

RESEARCH ARTICLE

Correlation of Midwives' Knowledge about COVID-19 to Anxiety in Providing Care during COVID-19 Pandemic

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Abstract

The increasing incidence of COVID-19 cases caused anxiety for medical workers. Knowledge about COVID-19 is an element that works on medical workers' anxiety levels, including midwives. This study aimed to analyze midwives' knowledge about COVID-19 to the midwives' anxiety in providing midwifery care during the COVID-19 pandemic. This correlational analytic study was conducted between August and October 2021 in RSUD Kabupaten Kediri. A self-administered questionnaire containing knowledge and Zung Self-Anxiety Rating Scale questions was distributed to 45 respondents to complete. The correlation between midwives' knowledge about COVID-19 in midwives' anxiety was examined using Kendall's tau correlation test. The outcomes pointed out that most respondents had good knowledge of approximately COVID-19 (89%), and most of the respondents had moderate anxiety (84%). The analysis showed that there had been a correlation between knowledge about COVID-19 to the anxiety of midwives in providing care. The correlation coefficient value of -0.235 with a significance level of 0.036 indicated that the better the knowledge, the lighter the anxiety of the midwives. Therefore, it's essential to increase the understanding of midwives about COVID-19 and to review other factors that can affect the anxiety of midwives in providing care.

Keywords: Anxiety, COVID-19, knowledge, midwives

Introduction

A disease due to a brand new coronavirus with general signs such as cough, weak point, fever, and convulsions is known as COVID-19.¹ Another symptom is shortness of breath. This symptom is a disorder syndrome acute breathing.² In December 2019, some patients with mysterious pneumonia were reported for the first time in Wuhan, China.³ This virus is also called severe acute respiratory syndrome coronavirus and can move rapidly from human to human through direct contact.⁴

In the middle of 2020, incidents in Indonesia were reported as 68,079 cases of COVID-19, 31,585 people recovered, and 3,359 people died, with a mortality rate of 4.9%.⁵ But in 2021 of July, the entire showed cases of COVID-19 within the international is 189,828,099 cases, with 4,085,071 deaths (2.2% of CFR) in 204 inflamed nations and 151 community transmission nations.⁶

Medical practitioners treating COVID-19's patients are at greater risk of being infected than other people, increasing psychological stress.^{7,8} The psychological response to the coronavirus pandemic that health professionals may

experience is anxiety, which will increase due to anxiety about one's health and transmission to their family.^{7,9,10}

Disease transmission is also associated with a lack of understanding and consciousness.¹¹ With proper knowledge about this disease can positively impact attitudes and practices, there is less chance of infection, and it will reduce anxiety levels.¹² According to these studies that 46.7% of nurses have good knowledge, and 65% have an anxiety level in the mild category.¹²

Health workers are at risk of experiencing psychological disorders, namely having anxiety symptoms due to feeling depressed.¹⁰ More than half of medical examiners have a good understanding of how to avoid and deal with COVID-19, but there is mild anxiety.¹⁰

The majority of the medical practitioners correctly understood preventing COVID-19 transmission.^{11,13-16} In this case, it is necessary to support health workers to strengthen their knowledge of health workers so that anxiety levels can be reduced.¹³⁻¹⁶

Midwives are the health workers at the forefront of maternal and toddler health services in health facilities such as hospitals or clinics. They must continue to provide safe health services

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for patients based on existing health protocol guidelines.⁸ Anxiety will increase along with the danger of transmitting infectious illnesses that may be obtained from treated patients. This will cause various responses, such as restlessness and nervousness, that affect patient care quality.

This study aimed to analyze the midwives' knowledge about COVID-19 to their anxiety in providing midwifery care during the COVID-19 pandemic.

Methods

The correlational analysis was conducted using a total sampling technique conducted between August 2021 and October 2021 in RSUD Kabupaten Kediri.

The topics of this study were midwives' knowledge about COVID-19 and midwives' anxiety due to providing midwifery care. The population is all midwives in RSUD Kabupaten Kediri, included in the inclusion criteria: midwives who work in RSUD Kabupaten Kediri and are agreed to be respondents. The Research Ethics Committee of Universitas Kadiri approved the study (Number 007/19/VII/KEP/UNIK/2021). The investigation started with prospective respondents who were asked to sign the consent form to become a respondent. After signing the consent form, the respondent is given a self-administered questionnaire. It contains knowledge about COVID-19, and Zung-Self Anxiety Rating Scale questions were distributed. The respondents were 45 midwives. The correlation between knowledge of midwives about COVID-19 to midwives' anxiety was examined using Kendall's tau correlation test. Calculation of test results is if the probability/significance value is less than the mistake degree (0.05).

Results

The characteristics of respondents are presented in Table 1. The majority of the respondents are between 20–29 years (45%). The maximum number of respondents got information about COVID-19 from the internet or social media (69%). The majority of the respondents have good knowledge, equal to 89%, and most of the respondents experienced moderate anxiety (84%).

The outcomes of Kendall's tau correlation

Table 1 Characteristics of Respondents

Characteristics	n=45 (%)
Age (years)	
20–29	20 (45)
30–39	18 (40)
40–49	6 (13)
≥50	1 (2)
Information source about COVID-19	
Internet/social media	31 (69)
Television	12 (27)
Others	2 (4)
Knowledge about COVID-19	
Less	0 (0)
Enough	5 (11)
Good	40 (89)
Anxiety level	
Mild	7 (16)
Moderate	38 (84)
Severe	0 (0)

analysis test obtained data implied that there is a correlation between midwives' knowledge about COVID-19 to the anxiety of midwives with a correlation coefficient of $r = -0.235$ with a significance level of 0.036 which indicates that the better the understanding, the lighter the anxiety of the midwives.

