

Review

Telenursing in Health Services in the Era of the COVID-19 Pandemic: Literature Review



I Made Rai Mahardika^{1*}, Luh Gde Nita Sri Wahyuningsih², Putu Ayu Lestardini³

¹STIKES Panca Atma Jaya, Klungkung, Indonesia

²ITEKES Bali, Denpasar, Indonesia

³Independent Researcher

Article Info	Abstract
Article history: Received: 23 February 2022 Accepted: 23 July 2022	<i>Introduction:</i> The development of telenursing is very rapid in various countries. The practice of telenursing supports nurses in providing care to patients without requiring nurses to meet directly with patients so as to reduce the spread of COVID-19 from nurses to patients, or vice versa. Telenursing is an alternative in providing health and long-distance services during the COVID-19 pandemic era. This literature review aims to determine the benefits of telenursing in health services in the COVID-19 pandemic era. <i>Methods:</i> The method used is a literature study analyzed from several journals. related to the topic taken. Journals were searched through ProQuest, EBSCO and google scholar with keywords telenursing, COVID-19 and health services. <i>Results:</i> The results of 11 articles show the benefits of telenursing in health services, including preventing the transmission of COVID-19 infection, media and health counseling, analysis costs and sustainable health services. <i>Conclusion:</i> Telenursing is one of the answers in overcoming the changes that occur to meet the needs of health access in the community. The application of telenursing during the COVID-19 pandemic provides various benefits for both patients and health workers. Telenursing has positive implications in preventing the transmission of COVID-19, as a medium for counseling and health promotion, minimizing medical costs and as a continuity of care.
Keywords: telenursing, COVID-19, health services	

*Corresponding Author:

e-mail: raimhdk87@gmail.com



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INTRODUCTION

Coronavirus diseases 2019 (COVID-19), which was first discovered in Wuhan, China, is a highly contagious respiratory disease and in a short time has succeeded in infecting thousands of millions of people globally [1]. During the COVID-19 pandemic, the health system was faced with maintaining a balance between meeting the needs of handling the pandemic and fulfilling essential health services. This balance must be maintained so that there will not be an increase in cases of other diseases after the COVID-19 pandemic is over.

To prevent the spread of COVID-19, the public or patients do not need to come to the hospital, doctor or nurse to get health services. Nurses are increasingly required to be professional and prioritize technological developments, including the use of information technology in the field of nursing services. The development of technology and information in health care over the last few decades have become a political priority around the world. During the COVID-19 pandemic, people need very high, professional, affordable and fast nursing services.

Telenursing is the use of technology to provide nursing care and remote nursing practice that aims to improve health care [2]. The growing use of the internet is followed by developments in the world of health and nursing so that telemedicine, telehealth and telenursing become alternatives in providing health and nursing services [3].

Telenursing is categorized as experiencing very fast growth in many

countries because of the benefits of its use. Telenursing has proven to be an efficient tool in providing health care information to residents of a country with geographic barriers [4]. Telenursing can make it easier for health workers to access isolated areas, thereby increasing the number of nursing service coverages, reducing treatment costs, waiting times and reducing unnecessary visits. Through telenursing patients and nurses do not meet directly, but through media that can be used by patients and families [5]. The media that can be used are via telephone, Personal Assistants (PDAs), facsimile machines, internet via email and computer systems [6]. On this occasion the author tries to dig deeper into the benefits of telenursing in health services in the era of the COVID-19 pandemic.

METHODS

The method used in this research is literature study. The author carried out various search strategies to find articles related to the benefits of telenursing in health services in the era of the COVID-19 pandemic. The selection process for journal articles used PRISMA guidelines and during the journal article search process, the authors used various search keywords such as telenursing, COVID-19, and health services. The author collects data using databases, namely ProQuest, EBSCO, and Google Scholar with search intervals from 2020 to 2021. Inclusion criteria include Indonesian and English language journals related to telenursing in health services during the COVID-19 pandemic. Similar articles, not according to

the title and not full text, they are eliminated and then the search results are analyzed to

identify the benefits of telenursing in health services during the COVID-19 pandemic.

