



Quality of life in people with chronic wounds

Calidad de vida en personas con heridas crónicas

Yessika Jaimes Contreras¹

Angélica María Coronado Castro¹

María Andreina Pulido¹

Mayerli Katherine Rincón Romero¹

¹ Universidad Cooperativa de Colombia, Facultad de Enfermería. Sede Bucaramanga, Colombia.

Submitted: 12-06-2024 | Revised: 11-09-2024 | Accepted: 20-12-2024 | Published: 01-01-2025

ABSTRACT

Introduction: Chronic wounds were identified as lesions that are difficult to heal, lasting more than three months. These affected not only the patient's physical condition but also their emotional, social, and economic well-being. Their presence was recognized as significantly impairing health-related quality of life (HRQoL), altering daily functions, autonomy, self-esteem, and interpersonal relationships. **Methods:** A narrative review of the literature was conducted, selecting articles published between 2015 and 2020 in English, Spanish, and Portuguese. Databases such as Scielo, ProQuest, Springer, and Visibility Virtual en Salud were used. Fifteen studies that met the inclusion criteria were included, excluding those without access to full text or published outside the time range. **Results:** The studies reviewed showed that the most affected dimensions of HRQoL were physical, psychological, social, emotional, family, economic, and spiritual. The most frequent symptom was pain, followed by bad odor, profuse exudate, infection, inflammation, and other signs such as intermittent claudication, pruritus, and heaviness in the lower limbs. The most common sociodemographic data included a mean age of 61 years, a predominance of females (51%), low educational and socioeconomic levels, and high unemployment rates. Eleven point eight percent were not affiliated with EAPB, and only 7% reported resources for wound care. **Conclusions:** It was concluded that chronic wounds negatively impacted multiple dimensions of quality of life. In addition, a vulnerable sociodemographic profile was identified, highlighting the need for comprehensive and interdisciplinary strategies to improve the care and well-being of this population.

Keywords: Quality of life; chronic injury; dimensions; symptoms; sociodemographic data.

RESUMEN

Introducción: Las heridas crónicas fueron identificadas como lesiones de difícil cicatrización, con una duración superior a tres meses. Estas afectaron no solo el estado físico del paciente, sino también su bienestar emocional, social y económico. Se reconoció que su presencia deterioró significativamente la calidad de vida relacionada con la salud (CVRS), alterando funciones diarias, autonomía, autoestima y relaciones interpersonales. **Métodos:** Se realizó una revisión narrativa de la literatura, seleccionando artículos publicados entre 2015 y 2020 en inglés, español y portugués. Se utilizaron bases de datos como Scielo, ProQuest, Springer y Visibility Virtual en Salud. Se incluyeron 15 estudios que cumplieron con los criterios de inclusión, excluyendo aquellos sin acceso a texto completo o publicados fuera del rango temporal. **Resultados:** Los estudios revisados evidenciaron que las dimensiones más afectadas de la CVRS fueron la física, psicológica, social, emocional, familiar, económica y espiritual. El síntoma más frecuente fue el dolor, seguido por mal olor, exudado abundante, infección, inflamación, y otros signos como claudicación intermitente, prurito y pesadez en miembros inferiores. Los datos sociodemográficos más comunes incluyeron una edad media de 61 años, predominio femenino (51%), bajo nivel educativo y socioeconómico, y alta tasa de desempleo. Un 11,8% no estuvo afiliado a EAPB y solo el 7% reportó recursos para el cuidado de la herida. **Conclusiones:** Se concluyó que las heridas crónicas impactaron negativamente múltiples dimensiones de la calidad de vida. Además, se identificó un perfil sociodemográfico vulnerable, lo que resaltó la necesidad de estrategias integrales e interdisciplinarias para mejorar el cuidado y bienestar de esta población.

Palabras clave: Calidad de vida; herida crónica; dimensiones; síntomas; datos sociodemográficos.

INTRODUCTION

Wounds are a pathology that appears due to changes in the vasculature. Within these are chronic wounds, which are characterized by their long duration, slow evolution, and difficulty in healing. It is said that they are chronic because they exceed more than 3 months.

In turn, they can influence the body's chemical composition, emotions, and self-concept. Individuals with visible signs of wounds encounter new challenges and difficulties in their daily lives, both socially and personally, which directly impact their quality of life.(1)

Likewise, the World Health Organization (2) defines quality of life as; "an individual's perception of his or her position in life within the context of the systems in which he or she lives and relates to his or her goals, expectations, norms, and concerns", which focuses on the degree to which the person is satisfied with the appearance of the wound and how they cope with the whole process of having a chronic wound.

