 questioned “How satisfied are you with your ability to work?” and showed a negative score of 2.85.

The Whoqol-Bref instrument brings two general issues that have also been evaluated. Q1- How do you evaluate your quality of life? and Q2- How satisfied are you with your health? They have achieved a regular classification according to the Likert scale.

Discussion

The study evidenced most of the subjects as being female. Leg ulcers are more commonly found in women than in men. Although it occurs in patients of all ages, they appear more frequently in the elderly (14). The average age found in the present study was 61.67. it is inferred from this data that the elderly are more affected by vasculogenic ulcers. Studies indicate that in most people, the first venous ulcer arises around the age of 60 years, becoming more common with an aging population (15).

Older age makes people more susceptible to injury, as changes in physiological systems due to nutritional, metabolic, vascular and immunological changes affect the function and appearance of the skin (16).

Among these changes are the reduction of epidermal thickness, reduction of dermal elasticity by the decrease of the number of fibroblasts, which modifies collagen and elastin fibers, reduction of blood vessels and nerve fibers (17).

Table 1 shows that the subjects of the research are distributed in all scales, from 1 to 5 in most of the variables, it is inferred from this result that the subjects’ perception is not homogeneous, the subjectivity of the concept of Quality of Life displaces the subjects among the variables since each individual has its perception constructed by diverse positions.

Each society culturally establishes its standard of living and this directs the forms of expectation and levels of satisfaction of the individuals that compose it, this perception influences what is and what is not a good quality of life. The degree of satisfaction of the subjects with their personal achievements, as well as the material goods obtained, vary according to the pattern of their society, and, in a deeper way, with their personal values (18).

Patients who were following the lesions frequently reported changes in routines due to chronic lesions, they understood that in many situations there were limitations, such as in work activities, the pains caused by wounds were also evidenced, affecting each individual in a subjective way.

It is perceived that the subjective sphere of perception encompasses feelings and value judgments of individuals. This is linked to the
cultural charge of the patient, the environment and the place in which they live and the conditions of development possible for their lives. It directs from its form of action in the society, as the means of perception and judgment of its life, always relative to the expectations and the well-being understanding of its group. "Subjectivity on the concept of quality of life also concerns the different phases of the subject's life, having a different meaning in each of them, for the same person" (19).

The interventions aimed at patients with chronic lesions need to transcend only technical actions aimed at the care of the lesion, it is necessary to understand the patients' needs, understanding that the meaning of the lesion is individual, and it affects the quality of life differently.

Thus, the understanding of the subjectivity of the patients, provides the offer of an integral and quality assistance, allowing to know what the fears, the insecurities, and the harrowing effects that a chronic injury can provide, in order to support and stimulate the patient to overcome their difficulties.

**Figure 1- Four domains of the WHOQOL Group**

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<th>Domínio</th>
<th>Facetas</th>
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The four domains that make up the instrument include several essential aspects that determine the subjective aspects fundamental to quality of life, from the quantitative analysis of the domains, it is possible to observe that the physical domain obtained a lower score in relation to the others average of 58.57, the psychological domain obtained 67.16, it is observed in this result that among the 4 domains, this one presented the best score, emphasizing that the higher the score the better the Quality of life, the Relations domain showed 64.33 in the analysis, and the Environment domain 61.12.

Physical well-being is determined by functional activity, strength, fatigue, sleep, rest, pain, and other symptoms. Well-being has to do with social functions and relationships, affection and privacy, appearance, entertainment, isolation, work, economic situation and family suffering. The psychological is related to the fear, the anxiety, the depression and the anxieties that are generated by the disease. Finally, spiritual well-being includes the meaning of sickness, hope, importance, uncertainty, religiosity, and inner strength (20).

For this study, it will be evidenced the physical domain with the analysis of the facets that compose it, due to being the domain that presents lower average, and thus expressing Quality of life with greater commitment,

The physical domain is probably the one perceived most significantly in people with some health impairment, since it incorporates any aspect that pertains to your body and its functionality. In the alterations identified in this domain one can perceive in an evident and unquestionable way the influence exerted in the others (21).

In the Q3 facet Pain was measured by the question: "To what extent do you think your (physical) pain prevents you from doing what you need?". Only 2 patients report no pain, and 2 others say they feel very little, adding up to these variables, express a percentage of 20%. If we add those that refer to pain and discomfort as suffering extremely and/or enough, 40% said they feel a lot of pain, and 5% feel extreme pain, thus quantifying a total of 9 patients with negative scores, equivalent to 45%.

The score of this facet was 2.90 expressing
In this variable the quality of life is compromised.

The dispersion of the subjects in the variables can be justified by the subjectivity of the pain. According to the International Association for Pain Studies, we can define it as an unpleasant sensory and emotional experience, associated with actual or potential tissue injury, or described in terms of such damages, being also a subjective and personal experience (22).

In the Q4 facet "How much do you depend on treatment in order to live comfortably?", we observe the total of 60% of the subjects, who report having a very / extremely dependent on treatments, in this way the need for treatment was perceived in a significant way in the life of patients with a vasculogenic lesion, due to the fact that they have a recurrent lesion, as the lesions cause the patients to seek treatment and constant returns to hospitals and outpatient clinics.

Thus, patients with vasculogenic ulcers need to have adequate therapy to treat the lesion, establishing dependence on treatments, since vasculogenic ulcers are a chronic process. Among the leg ulcers, vasculogenic of venous, arterial or mixed origin are the most prevalent, characterized by a chronic, painful, recurrent process (23-24).

