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Wounds Care on Patients During The Covid-19 Pandemic Era

Petra Diansari Zega[1*], Thanh Loan Bui[2], Adelina Sembiring[3], Zulkarnain Batubara[4]
[1,3,4] *STIKes Mitra Husada Medan, Indonesia*
[2] *Quang Tri Medical College, Vietnam*

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Abstract

Wound care is part of nursing management. During Covid-19, the practice of wound care decreased under normal conditions. Nursing management knowledge is needed on how to practice wound care during COVID-19 to provide a wound healing process. This systematic review aims to identify wound care nursing care management during COVID-19. Methods: Article searched from PubMed; ProQuest; and EBSCO; selected based on the following inclusion criteria: study focus on nurses practicing chronic wound care during Covid-19, focused nursing management, case studies, articles published in the 2019-2021 range, full text, articles in English. Results: In the final stage, 5 articles were found. The results of the study show that nursing care management uses telehealth and telemedicine services for wound care patients. Conclusion: The findings of this systematic review indicate that telehealth and telemedicine services can provide opportunities to improve wound care to patients.

**Corresponding Author: petradiansarizega56@mail.com*

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Introduction

One of the threats of COVID-19 in the world is the disruption of wound care practices, especially chronic wounds. In March 2020, the surgeon general urged all healthcare facilities across the US to stop elective procedures and suspend all non-essential treatment. This is a way to prevent transmission of the corona virus and prevent the number of people in the hospital. Furthermore, patients with various medical comorbidities require disciplinary consultation from health workers, such as diabetes control, which is not as frequent as during the COVID-19 pandemic. Of course, given the difficulty of carefully observing and actually treating wounds during the COVID-19 pandemic, wound care specialists quickly devised new treatment models to ensure the continued success of managing vulnerable outpatients, as well as managing patients with pressure ulcers (Waller, 2018). Chronic wounds are generally described as barrier deficiencies that have not healed the wound for up to three months (Leveriza, 2012).

Chronic wounds are wounds in which the normal healing process has been restricted at one or more points in the hemostatic, inflammatory, proliferative, and remodeling phases. In this type of wound, there is generally an underlying pathology, which results in slow healing (Frykberg, 2015; Falanga, 2022). Chronic wounds include diabetic foot ulcers, venous leg ulcers, and pressure ulcers. Chronic wounds are a challenge for wound care professionals and consume a lot of health resources around the world (Li et al, 2020). It affects millions of patients worldwide, placing a great deal of responsibility on health resources in performing wound care (Powers et al, 2016; Werdin et al, 2008). In the United States, chronic wounds affect more than 6 million people, with more being anticipated due to an aging population and the high prevalence of patients with diabetes mellitus (Jiménez et al, 2019).

Chronic complex wounds are a primary health problem, with serious repercussions for the people affected, the care environment and the health care system. Approaching them requires an integrated system of care where the complete course of the discus counts for greater effectiveness (Welsh et al 2018; King, 2000). Effective chronic wound management is complex, and to maximize outcomes for patients, it is recommended that those involved in care and treatment should have the appropriate knowledge and skills (Tinelli, 2020).

The spread of the coronavirus has severely impacted medical practice behavior, resulting in a reduction in required medical care, including specialization in wound healing. The COVID-19 pandemic has limited the ability of wounds to heal under normal conditions. Patients with vascular foot ulcers are a highly vulnerable population, with a poor quality of life caused by pain that is directly related to ulcer duration and ulcer size. If ischemic wounds and veins are not treated or managed, the consequences can be drastic, such as infection, sepsis, amputation, or even death (Joanna, 2017). World wound care is experiencing greater disruption causing the need for wound evaluation (1).

In this systematic review, an overview will be given of nursing management in carrying out wound care during the corona virus disease. The aim of this systematic review was to evaluate 14 nursing management procedures for treating wounds in patients with chronic wounds during COVID-19.

Research Methods

Search Strategy

Searching for articles in this systematic review uses an international electronic database consisting of EBSCO, ProQuest, and PubMed with years of publication from 2019-2021, and articles in English and full text. The search strategy carried out in this systematic review uses several keywords used in the search in the database used. Keywords refer to Medical Subject Heading (MeSH). The search terms used were: nursing care, nursing management, wound, COVID-19, Corona Virus Disease 2019. The following search strategies were used: nursing care OR nursing management AND wounds OR injuries AND Covid-19 OR coronavirus disease 2019.