Similarly, authors such as Araújo et al.(3) indicate that various factors, such as pain, difficulty in mobility, reduced self-esteem, social isolation, inability to work, altered body image, and depression, affect the QOL of people with chronic wounds.

Due to the significant impact of chronic wounds on the quality of life of individuals with these conditions, we will now address this issue through a review of the literature, focusing on the sociodemographic data most frequently reported, the dimensions most affected, and the most common symptoms in these individuals.

What dimensions of quality of life are most affected, and what symptoms and sociodemographic data are most prevalent in people with chronic wounds?

Objective

To describe the affected quality of life dimensions, wound symptoms, and sociodemographic data most frequently encountered in patients with chronic wounds.

METHODS

Peak question: What are the most commonly affected quality of life dimensions, wound symptoms, and sociodemographic data in patients with chronic wounds?

Q: People with chronic wounds

I: To know the dimensions of quality of life affected, the symptoms of the injury, and the most frequent sociodemographic data.

C: Not applicable

O: To identify the quality of life dimensions affected, the most common symptoms presented, and the most frequent sociodemographic data.

Type of Study: Narrative review

Methodology

Inclusion and exclusion criteria

Inclusion

- Articles published in the last 5 years (2015-2020).
- Be published in English, Portuguese and Spanish.
- Documents that provide important information on chronic wounds, quality of life and health-related quality of life.

Exclusion

- Articles for which the full text is not accessible.
- Articles, editorials and clinical cases.

Literature search assemblies

Selected databases: The search was carried out in the following databases:

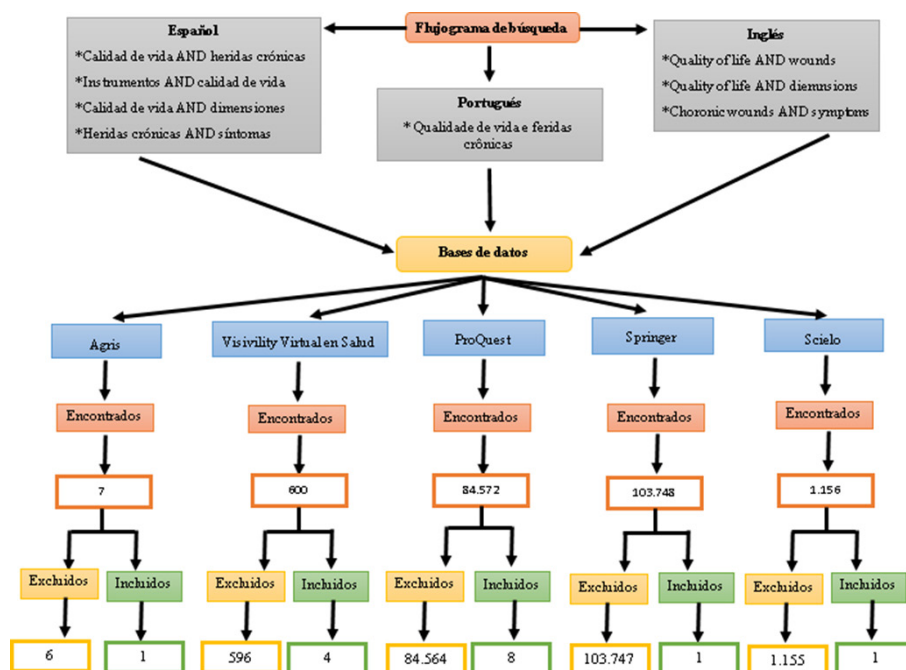
- Agris
- Virtual Visivility in Health
- ProQuest
- Springer

- Scielo

Assembled search strategies

- Quality of life AND chronic injury
- Quality of life AND tools
- Quality of life AND dimensions
- Chronic wounds AND symptoms
- Quality of life AND wounds
- Quality of life AND dimensions
- Chronic wounds AND symptoms
- Quality of life and chronic diseases

Figure 1. Search flowchart



Ethical Aspects

This narrative research poses no risk, as it will be used solely for research purposes, which will be carried out through a literature review, thereby providing new knowledge and results on the investigated topic. It is not a project developed for human beings, so it would not be subject to the Helsinki Declaration, promulgated by the World Medical Association, which takes into account the ethical aspects of experimentation with human beings.

