



ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

IJDR

International Journal of Development Research
Vol. 10, Issue, 01, pp. 33133-33137, January, 2020



RESEARCH ARTICLE

OPEN ACCESS

INSTRUMENTS MEASURING QUALITY OF LIFE OF PEOPLE WITH CHRONIC WOUNDS: A SCOPING REVIEW PROTOCOL

*¹Janislei Soares Dantas, ²Herbert Kauan Alves Martins, ³Wynne Pereira Nogueira and ⁴Maria Eliane Moreira Freire

¹Nurse. Master in Nursing from the Federal University of Paraíba, João Pessoa-PB, Brazil

²Nursing Student. Federal University of Paraíba, João Pessoa-PB, Brazil

³Nurse. Master in Nursing from the Federal University of Paraíba, João Pessoa-PB, Brazil

⁴Nurse. PhD in Nursing. Lecturer in the Department of Clinical Nursing of the Federal University of Paraíba, João Pessoa-PB, Brazil

ARTICLE INFO

Article History:

Received 17th October, 2019

Received in revised form

10th November, 2019

Accepted 08th December, 2019

Published online 29th January, 2020

Key Words:

Chronic wounds; Patient reported outcome measures; Quality of life; Surveys and questionnaires.

*Corresponding author:
Janislei Soares Dantas

ABSTRACT

Objective: Map the types and details of instruments used in the assessment health-related quality of life (HRQoL) available to people with chronic wounds. **Materials and Methods:** systematic scoping review study will follow the guidelines of the Joanna Briggs Institute and the conformities recommended by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. The databases MEDLINE (PubMed), CINAHL (EBSCO), Web of Science and Scopus will be used for the search. The inclusion criteria considered will be articles that include people with chronic wounds, of any etiology, above 18 years old, and from various health care contexts, that utilize, critique or compare specific measurement instruments of health-related quality of life for this population. Online studies, in any language and without temporal, geographic or cultural limitations will be examined. **Conclusion:** This protocol document describes the process of conducting a systematic scoping review. The review study developed from this protocol contributed to summarize as the best results found in the literature on the instruments currently available to measure HRQoL in people with chronic injuries.

Copyright © 2020, Janislei Soares Dantas et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Janislei Soares Dantas, Herbert Kauan Alves Martins, Wynne Pereira Nogueira and Maria Eliane Moreira Freire. 2020. "Instruments measuring quality of life of people with chronic wounds: A scoping review protocol", *International Journal of Development Research*, 10, (01), 33133-33137.

INTRODUCTION

People with chronic wounds face restrictions in the following areas: physical, social and psychological. They present limitations for activities of daily life and leisure, and they experience feelings of frustration, anxiety, isolation, depression and negative self-concept, thus compromising their quality of life in all areas. Chronic wounds are considered a public health problem in Brazil and throughout the world, as its occurrence is aggravated by the ageing of the population, owing to the increase in chronic illnesses (Lentsck *et al*, 2018; Gouveia *et al*, 2017; Oliveira *et al*, 2019). On many occasions, disguised as comorbidities, they represent a silent, often undervalued, epidemic for the individual, health care systems, and society (Järbrink *et al*, 2016). It is estimated that between 1% and 4% of the world's population will develop some form of chronic lesion during their lifetime (Cavassan *et al*, 2019).

Around 15% of chronic wounds last for more than a year and have a high potential for relapses (Lindholm e Searle, 2016). They generate high costs for health care services, as they involve home care, prolonged hospitalizations, complex treatments and the use of adjuvant therapies (Kapp e Santamaria, 2017). The European Wound Management Association (EWMA) defined a chronic wound as a lesion in which the physiological process of healing presents a failure in progressing or responding to treatment in a period of four to six weeks and the absence of complete restoration under anatomical and functional aspects after three months (EWMA, 2019). The most common types are venous ulcers, arterial ulcers, diabetic neuropathic ulcers, surgical dehiscence and unusual wounds (IWII, 2016). Complications or deficiencies, like ischemia, and the presence of intrinsic and extrinsic factors, including the use of medication, poor nutrition or comorbidities accentuate its occurrence (Mihai *et al*, 2018). They can be referred to as wounds that are difficult to heal,