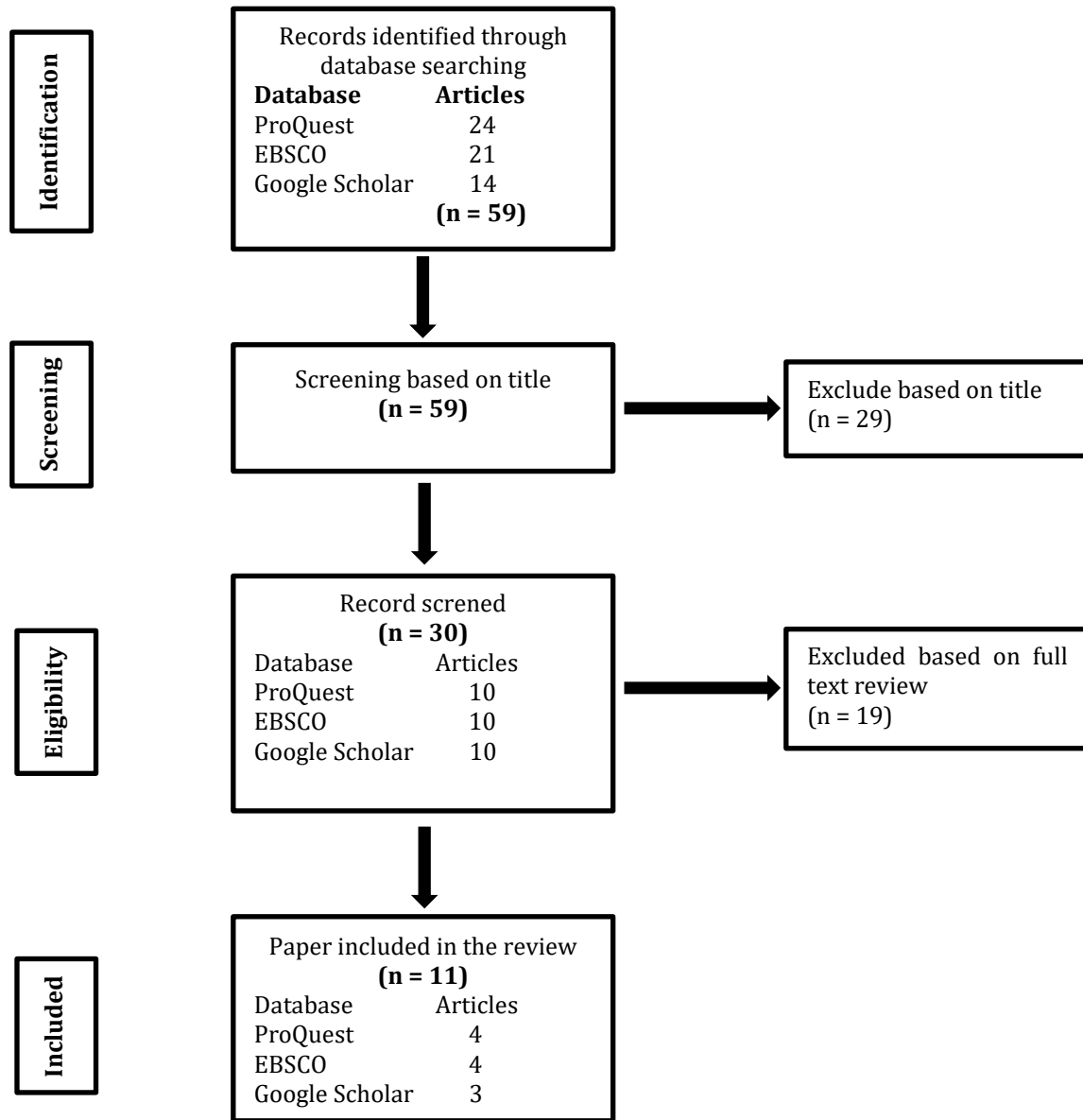


Figure 1. Flow diagram of the results of the article selection study

RESULTS

The results of data collection from three databases, the authors obtained 11 verified journal articles to be identified related to the benefits of telenursing in health services during the COVID-19 pandemic. The application of telenursing during the COVID-19 pandemic provides various benefits, including 2 articles revealing prevention of transmission of COVID-19 infection, 3 articles revealing as a medium of counseling and health promotion, 3 articles revealing minimizing the cost of treatment and 3 articles as an effort to provide continuous care.