Likewise, the provisions of Law 23 of 1982, which decrees the author's rights, will be taken into account, evidenced in each of the bibliographic references included in the project, and likewise, Resolution 3480 of 1993, which establishes "the scientific, technical and administrative standards for health research," will be complied with.

RESULTS

Description of the studies: Following the database search, 190,083 articles were retrieved. After applying the inclusion and exclusion criteria, 15 articles were included, providing information for our research. The others were excluded because they were published more than 5 years ago and could not be accessed in full text. The selected studies were carried out in countries such as Brazil, Spain, Colombia, Norway, Australia, and Germany.

Regarding the selected studies, Table 1 presents the articles to be analyzed about the specific objective 1: to identify the symptoms and dimensions of quality of life affected in people with chronic wounds.

Table 1. Symptoms and dimensions of quality of life affected in people with chronic wounds

Article	Methodology of the article	Identified symptoms	Dimensions affected
Vera Santos et al (4)	Quantitative	Pain stern score 7 at at Scale Visual Analog-EVA.	Dimension health / operation (P=0,04) Dimension psychological / spiritual (P=0,03) Dimension family (P=0,04)
Albuquerque A et al.(5)	Quantitative	Pain severe at at 50 % of patients measured with EVA and moderate pain in the remaining 50 % remaining 50 %, score of 4.	Dimension psychological (P=0,06) Physical dimension (P=0,03) Environment from the person (P=0,05)
Gonzales, R. V.(6).	Systematic literature review	PainAbundant exudate Foul odor	Social dimension Psychological dimension
Lorenzo Hernandez et al.(7)	Quantitative	Infection Torpid evolution	Physical dimension Social dimension Social dimension psychological dimension
Melguizo Herrera et al.(8)	Quantitative	52,7 % of the people reported wound-related pain Intermittent claudication at 60 % of patients	Dimension of personal fulfillment Occupational functioning dimension Physical well-being dimension Psychological-emotional dimension
Lis, R. et al.(9)	Quantitative	Inflammation Pain: 80 % of patients Serum PCR concentration	Social dimension (P=0,4) Mental dimension (P=0,3) Physical dimension (P=0,4)
Otero González, G. et al.(10)	Quantitative	Pain Tired legs Pruritus Cramps Heaviness of lower limbs	N / A
Kapp, S. et al.(11)	Qualitative	Pain Discomfort Undesired physical inactivity	Physical dimension Emotional dimension Social dimension Economic dimension
Sommer et al.(12)	Quantitative	N / A	Physical dimension Emotional dimension Social dimension
Gonçalves Bezerra, S. M., & Rangel Andrade, E. M. (2018)	Qualitative	Exudate Purulent and waxy appearance Bad odor Pain	Well-being dimension Physical dimension
Lopes Joaquim, F., Costa Rosa , R., & Garcia Caro , M. (2017).	Qualitative	Unpleasant odor Pain Abundant exudate	Emotional dimension "Struggle, negative and depressive feelings, fear (amputation)." Spiritual dimension "Faith in God and hope for healing". Dimension physical "disability and dependence". Social dimension "they feel invalid and do not feel autonomous in their social circle".
Begoña Muñoz, M. (2018).	Qualitative	Unpleasant odor Pain	Dimension physical "limitation and disability" Emotional dimension "Fear of possible complications and uneasiness about recurrence". Dimension social "concern family involvement" Psychological dimension "discouragement, frustration, anger, uncertainty and hopelessness.
Fabrellas, N., & Sáez Rubio, G. (2017)	Systematic literature review	N/A	Dimension emotional "low self-esteem, isolation, feelings of worthlessness, fear and distress". Physical dimension "not being able to activities to which they were accustomed and/ or adopt new behaviors".
Oquendo Rubio, A., & Tirado Moras, D. (2017)	Quantitative	Pain	Physical dimension (60 % of patients). Psychological dimension Social dimension
Santana de Carvalho, J., & Cristina Gobb, J. (2018)	Systematic bibliographic review, integrative type.	Pain Exudate Foul odor	Physical dimension Social dimension Dimension Emotional Dimension Psychological Dimension

Analysis of Table 1: Symptoms and dimensions of quality of life affected in people with chronic wounds

The table allowed us to identify that in 100 % of the articles, the dimensions of quality of life that are affected are physical, psychological, social, emotional, family, economic, and spiritual, and the most frequent symptoms were pain, abundant exudate, foul odor, infection, inflammation, intermittent claudication, heaviness of lower limbs, cramps, and pruritus.