wounds that do not heal, complex wounds or serious injuries (WSE, 2019). Studies (Kapp *et al*, 2018; Deufert e Graml, 2017; Dias *et al*, 2014) show that people with chronic wounds face complex challenges, owing to physical and psychosocial factors caused by the lesion. The physical effects include pain, discomfort, mobility impairments, self-care deficits and the incapacity to carry out the activities of daily life. Anxiety, shame, alterations in body image, emotional problems and social isolation are some of the psychosocial factors also caused by the lesion, and that significantly compromise the quality of life of these people (Tavares *et al*, 2017; Torres *et al*, 2018). The Health-Related Quality of Life (HRQoL) is a multidimensional construct that covers psychological, physical, social and emotional dimensions, and questions related to wellbeing (Gorecki *et al*, 2014). Thus, we intend to understand the impact caused by the disease and/or its treatment according to the different dimensions of quality of life. This can be measured through specific and generic questionnaires (Lupepsa e Franco, 2017). Potential negative effects of chronic wounds on physical, psychological, social, spiritual, lifestyle and financial areas of the quality of life are reported in various scientific publications (Gouveia *et al*, 2017; Kapp *et al*, 2018; Torres *et al*, 2018; Frota *et al*, 2015).

Faced with this problem, attention models focused on considering Patient Reported Outcome Measures (PROMs) have received greater attention in the last few decades, due to their potential to contribute, positively, to the health and wellbeing of patients (Kapp *et al*, 2018). HRQoL instruments are classified as PROMs and focus on the aspects and impact of health care interventions that are important. The general structure of these tools is composed of a set of questions, divided into categories or dimensions related to a specific area and that have an impact on the quality of life (Wiering *et al*, 2017). The PROMs stand out as key measures to identify new concepts of care for people with chronic wounds, as they take into consideration the patient's perspective related to his/her health conditions (Wiering *et al*, 2017; Del Core *et al*, 2018). Standardized measurement instruments of HRQoL allow for the evaluation of the effectiveness of the therapeutic measures employed, facilitate doctor-patient communication and decision making, prioritize the results and preferences of the patient, and monitor changes in the results during prevention, treatment and rehabilitation, thus turning into a standard to be implemented, as much in clinical care as in research. Thus, setting themselves up as important indicators of results about the performance of the healthcare system (Kapp *et al*, 2018; Deufert e Graml, 2017). There is a heterogeneity of PROMs instruments to measure HRQoL. The choice will depend on the objective of your proposal, the practicality required and the population to be studied (Blome *et al*, 2014). Consequently, there is a need to increase the knowledge about the scope and objectives of these instruments, what are the specific dimensions that should be evaluated and in which contexts they were utilized.

In this study, the option was taken to carry out a review of the scope, which will permit a systematic and exploratory mapping of the main HRQoL questionnaires currently used and directed towards people with chronic wounds. The guidelines proposed by the Joanna Briggs Institute (Peters *et al*, 2017) and the conformities recommended by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation (Tricco *et al*, 2018) will be considered. Before