DISCUSSION

The COVID-19 pandemic is still a trend and issue that is often discussed by the public today. The World Health Organization (WHO) recommends social distancing in preventing the spread of COVID-19. This has prompted the government to make various efforts to break the chain of the spread of COVID-19 by making social distancing policies and limiting outpatient visits. However, the fulfillment of the need for health services does not recognize the obstacles that occur, so an information technology is needed to connect patients and medical personnel in an effort to meet the needs of health [7].

Telenursing is the use of technology to provide nursing care and remote nursing practice to patients with the aim of improving health care [2]. Health services, especially remote nursing using information technology media, provide convenience for the

community [3]. Telenursing aims to improve the quality of care, safety and fast access to nursing care by overcoming geographical barriers [8]. Telenursing provides various benefits during the COVID-19 pandemic, including:

Prevent the transmission of COVID-19

Since the pandemic began, telehealth has been used to triage patients and reduce the impact of patient surges on health care facilities resulting in decreased access to health care and reduced transmission of SARS-CoV-2 [9]. In addition, in an effort to reduce the risk of transmitting the COVID-19 virus to patients, telephone support can be used to avoid unnecessary visits to hospitals. Telephone-based support is an effective method of addressing and reducing the need for supportive care of cancer patients undergoing chemotherapy through increasing access to support for this population especially those who may be in rural and remote settings [10]. The practice of telenursing allows nurses to provide nursing care to patients without requiring nurses to meet directly with patients so as to reduce the spread of COVID-19 from nurses to patients, or vice versa.

Health promotion and counseling

The development of telenursing is very rapid in various countries, because it has proven to be an efficient tool in helping to overcome geographical constraints and providing information about health care to the public [4]. Telenursing facilitates the convenience of patients in receiving education such as

information on the use of drugs and diet, as well as the convenience of conducting consultations remotely [11]. Patients can easily ask questions and receive accurate information through the telenursing program.

The benefits of telenursing in patient nursing care are providing health education and changing patient health behavior. Strengthen and support patients in the decision-making process regarding the needs of the patient care planning program. The needs of these patients include the need for education about drug treatment adherence, drug side effects, diet, mental counseling, adherence to standard of care [8]. So as to improve the outcomes of the interventions that have been carried out and reduce complications chronic disease.

Minimize medical costs

Telenursing care, in addition to health and safety benefits, can provide financial benefits for patients, families and health and welfare services by reducing the time and costs incurred if the patient or nurse has to meet in person [12]. Telenursing has been successful in high-growth countries due to several factors, namely savings in healthcare costs, increasing rates of aging and the population with chronic diseases and increasing health coverage in remote, rural and remote areas. The advantages of telenursing for patients are that people living in remote areas can get health care if they have internet facilities on their phones or computers, and easy access to high quality nursing services at low costs because they do not have to travel to far locations.

Telenursing can help resolve nurse shortages, reduce distance, visit time and keep patients out of the hospital. Health services, especially remote nursing using information technology media (internet) provide convenience for the community. People or patients do not need to come to the hospital, doctor or nurse to get health services. The time required for health services is also getting shorter [13].

Continuous care

Utilization of technology and information that is currently developing can be a solution in responding to community needs regarding consultations with health workers during the COVID-19 pandemic. The ease of establishing communication with patients has a positive impact with sustainable services. During the COVID-19 pandemic, health services provided by telehealth applications ensure continuity of care, increasing the participation of patients and their relatives in care [14]. Nurses can use telenursing technology in making decisions for patient care. Remote care and ongoing support provided by nurses are very helpful for patients, such as healthcare, nutrition, medical and respiratory care for COVID-19 patients. In addition, having a treatment plan provides a sense of calm and reduces anxiety in patients [11].

CONCLUSION

Advances in communication and information technology are revolutionizing healthcare globally, including the provision of nursing services. The high use of the internet in today's society strongly supports the

implementation of telenursing as an effort to digitize (virtual care) during the pandemic. The COVID-19 pandemic has caused various changes in all aspects of human life. Telenursing is one of the answers in overcoming the changes that occur to meet the needs of health access in the community. The application of telenursing during the COVID-19 pandemic provides various benefits for both patients and health workers. Telenursing has positive implications in preventing the transmission of COVID-19, as a medium for counseling and health promotion, minimizing medical costs and as a continuity of care. However, the implementation of telenursing in Indonesia is still relatively small and there is still a need for government support related to ethics and legality and nurses must have sufficient knowledge of communication in the application of telenursing.

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