The Q4 facet, obtained score 2.50, this lower score, characterizes quality of life impairment in this aspect.

In the facet, Q10- "Do you have enough energy for your day-to-day?", there is a mid-term trend, with a 60% register in the scale with the mean reference, it can be suggested that these patients are not sure about their energy levels.

Chronic injury patients may have reduced energy capacity because of injury limiting their performance in various activities. Wounded patients present reduced energy, as well as little willingness to perform their daily activities (25).

This variable related to energy affects the Quality of life of these patients, this facet obtained a score of 2.75, classifying it as a low score, which shows impairment in this aspect.

The diseases elevate the metabolism, especially those that are characterized by the increase of the cellular activity. Chronic skin lesions provoke a series of metabolic processes that can lead to protein-caloric depletion, interfering in this way with basal metabolism (26).

It is worth mentioning that the% of the sample reports having energy completely.

Q15- "How well are you able to get around?", 55% report negative scores between Very Bad, Bad, Neither Good nor Bad, Most classify this aspect as compromised, the facet score was 3.25 characterizing it as regular.

The negative effect on the quality of life of ulcer patients is caused by many interrelated factors, including odor, presence of exudate, pain, reduced mobility, lack of sleep and increased frequency of dressing changes (27-28).

The mobility of the impaired patient causes limitations that lead to changes in daily activities that cover all possible physical aspects, such as walking, bathing, working, traveling and sleeping, to routine work such as cleaning the house, causing patients to perform these activities in a slower pace, becoming dependent on others (29-30).

The Q-16 facet asks "How satisfied are you with your sleep?". The negative scores Very Dissatisfied, Dissatisfied, Neither Satisfied nor Dissatisfied, add up to 60%, prevailing in relation to the positive ones, 40%, this facet scored 3, 05 a regular rating. Sleep is essential for a satisfactory quality of life, since it causes interferences in the wound healing, the Q3 facet related to pain, shows that most of the subjects report feeling pain. Pain is one of the main factors that alter sleep.

Sleep is vital for all animals, including humans. There is an association between sleep disorders and diseases and/or death. Sleep disorders are common in patients with chronic conditions, such as vasculogenic ulcers, due to painful physical conditions. Just as pain interferes with the quality of sleep of the affected individual, people who sleep little feel more pain (31).

The healing of the lesions depends not only
on physiological factors, but on a set of care actions and a good life condition, attending to the basic necessities of life, such as food and sleep (32).

The Q-17 facet “How satisfied are you with your ability to perform your day-to-day activities?” Got negative scores Very Dissatisfied, Dissatisfied, and Neither Satisfied nor Dissatisfied 50%, positive scores Satisfied and Very Satisfied added up 50%, this facet got score 3.20, a regular score.

Many patients cannot rest because they cannot interrupt their activities. For several reasons, such as not wanting to ask for help, because they do not want to establish dependency, or because they do not want to move away from the activities that they develop in their social circles, that fact can explain the 50% of subjects who say they have no commitment in their activities.

The presence of vasculogenic ulcers is capable of altering the daily life, causing interference in their personal, relational and professional life. The limitations perceived in the activities of daily life refer to the loss of freedom, which implies restriction in social life, including non-participation in social events, travel, and the imposition of the use of certain pieces of clothing. (33).

The Q-18 questioned “How satisfied are you with your ability to work?”, 60% of the subjects reported predominantly negative scores on this variable, this facet obtained a score of 2.85 which classifies it as having a compromise in the quality of life of these patients.

The prolonged treatment and the rescindivas of vasculogenic ulcers take their bearers to have to move away from the work. Chronic ulcers, now called complex wounds, are considered a public health problem. They contribute to the increase in the number of early retirements, leading to a loss of labor (34).

In general, wounds affect the Brazilian population regardless of age, sex or ethnicity, and it is responsible for a high index of cases related to changes in skin integrity, thus constituting an important public health problem. However, there is no statistical data to prove the fact, since the records related to the care of individuals with chronic wounds are scarce. However, it is known that the higher the incidence of wounds in the population, the greater the public expenditure while the quality of life decreases (33).

Concerning the two general questions Q1-How do you assess your quality of life? and Q2-How satisfied are you with your health? these facets scored respectively 3.65 and 3.05, according to Likert scale scores, this classification is regular.

The facets that compose the physical domain, evidenced for the most part, being variables that affect the quality of life of patients with chronic injury, when assisting the patients with vasculogenic ulcers, it is essential to level this patient in all spheres, biological, social and psychological care so that complete care can be given to this patient.

Studies show that quality of life (QOL) in patients with chronic lower extremity wounds affects their lifestyle due to pain, mobility difficulties, depression, loss of self-esteem, social isolation, inability to work and often alter body image, leading to a decrease in quality of life. Chronic lower limb ulcers represent the typical problem of chronic lesions and are almost always recurrent (34).

Conclusion

The meaning of quality of life in patients' perspective is in the way they live the aspects of their life, so the understanding about the quality of life of patients with vasculogenic ulcers is relevant in the sense of increasing the knowledge about the interferences that the lesions chronic diseases cause, and thus can better plan the care of the patient, offering integral care, understanding that the care contemplates the patient as a biopsychosocial being.

The results of the present study showed important aspects of those that suffer from the presence of chronic lesions, the pain felt, the dependence on treatments; energy and fatigue;
ability to work, sleep and rest; daily activity; and mobility were analyzed, and it was inferred from the obtained results, that in these variables there is impairment of the Quality of life of patients with vasculogenic ulcers.

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