developing the current protocol review, a preliminary survey was carried out in the JBI Database of Systematic Reviews and Implementation Reports, and in MEDLINE (via PubMed) with the aim being to identify the existence of systematic reviews or similar scope reviews that have previously been published or are in progress. In the preliminary search, one study (Augustin *et al*, 2014) outlined HRQoL concepts and an evaluation methodology for chronic wounds and inflammatory diseases of the skin and even detected 106 validated tools to measure the quality of life of people with such conditions. Another study (Launois, 2015) located 10 quality of life scales utilized for chronic venous disorders, including leg ulcers – identifying advantages and deficits of the existing tools. However, until now, no dedicated revisions to the comprehensive investigation of HRQoL evaluation instruments for people with chronic wounds, which consider the frequency of use, fitness of use, quality of life domains, structure and psychometric details of the respective instruments, have been located. Given the knowledge gaps mentioned above, the authors intend, through the scoping review, to explore studies that used HRQoL assessment instruments applied in this specific population, in order to draw from the results, the best available evidence on the main types and details of these instruments, providing information that may contribute to a critical analysis by health professionals to enable appropriate choice of the instrument (s), according to specific indications intended, both in care and in future research in this context. It will also support potential directions for future systematic reviews. Thus, it is opportune to carry out a scope review, due to its methodological adequacy to the studied theme. Based on the foregoing, this protocol has the purpose of establishing guidelines for the production of a scoping review, which has as its objective to map the types and details of instruments used in the assessment health-related quality of life (HRQoL) available to people with chronic wounds. The research question is: What is the state of the art about the scientific production on the instruments used to measure the HRQoL of people with chronic wounds?

MATERIALS AND METHODS

The scoping review will follow the methodological model described by the manual from the Joanna Briggs (Frota *et al*, 2015) Institute and will follow seven main stages:

Stage 1: Define and align the objective(s) and question(s)

The objective of this scope review is to map the types and details of instruments used to assessment of health-related quality of life (HRQoL) available to people with chronic wounds. The central question guiding this scoping review were What is the state of the art about the scientific production on the instruments used to measure the HRQoL of people with chronic wounds.

Stage 2: Develop and align the inclusion of criteria with the objective(s) and question(s). The inclusion criteria based upon the PCC (Population, Concept and Context):

Participants

The current review will consider studies that include people with chronic wounds, adults and/or old people, independent of the wound etiology.

Concept

The concept will address the quality of life construct in the face of the questions of the health-illness process related to the existence of chronic wounds. Quality of life has its own specificity when associated with health questions, principally chronic conditions, commonly referred to as HRQoL. This is a subjective measure of the physical, social, psychological and spiritual wellbeing of a person and represents the conception about how a particular disease or intervention affects life. The information about the HRQoL of a patient generally is collected using PROMs' instruments. This implies that the patient responds to a series of questions based on dimensions of physical and social functioning, and mental and spiritual well-being. It can include generic and specific questions about his/her state of health. The answers are analyzed to produce scores from a multidimensional perspective, which establishes quality of life standards or levels. The identified instruments will be summarized by their various components, including tool scope, structure, population, frequency of use and psychometric properties, and will then be grouped into generic and disease-specific questionnaires.

Context

The context of this review will consider any health care environment, whether it is outpatient, hospital or home, where people with chronic wounds are attended to and have their quality of life evaluated by way of instruments.

Stage 3: Describe the planned approach for evidence seeking, selection, extraction and the creation of charts

Initial research was conducted on MEDLINE (PUBMED) and CINAHL (EBSCO) using a combination of keywords and controlled vocabulary terminology. Second, the results of these searches were analyzed to determine additional additional search terms for title, abstract, author keywords, and database indexing. See Appendix 1 for a complete MEDLINE (PUBMED) search strategy. Lastly, the list of references of the included articles will be consulted to rescue additional studies of potential relevance. The reviewers could then get in contact with the authors of the primary studies to obtain more information if necessary. In the case that there are questions related to translation, advice will be sought from a native speaker. Studies in any language, without temporal, geographic or cultural limitations, will be included.