Sociodemographic characteristics of people with chronic wounds

In this section, we will respond to the second specific objective of this study, which is to determine the most frequent sociodemographic data in people with chronic wounds; within the literature search, 15 articles were obtained, of which 13 allow us to profile the population with chronic wounds highlighting the most relevant sociodemographic data.

Analyzing the information from the 13 articles that provide sociodemographic data, we identified a total population of 723 people (100 %), predominantly female with 370 women (51 %) followed by men with 353 men (49 %), the average age is 61 years, the socioeconomic level was reported by 35 people (4,8 %) who belonged to stratum 1, the level of schooling was reported by 469 people (64,8 %) where four people (0,5 %) are illiterate, 344 people (47,5 %) studied up to elementary school, 72 people (9,9 %) studied up to high school and 49 people (6,7 %) are university students, the marital status was reported by 161 people (22 %) of which 126 people (17,4 %) are married, 28 people (17,4 %) are married, 28 people (17,4 %) are unmarried, and the marital status was reported by 15 people (22 %) of which 126 people (17,4 %) are married.

People (3,8 %) are without a partner, seven people (0,9 %) are living in a common-law relationship, 14 people (1,9 %) are living with a partner, and seven people (0,9 %) are living with a partner.

Indicated that they practice a religion, 238 persons (32,8 %) indicated their occupation, where 50 persons (6,9 %) are unemployed, 35 persons (4,8 %) are housewives, 26 persons (3,5 %) are employed, and 26 persons (3,5 %) are used.

Are self-employed, 51 people (7 %) work for hours, 28 people (3,8) are disability pensioners, 48 people (6,6 %) are retired, 36 people (4,9 %) indicated their monthly income with minimum wage, 51 people (7 %) indicated having economic resources for the wound care and 86 people (11,8 %) indicated not being affiliated to EAPB (Benefit Plan Administration Company).

Quality of life in people with chronic wounds

To respond to the general objective, within the literature, we found that the most affected dimension is the physical dimension, with 80 % of evidence in the articles reviewed with $P:0,03$, followed by the psychological and social dimensions with 20 % with $P:0,04$, the most frequent symptom within the literature review with 80 % was pain, but without ignoring that other influential symptoms deteriorate the quality of life of patients with chronic wounds such as foul odor and abundant exudate.

In addition, the average age of the people used for these studies was 61 years; in chronic wounds, the female sex predominates with 51 %; the level of schooling indicates 47,5 % who studied up to elementary school, and 17,4 % were married; the review also concluded that only 7 % of patients have financial resources for wound care and 11,8 % indicated that they are not affiliated to EAPB (benefit plan management company), which directly affects the quality of life of people and correlates with the affected dimensions described above.

On the other hand, it is essential to mention that the articles affirm that the healing of a long-term wound would increase the quality of life, social inclusion, and mental and physical well-being, as well as decrease costs in the health care system, achieving a balance not only for the individual but also for society.

DISCUSSION

In this section, we will review the analysis in the light of the selected literature to identify the dimensions, wound symptoms, and the most frequent sociodemographic data in people with chronic wounds where we achieved the contribution of several authors that comparing them with the results obtained we found that:

Physical dimension

Alburqueque et al.(13) refer that physical deterioration is evidenced because of the injuries of the wound, which impairs their ability to work, contributing to early retirement, unemployment, increased sick leave, and difficulty when moving, causing dependence on these people.

Likewise, Melguizo et al.(14) says that the presence of a chronic injury shows a significant impact on physical functioning by the inability to immobility and difficulty in performing activities of daily living.

Similarly, a study indicate that with time, the presence of disability becomes more pronounced, resulting in difficulty performing activities of daily living, such as personal hygiene, which

prevents them from performing tasks like bathing, as they are afraid of wetting their bandages and potentially altering their healing.

This coincides with what a study indicates that chronic wounds impose physical restrictions, affecting mobility and causing difficulty in activities such as bathing, climbing stairs, walking, and dressing.

On the other hand, Lis R et al.(9) states that physical limitations are presented when mobilizing, including the inability to perform activities independently, developing dependence on family members or caregivers, and impacting their workspace and opportunities for growth.