These are the keywords then entered in the search box in the electronic database and then filtered according to the following criteria: full text, issues ranging from 2019 - 2021, and using English.

Selection Criteria

The article reviews systematic analysis of standards using the PICO model consisting of population, interventions, comparisons, and results in determining inclusion and exclusion criteria. Articles that will be included in the study if these specific inclusion criteria are: (1) the study focuses on nurses who practice chronic wound care in patients during Covid-19, (2) nursing management, (3) case studies, (4) years publication: 2019-2021, (5) full text, (6) articles in English. Exclusion criteria: (1) acute wound care (2) not discussing nursing management, (3) articles published before 2019, (4) full text (5) articles not in English.

Quality Assessment

The assessment of research methodology for the quality of systematic review articles uses 18 JBI Critical Appraisal Checklist guidelines. The instrument used is the JBI Critical Appraisal Checklist for case series which consists of 10 questions (1). The JBI Critical Assessment Checklist was used for the purpose of assessing the quality of research methodology and to determine the extent to which research has addressed possible bias in its design, intervention, and analysis (10).

Study Selection

Researcher uses a method in the form of a systematic review with descriptive narrative analysis of several main finding articles that discuss nursing management in treating wounds to patients during COVID-19. Guidelines for systematic review using Preferred Reporting Items for Systematic Review and Meta-Analyzes (PRISMA) and as a standard in reviewing and selecting articles. Specific information was extracted such as author, year of publication, journal name, study design, type of intervention, and results.

Result and Discussion

Based on the article search flow chart or PRISMA diagram, identification stage, 242 articles were obtained from several databases used with the following details from EBSCO 2 articles, from ProQuest 142 articles, from PubMed 98 articles. At the screening stage there was a reduction in the number of articles due to the fact that there were 12 of the same articles, so that at the screening stage there were 230 articles that would be selected based on the title and abstract of the article. After being selected, 195 articles released at this stage did not meet the inclusion criteria. At the feasibility stage, there are 40 articles that will be selected full text. At this stage, 35 articles were published because they were not related to nursing management, the research did not use English, the research was published under 2019. In the final stage, 5 articles were obtained based on selection carried out according to inclusion criteria.

The World Health Organization (WHO) describes telemedicine (TM) as "one of the services in providing health services to patients, where distance is a factor of resistance, by every health care professional using information and communication technology to exchange valid information for diagnosis, treatment and prevention." disease and injury, research and evaluation, and continuing education of health care providers, all to promote individual and community health (Monaghesh et al, 2020).

Telehealth has the prospect of addressing many of the key challenges in healthcare delivery during the COVID-19 outbreak. Telehealth has prospects for addressing many of the key challenges in healthcare delivery during the COVID-19 outbreak. In addition, telehealth can help us stay away from direct physical contact and reduce the risk of COVID transmission and ultimately provide sustainable care to the community. Health care and patients are forced to put forward telehealth tools as a problem solution to prevent and control COVID-19 infection (Bondini et al, 2020; Oropallo et al 2021). Telehealth is used as the default consultation method to prevent patients from reducing the risk of spreading disease. The current model implemented as part of the

emergency response relies on the patient's ability to discuss the injury and its symptoms in order to reduce close contact and actions outside the home. The use of telehealth has a positive impact on wound healing, including a shorter healing time and positive consumer feedback. All of the systems studied used telehealth communication between the wound specialist and the nurse present with the patient (18).

The current standard model of chronic wound telecare such as diabetic foot ulcers includes in-hospital specialists who perform remote clinical examinations and decision-making, working closely with visiting nurses and patients. Wound care is a visual specialty. Numbers are the gold standard for diagnosis and treatment. Chronic wounds that condition long-term care require frequent monitoring and frequent follow-up visits. This involves traveling costs and long waiting times. This situation makes the wound care specialization an ideal specialty for telemedicine applications for wound care (16). Telehealth and telemedicine services can provide opportunities to improve nursing care for patients during COVID-19.

Conclusion

The findings of this systematic review study are that telehealth and telemedicine services can provide opportunities to improve wound care for patients.

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