Stage 4: Select evidence

The scope review will consider both experimental and epidemiological studies, including randomized control studies, non-randomized control studies, quasi-experimental studies before and after, prospective and retrospective cohort studies, case-control studies and transversal analytic studies, including case series and reports of individual cases. Quality of life instruments utilized in reviews, adaptation and validation studies, and conference summaries will not be included, with the aim being to avoid the duplication of data. Also, non-original articles, narrative reviews, non-published literature and grey literature will be excluded as this review will focus on instruments, questionnaires or quantitative scales that were submitted to psychometric tests and validated for the target population. Lastly, articles that cover wounds of neoplasia will be omitted, owing to the specificity of their healing physiology.

Stage 5: Extract evidence

The databases to be searched include: MEDLINE (PubMed), CINAHL (EBSCO), Web of Science and Scopus. After the search, all the citations identified will be stored in the Mendeley 1.19.4 (Mendeley Ltd., Elsevier, Netherlands) (Elsevier, 2019), management software of references, while the duplicates are removed. Concluding this stage, titles and abstracts will be selected by two independent reviewers for evaluation in relation to the outlined inclusion criteria. The complete text of the studies selected will be recovered and evaluated in detail in relation to the inclusion criteria. The studies that do not attend to the established inclusion criteria will be excluded and the reasons for the exclusion will be registered and reported. An analysis form for the selection of studies was created for better control (Appendix 2). Any divergences that arise between the reviewers in each step of the selection and triage process of the study will be resolved by way of discussion. If a consensus cannot be reached, a third reviewer will be consulted.

Stage 6: Map evidence

The results of the selection process will be reported in their entirety in the final report and presented in conformity with the PRISMA-ScR (Tricco *et al.*, 2018) flow diagram. The data will be extracted from the articles included in the scope review by two independent reviewers, using a data extraction tool developed by the reviewers of this research and inspired on the model of Joanna Briggs Institute Reviewer's Manual. The main information to be extracted from the selected articles will include specific details from the studies such as: identifying code (E1, E2,), base, periodic, publication year, authors, language, title, objective, study design, target population and sample, HRQoL instrument, main results, most affected dimensions and conclusions (Appendix 3). This is in addition to specific information about the tool, in relation to the structure, type, domains, psychometric properties and author (Appendix 4). The data extraction table will be modified and reviewed as necessary. All modifications will be detailed. Any disagreements between the reviewers will be resolved by way of discussion, in the paradigm of reaching a consensus. However, in the event that disagreements are not sufficiently clarified, they will be resolved by a third reviewer.

Stage 7: Sum up the evidence in relation to the objective(s) and question(s)

The characteristics extracted will be presented in table format with aligned information to meet the outlined objective of the scope review and highlight the main results. A narrative and descriptive summary will accompany the tabulated results, in such a way as to respond to the question of the review, and which will supply a detailed summary of the instruments utilized to measure the HRQoL of people with chronic wounds. The findings will provide evidence for the appropriate selection of PROMs, destined to verify the impact caused by the chronic wound on the HRQoL of these people.

Conclusion

The scoping review protocol is important as it predefines the objectives and methods of the scope review. It is a systematic approach to conducting and reporting the review and allows process transparency. The protocol provides the plan for the scoping review and is important in limiting the occurrence of

reporting bias. So, this protocol document describes the process of conducting a scoping review on the types and details of instruments used in the health-related quality of life assessment (HRQoL) available to people with chronic wounds. It will contribute to the best evidence found in the literature on the instruments currently available to measure HRQoL in people with chronic wounds. PROMs instruments for assessing HRQoL of people with chronic wounds are generally considered sensitive and practicable because they can identify small changes in different dimensions of quality of life using only a few items. The health-related quality of life (HRQoL) of people with chronic wounds measured through standardized PROMs provides an assessment of the impact of chronic wounds on quality of life and makes it possible to understand the potential consequences of the disease, as well as an assessment of therapeutic procedures and medical and nursing interventions. Therefore, a better understanding of the quality of life of people with chronic wounds will help healthcare professionals to optimize care delivery and outcomes for this group of patients.