Psychological dimension

Albuquerque et al.(13) refer that the psychological dimension is affected by the presence of negative thoughts, anxiety, despair, low self-esteem, thoughts of insecurity and worthlessness, developing depression in these people.

Similarly, Melguizo et al.(8) say that at the psychological level, emotions and feelings of crying, despair, anxiety, fear, sadness, nervousness, guilt, and feelings of vulnerability are produced.

This aligns with the statements made by Lorenzo et al.(7) states that the presence of a chronic wound directly affects self-esteem by causing feeling different from others, developing feelings of importance and uneasiness when not seeing the healing of the wound progress, which leads to the deterioration of mental health.

Likewise a study says that negative feelings such as sadness, hopelessness, anxiety, and depression are present in 95 % of patients. Still, they identified that 80 % of people enjoy life, 95 % feel that their life has meaning, 65 % refer that they accept their physical appearance, and 80 % feel satisfied with themselves.

On the other hand, Vera et al.(4) indicates that the psychological dimension is affected by social isolation, fear of what people will say about possessing something strange in their body, decreased self-esteem when seeing physical changes, and increased limitations.

Social dimension

Lorenzo et al.(7) state that at the social level, there is economic wear and tear, as the presence of the wound limits the working life of these individuals.

Likewise, Kapp et al.(11) say that in people with chronic wounds, the social dimension is affected since they tend to avoid contact with other people and therefore abandon their jobs, and in the face of the difficulty of job opportunities, they take behaviors of isolation and inability to interact with the environment due to their health condition.

On the other hand, Lis et al.(9) indicate that the presence of chronic wounds affects the social dimension due to the lack of healing, which leads to isolation because of the embarrassment caused by their physical appearance, unpleasant odor, and abundant wound exudate.

Similarly, a study says that she is affected by not feeling good about herself, seeing her body differently, and not having the capabilities to develop a personal and social life normally.

According to a study says that the social dimension is affected since people with chronic wounds feel incapable and not autonomous in their social circle because of the disability and the dependence that these cause them.

Emotional dimension

Kapp et al.(11) evidenced the affectation of the emotional dimension, referred to by people as frustration with the health system related to wound treatment, characterized by distrust of health professionals, allergies to bandages, and the use of topical products that do not aid wound healing.

Sommer et al.(12) say that emotionally, people with chronic wounds are intrigued by the healing process that the wound will take; they also present anxiety at not having an answer to what is happening to them and, at the same time, helplessness at being limited in various aspects of their life.

A study indicate that the presence of a chronic wound awakens feelings of struggle for wanting to recover, as well as fear and negative and depressive feelings at the thought of the risk of amputation.

A study evidence that there is a presence of fear for possible complications and uneasiness for recurrence, that is, the reappearance of the wound.

A study says that in people with chronic wounds, there is evidence of low self-esteem, isolation, feelings of handicap, i.e., a physical limitation that hinders the normal development of activities, fear, and anguish.

Family dimension

Vera & Dos Santos.(1), in their study, "Quality of life in patients with chronic wounds: magnitude of changes and predictive factors," state that a significant impact on the family is presented due to the person's dependence and commitment to care towards them.

Economic dimension

Kapp et al.(11), in their study, The Quality of Life of people who have chronic Wounds and self-treat indicate that patients with chronic wounds do not have the financial resources for adequate wound care and treatment due to limitations in their work life and physical immobility.

Spiritual dimension

In their study "Quality of life in patients with chronic wounds," indicates that people with chronic wounds often refer to having "faith in God and hope for healing," revealing positive expectations regarding life, as well as religious beliefs acquired throughout their life trajectories.

On the other hand, symptoms were identified by authors such as Vera et al.(4), Alburquerque et al.(5), Melguizo, et al.(8), Lis, et al.(9), Otero et al.(10), Kapp, et al.(11), Gonçalves & Rangel et al.(5) in their studies, agreed that the most frequent symptom in people with chronic wounds is pain, evidenced as severe.

Similarly referred to the foul odor. who reported it as frequent in their studies and observed abundant exudate.

Unlike authors such as Lorenzo et al.(15), Lis et al.(9), Otero et al.(11), and Melguizo et al.(8), who identify symptoms such as infection, intermittent claudication and heaviness in lower limbs, cramps, and pruritus, where all these symptoms influence the physical, emotional, social and psychological condition of people with chronic wounds.