REFERENCES

- Augustin M, Baade K, Heyer K, Price PE, Herberger K, Wild T, et al. Quality of life evaluation in chronic wounds: comparative analysis of three disease-specific questionnaires. *Int Wound J*. 2014; 14(6):1299-1304.
- Blome C, Baade K, Sebastian DE, Price P, Augustin M. The "wound-QoL": A short questionnaire measuring quality of life in patients with chronic wounds based on three established disease-specific instruments. *Wound Repair Regen*. 2014; 22(4):504-514.
- Cavassan NRV, Camargo CC, Pontes LG, Barraviera B, Ferreira RS, Miot HA, et al. Correlation between chronic venous ulcer exudate proteins and clinical profile: A cross-sectional study. *J Proteomics*. 2019; 192:280-290.
- Del Core MA, Ahn J, Wukich DK, Liu GT, Lalli T, VanPelt MD, et al. Gender differences on sf-36 patient-reported outcomes of diabetic foot disease. *Int J Low Extrem Wounds*. 2018; 17(2):87-93.
- Deufert D, Graml R. Disease-specific, health-related quality of life (HRQoL) of people with chronic wounds – A descriptive cross-sectional study using the Wound-QoL. *Wound Medicine*. 2017; 16:29-33.
- Dias TYAF, Costa IKF, Melo MDM, Torres SMSGSO, Maia EMC, Torres GV. Quality of life assessment of patients with and without venous ulcer. *Rev Latino-Am Enfermagem*. 2014; 22(4):576-581.
- Elsevier. Mendeley Ltd. 2019 [cited 2019 Sep 10]. Available from: <https://www.elsevier.com/solutions/mendeley>
- European Wound Management Association (EWMA). EWMA's e-learning course in basic wound management. 2019. Available at: <https://ewma.org/what-we-do/education/ewma-e-learning/>.
- Frota SS, Guedes MVC, Lopes LV. Fatores relacionados à qualidade de vida de pacientes diabéticos. *Rev Rene*. 2015; 16(5):639-4.
- Gorecki C, Nixon J, Lamping DL, Alavi Y, Brown JM. Patient-reported outcome measures for chronic wounds with particular reference to pressure ulcer research: A systematic review. *Int J Nurs Stud*. 2014; 51(1): 157-65.
- Gouveia SVLC, Santos OA, Santos AAF, Tihemi NE, Betteloni JJ, Park KSH. Quality of life in patients with chronic wounds: magnitude of changes and predictive factors. *Rev Esc Enferm*. 2017; 51:e03250.
- International Wound Infection Institute (IWII). International Consensus Update 2016: Wound infection in clinical practice. *Wounds International*. 2016. Available at: <https://gneaupp.info/wound-infection-in-clinical-practice-international-consensus-update-2016/>.
- Järbrink K, Ni G, Sönnergren H, Schmidtchen A, Pang C, Bajpai R, et al. Prevalence and incidence of chronic wounds and related complications: a protocol for a systematic review. *Syst Rev*. 2016; 5(1):152.
- Kapp S, Santamaria N. The financial and quality of life cost to patients living with a chronic wound in the Community. *Int Wound J*. 2017; 14(6):1108-1119.
- Kapp S, Miller C, Santamaria N. The quality of life of people who have chronic wounds and who self-treat. *J Clin Nurs*. 2018; 27:182-192.
- Launois R. Health-related quality-of-life scales specific for chronic venous disorders of the lower limbs. *J Vasc Surg-Venous L* 2015; 3(2):219-227.e3.
- Lentsck MH, Baratieri T, Trincaus MR, Mattei AP, Miyahara CTS. Quality of life related to clinical aspects in people with chronic wound. *Rev Esc Enferm*. 2018; 52:e03384.
- Lindholm C, Searle R. Wound management for the 21st century: combining effectiveness and efficiency. *Int Wound J*. 2016; 13:5-15.
- Lupepsa CA, Franco GCN. Avaliação de questionário específico para a doença arterial periférica [Evaluation of a specific questionnaire for peripheral artery disease] – Vascuqol. In: Pedroso B, Pinto GMC (Organizer). Avaliação da qualidade de vida em saúde – instrumentos de medida. [Evaluation of the quality of life in health – measurement instruments]. Jundiaí: Paco Editorial; 2017.
- Mihai MM, Preda M, Lungu I, Gestal MC, Popa MI, Holban AM. Nanocoatings for chronic wound repair-modulation of microbial colonization and biofilm formation. *Int J Mol Sci*. 2018; 19(4):1179.
- Oliveira AC, Rocha DM, Bezerra SM, Andrade EM, Santos AM, Nogueira LT. Qualidade de vida de pessoas com feridas crônicas. *Acta Paul Enferm*. 2019; 32(2):194-201.
- Peters MDJ, Godfrey C, McInerney P, Baldini Soares C, Khalil H, Parker D. Chapter 11: scoping reviews. In: Aromataris E, Munn Z (Editors). *Joanna Briggs Institute Reviewer's Manual*. Adelaide: Joanna Briggs Institute; 2017. [cited 2019 Aug 2]. Available from: <https://reviewersmanual.joannabriggs.org/>
- Tavares APC, Sá SPC, Oliveira BGRB, Sousa AI. Quality of life of elderly patients with leg ulcers. *Esc Anna Nery*. 2017; 21(4):e20170134.
- Torres SMSSO, Araújo ROE, Costa IKF, Tibúrcio MP, Sousa AJG, Pergola-Marconato AM, Mansano-Schlosser TC, et al. Health-related quality of life in patients with venous leg ulcer treated in primary care in Brazil and Portugal. *PLoS ONE*. 2018; 13(4):e0195990.
- Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med*. 2018; 169:467-473.
- Wiering B, Boer D, Delnoij D. Patient involvement in the development of patient-reported outcome measures: a scoping review. *Health Expect*. 2017; 20(1):11-23.
- Wound Source Editors (WSE). Is This Wound Chronic? 2019. Available at: <https://www.woundsource.com/blog/wound-chronic>.