About the most frequent sociodemographic data in people with chronic wounds, the predominance of the female gender is highlighted (51 %), similar to that observed in studies by Alburquerque et al.(13), Lorenzo et al.(15), Melguizo et al.(8), Kapp et al.(11) however, authors such as Lis et al.(9), evidenced the presence of chronic wounds mainly in the male gender.

On the other hand, the mean age found in this review was 61 years, indicating that the presence of chronic wounds is prevalent in the older adult population; these findings are similar to those reported by Alburquerque et al.(13), Lis et al.(9) and Sommer et al.(12), who describe mean ages close to 61 years in their studies.

In addition, the predominant level of schooling in this review is basic primary, along with a low socioeconomic stratum, which coincides with authors such as evidenced the presence of illiteracy in elementary, high school, and college studies. However, all agree that the predominant level of schooling is elementary school, and in terms of socioeconomic level, Melguizo et al.(8) found that in this population, stratum 1 predominates.(21,22,23,24,25)

In turn, in this study, the most frequent marital status is married, which is in agreement with authors such as Vera et al.(4), Alburquerque et al.(5) who identified that these people are married, without a partner, and in free union, with married people predominating.(26,27,28,29,30)

Regarding religion, this review identified that only 1,4 % of the participants belong to a specific religion, which aligns with the findings of Vera et al.(1) In their study: Quality of Life in Patients with Chronic Wounds: magnitude of Changes and Predisposing Factors, where they identified that their participants belong to some religions, but it is not specified to which ones.(31,32,33,34,35)

In addition, the most prevalent occupation among the participants of this review was unemployment, who found among their participants; unemployed, homemakers, dependents, disability pensioners and retirees, where the majority were unemployed.

Taking into account these contributions, we show that there is similarity between what they refer and the results obtained in this research, since the presence of chronic wounds affect the physical, psychological, social, emotional, family, economic and spiritual dimension and likewise influences the presence of symptoms such as pain, foul odor, abundant exudate, infection, intermittent claudication, heaviness of the lower limbs, cramps and itching, evidenced by the presence of decreased mobility due to pain causing limitations in daily life activities, presence of negative feelings, cramps and itching, intermittent claudication, heaviness of lower limbs, cramps and itching, evidenced by the presence of decreased mobility due to pain causing limitations in daily life activities, presence of negative feelings, hopelessness, anxiety, vulnerability and depression, which affects their mental health, embarrassment about their physical appearance and discomfort due to foul odor and abundant exudate, which leads to social isolation, presence of fear, uneasiness, frustration, distrust, feeling of struggle and fear for possible recurrence of the wound, fatigue of family

members because of dependence and care they require, inability to work, because of heaviness of lower limbs, cramps and itching, which leads to early retirement and therefore unemployment, causing the lack of income both for subsistence and for the care required by the wound, presence of hope for recovery, trust in God and sometimes fullness with oneself, which hinders the natural development of these people as they experience significant changes both physically and in their emotional state, thus affecting their quality of life.(36,37,38)

On the other hand, and taking into account the findings identified within the most frequent sociodemographic data in people with chronic wounds, the predominance of the female gender is evident, which is due to the daily activities (domestic) that the majority of women perform. Also, the socioeconomic level of the same where it is reported that they belong to stratum 1, the schooling in these people is evident from illiteracy to university, and the marital status also varies; the report of religion is not extensive since the few studies that report it, identify that these people respond that they belong to some religion, as for the occupation of the participants we found from unemployed to retired, their monthly income is one minimum wage or less, most of them do not have an affiliation to any EAPB and do not have economic resources for the care of the wound.

All these findings indicate a vulnerable profile of people with chronic wounds, which leads us to understand that the poor management of these wounds and the difficulties they present, both physical, social, and psychological, as well as the slow, difficult, and limited healing, are factors that lead to problems that affect the life of the individual in all areas, generating a negative impact on the quality of life.

CONCLUSIONS

Taking into account what was found in the literature review, it can be affirmed concerning the objectives of the study:

- The dimensions of quality of life that are affected in people with chronic wounds are physical, psychological, social, emotional, family, economic, and spiritual.
- The most frequent symptoms were pain, abundant exudate, foul odor, infection, inflammation, intermittent claudication, heaviness in the lower limbs, cramps, and pruritus.
- The socio-demographic data collected were: a mean age of 61 years, predominantly female, low socioeconomic level, primary schooling, married, with religious beliefs, mainly unemployed, a monthly income equal to or less than one minimum wage, with limited resources for wound care, and mostly without affiliation to the EAPB.

Limitations

By conducting this research, we were able to identify certain limitations, such as:

- Access to review articles is limited due to the limited number of studies conducted in this area.
- The literature found belonged to a period greater than 5 years, which prevented us from using this information.
- Some studies restrict their visualization, as they do not allow access to full text.

Recommendations

The results of this research allow us to provide recommendations for future research, such as:

The nursing discipline is becoming increasingly involved in conducting studies on the quality of life of individuals with chronic wounds to implement interventions that take into account not only wound care but also the environment in which these individuals live.

Conduct studies focused on comparing the effectiveness of generic and specific assessment instruments to achieve high reliability, thereby offering more specific and comprehensive care that takes into account the unique differences of each person.

REFERENCES

1. Vera L, Dos Santos A. Calidad de vida en pacientes con heridas crónicas: magnitud de los cambios y factores predictivos. *Rev Esc Enferm*. 2017;12.
2. Organización Mundial de la Salud. Calidad de vida. OMS; 2017.
3. Araújo R, da Silva CD, Souto RQ, Marconato AMP. Impacto de las heridas crónicas en personas atendidas en atención primaria. *Rev Univ Fed Rio Grande (Brasil)*. 2016.
4. Vera Santos L, Dos Santos Amaral A, Betteloni J, Nischi E. Calidad de vida en pacientes con heridas crónicas: magnitud de los cambios y factores predictivos. *Rev Enferm*. 2017.
5. Alburquerque Almeida W, Ferreira AM, Ivo M, Rigotti M, Nogueira A. Factores asociados con la calidad de vida de las personas con heridas complejas crónicas. *Rev Online Pesquise*. 2016.
6. González RV. Calidad de vida y cicatrización en personas con heridas crónicas [tesis doctoral]. Primavera; 2015.
7. Lorenzo Hernández MP, Hernández Cano RM, Soria Suarez MI. Heridas crónicas. *SciELO*. 2018.
8. Melguizo Herrera S, Díaz Gómez A, Lambis Osorio M. Calidad de vida en personas con heridas crónicas complejas en Cartagena, Colombia. *Enferm Glob*. 2018.
9. Lis R, Rokne Hanestad B, Moum T. Health-related quality of life among patients with diabetes and foot ulcers: association with demographic and clinical characteristics. *Elsevier*. 2018.
10. Otero González G, Agorio Norstrom C, Martínez Asuaga M. Úlceras en miembros inferiores: características epidemiológicas de los pacientes asistidos en la unidad de heridas crónicas. *Rev Dermatol Fac Med Univ República*. 2018.
11. Kapp S, Miller C, Healt A. Calidad de vida en personas con heridas crónicas y que se autotratan. *Enferm Glob*. 2019.
12. Sommer R, Agustin M, Hampel C, Blome C. El cuestionario Woo-QoL sobre calidad de vida en heridas crónicas es altamente confiable. *SciELO*. 2019.
13. Alburquerque W, Ferreira A, Ivo M, Rigotti M. Factores asociados con la calidad de vida de las personas con heridas crónicas. *Rev Online Pesq*. 2018.
14. Malguizo E, Díaz A, Ozorio L. Calidad de vida en personas con heridas complejas en Cartagena, Colombia. Universidad Nacional de Colombia; 2018.
15. Lorenzo Hernández M, Hernández Cano R, Soria Suarez MI. Heridas crónicas atendidas en servicio de urgencias. *SciELO*. s.d.
16. Acedra Jinete J, Aguilar Morales R, Amell Lastre G. Curaciones de heridas crónicas: reto para el cuidado en la enfermería. *Rev Cienc Innov Salud*. 2013.
17. Araújo TY, Fernandes IK, Medeiros MD. Calidad de vida de pacientes con úlceras venosas. *SciELO*. 2014.
18. Bautista LM, Vejar LY, Pabón MR, Moreno JJ, Fuentes L, León KY, et al. Grado de adherencia al protocolo de registros clínicos de enfermería. *Rev Cuidarte*. 2016;7(1):195-203. doi:10.15649/cuidarte.v7i1.237.
19. Beaskoetxea Gómez P, Bermejo Martínez M, Capillas Pérez R. Situación actual sobre el manejo e impacto de las heridas crónicas. *SciELO*. 2015.
20. Muñoz MB. Calidad de vida en personas con heridas crónicas: estudio cualitativo fenomenológico. *SciELO*. 2018.
21. Cáceres F, Parra Prada L, Espinoza Pico O. Calidad de vida relacionada con la salud en población general de Bucaramanga, Colombia. *Rev Salud Pública*. 2017.
22. Corrales Pérez JM, Aguiló Pollo MD, Vázquez Aguilera M. Repercusión de las heridas crónicas en las unidades de rehabilitación funcional. *SciELO*. 2015.
23. Costa RRO, Medeiros SM, Martins JCA, Cossi MS, Araújo MS. Percepção de estudantes da graduação em enfermagem sobre a simulação realística. *Rev Cuidarte*. 2017;8(3):1799-808. doi:10.15649/cuidarte.v8i3.425.
24. Esparza Imas G, Fuentes Agundez A, Nova Rodriguez J. Experiencias de enfermeras coordinadoras de unidades de heridas crónicas. *SciELO*. 2016.
25. García Moita P, Contrera L, Furlanetto AC, Santana Fava J. Calidad de vida de pacientes con heridas crónicas. *Promoc Salud*. 2017.
26. García Vargas WC, Pastrana Vargas MF. Calidad de vida en personas que presentan úlceras venosas en miembros inferiores. *Shielo*. 2018.
27. Acendra J, Aguilar RM, Lastre AG. Heridas crónicas: un reto para el cuidado de enfermería. *Cienc Innov Salud*. 2017.
28. Meléndez C, Garza R, Castañeda-Hidalgo H, González JF, Turrubiates J. Percepción del paciente quirúrgico acerca de la seguridad en el ámbito hospitalario. *Rev Cuidarte*. 2015;6(2):1054-61. doi:10.15649/cuidarte.v6i2.165.
29. Mengarelli R, Bengoa G, Soracco J. El impacto psicológico en pacientes con heridas crónicas. *Rev Esp Heridas Crón*. 2016.
30. Ministerio de Salud México. Calidad de vida. México: Secretaría de Salud; 2018.
31. Organización Panamericana de la Salud. Manual clínico para la estandarización del cuidado y tratamiento a pacientes con heridas agudas y crónicas [Internet]. OPS; s.f. Disponible en: http://www.calidad.salud.gob.mx/site/editorial/docs/Manual_Clinico_Heridas.pdf
32. Puerto HM. Calidad de vida en cuidadores familiares de personas en tratamiento contra el cáncer. *Rev Cuidarte*. 2015;6(2):1029-40. doi:10.15649/cuidarte.v6i2.154.
33. Ramírez R. Calidad de vida relacionada con la salud como medida de resultados en salud: revisión sistemática de la literatura. *SciELO*. 2017.
34. Samaniego Ruiz M, Palomar Llatas F, Sanmartín Jiménez O. Valoración de las heridas crónicas en el adulto: una revisión integrativa. *Rev Esc Enferm USP*. 2018.