Appendix 1: Initial search

Search strategy for MEDLINE (PubMed)		
Search	Query	Records retrieved
#1	"quality of life" OR "life quality" OR "health-related quality of life" OR HRQOL OR "quality of life index" OR quality of life assessment	376935
#2	wound and injuries OR wounds and injury OR wounds OR chronic wounds OR skin ulcer OR leg ulcer OR foot ulcer OR pressure ulcer OR non-healing wounds	1264877
#3	surveys and questionnaires OR questionnaires OR measures OR scales OR tools OR instruments	5606847
#4	#1 AND #2 AND #3	10287
Not limited to date, not language limits		

Appendix 2:

Database and collection date:			
For the articles selected in the search fill in questions 1 through 3			
1- Reference number of the article (order in which the article appears in the search)			
2- DOI or PMID number			
3- Inclusion criteria: PCC			
() The population of the study is composed of people older than 18 years old.	() The population is composed of people with chronic wounds. Main types: venous ulcers, arterial ulcers, diabetic neuropathic ulcers, surgical dehiscence and atypical wounds (vasculitis, sickle cell anemia, pyoderma, Martorell's hypertensive ischemia), in any health care environment (outpatient, hospital, community).	() original study in any language and from any date that utilizes, critiques or compares questionnaires for the measurement of quality of life of people with chronic wounds.	() It is not a review study.

Appendix 3:

Data extraction instrument	
Identifying Code	
Base	
Periodic	
Publication year	
Authors	
Language	
Title	
Objective	
Types of Study	
Population (details)	
Concept	
Context	
HRQoL instrument used	
Main results	
Main conclusions	

Appendix 4:

Data extraction instrument	
HRQoL Instrument	
Quality of Life Domains assessed	
Number of items in instrument	
Details of psychometric, validation of tool	
Author	