35. Sodelvilla Agreda J. Heridas y calidad de vida. SciELO. 2015.
36. Teoría Humanística de Paterson y Zderan. Teoría Humanística. SciELO. 2017.
37. Universidad de Alicante. Calidad de vida y cicatrización en pacientes con úlceras crónicas [tesis doctoral]. Alicante: Universidad de Alicante; 2016.
38. Woo K, Vera L, Alam T. Potimización de la calidad de vida de las personas con heridas crónicas que no cicatrizan. Heridas Int. 2018.

FUNDING

None.

CONFLICT OF INTEREST

Authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTIONS

Conceptualization: Yessika Jaimes Contreras, Angélica María Coronado Castro, María Andreina Pulido, Mayerli Katherine Rincón Romero.

Data curation: Yessika Jaimes Contreras, Angélica María Coronado Castro, María Andreina Pulido, Mayerli Katherine Rincón Romero.

Formal analysis: Yessika Jaimes Contreras, Angélica María Coronado Castro, María Andreina Pulido, Mayerli Katherine Rincón Romero.

Drafting - original draft: Yessika Jaimes Contreras, Angélica María Coronado Castro, María Andreina Pulido, Mayerli Katherine Rincón Romero.

Writing - proofreading and editing: Yessika Jaimes Contreras, Angélica María Coronado Castro, María Andreina Pulido, Mayerli Katherine Rincón Romero.