Discussion

Knowledge results from understanding and takes place after humans sense a positive item. Most humans perceive a positive thing, where most are acquired via the eyes and ears. This can be known and interpreted with a good, sufficient, and poor scale.^{8,12}

The study outcomes stated that most of the respondents had a good understanding of COVID-19, which was 89%. The existence of a web seminar held by the Indonesian Ministry of Health and the Indonesian Midwives Association and training from the Kediri District Health

Table 2 Kendall Tau's Analysis Results

Categories	Midwives' Knowledge about COVID-19	
	r	p
Knowledge	1.000	0.036
Anxiety	-0.235	

Office regarding the handling of COVID-19, which health workers attended, also helped increase midwives' knowledge in RSUD Kabupaten Kediri. The convenience of accessing the internet is one of the reasons for midwives' good level of knowledge in obtaining information related to COVID-19. They can come from social media such as WhatsApp, Instagram, Facebook, Telegram, and articles on the internet. It is associated with other research that stated most of the healthcare providers in Yemen (69.8%)¹⁵ or nurses in Iran (56.5%)¹⁶ have good knowledge about COVID-19. Good understanding will come from individuals who can know, understand, analyze, synthesize, apply and evaluate stimuli,¹⁷ which in this study is about COVID-19.

Knowledge is encouraged with the aid of internal and external factors. Internal factors include age, experience, education, occupation, and gender. While external factors consist of information, environment, and socio-cultural.¹⁷ The respondents' age in this study was mainly between 20–29 years (45%) and 30–39 years (40%). The highest average knowledge of respondents aged 30–39 years categorized as early adults is 86%, and the lowest is at the age of 20–29 years, 76%. It can occur because, in the early adulthood stage, a person's cognitive abilities are at an optimal stage where a person is easy to learn, do logical reasoning, think creatively, and there has been no memory decline. It is also following the theory that the more mature the person's level of maturity and strength in thinking and working will also increase.¹⁸

Most respondents obtained information from the internet or social media which is 69%. It can be influenced because one of the preventions of COVID-19 is by implementing health protocols guidance to keep a distance. The government can provide information about COVID-19 that can be accessed by the general public quickly, updated, and trusted through the internet and social media. Health workers at Sungai Durian Health Center, West Kalimantan, received the most information about COVID-19 (62.2%) from the internet.¹⁹

Anxiety is a feeling of concern, uncertainty, and fear without an apparent stimulus, associated with physiological changes (tachycardia, sweating, tremors, etc.). If anxiety cannot be handled optimally, it can cause trauma.²⁰

The effect showed that most respondents had moderate anxiety, 84%. In this study, the health workers who performed midwifery care

were midwives, with the highest age range being between 20–39 years. There is a relationship between late adulthood and coping mechanisms with anxiety because most respondents aged 21 to 45 years old have an anxiety disorder.²¹

The factors that influence psychological well-being include demographic characteristics, which are gender, age, and socioeconomic level. Health workers are at the forefront of handling patients who only have symptoms of COVID 19 and patients who are positive for COVID-19 so that various mental conditions will arise. Respondents in this study were all female. Women were more worried about their inability than men. Women are a vulnerable group affected by mental health such as anxiety and stress arising during the coronavirus pandemic or COVID-19.²² There is 66 percent of female respondents showed that the most common psychological disorders experienced are anxiety.^{23,24} During the COVID-19 pandemic, medical examiners feel depressed and worried, so stress improves their mental status while doing their obligations.

The results showed a correlation between knowledge and anxiety of midwives with a correlation coefficient of $r = -0.235$. It indicates that the better the knowledge, the lighter the anxiety of the midwives.

Nurses had good knowledge about COVID-19, but nurses' anxiety was at a moderate level.¹⁸ Even though knowledge about COVID-19 is one of the elements that affect the anxiety degree of nurses in the Outpatient Installation of Dr. M Djamil General Hospital Padang.²⁵ However, there is no considerable correlation between anxiety and the extent of understanding of nurses about COVID-19.²⁶ The results of this research showed a correlation although the level of the correlation was low. It is with a correlation coefficient of $r = -0.235$ with a significance level of 0.036. It could be because other factors influenced the anxiety of health workers. The anxiety of health workers is not only influenced by knowledge, but several other things can affect it. Most of the respondents experienced anxiety due to the COVID-19 pandemic in the Manggarai district due to several factors, including increased anxiety from female nurses, inadequate PPE availability, fear of transmission to other family members, and nurses' knowledge.²⁷

The analysis test results by Kendall's tau test $r = -0.235$ showed a negative sign correlation coefficient, which means that there is an opposite

correlation between the two variables with a low level of correlation that not only knowledge is a factor that affects the anxiety of midwives.²⁶ High anxiety can affect a person's physical, spiritual, and knowledge. The consequences of this anxiety need to be overcome to reduce the effects of anxiety itself.²⁸

Conclusions

There is a correlation between the knowledge and anxiety of midwives. The results indicate that the better the knowledge, the lighter the anxiety of the midwife. However, the level of correlation between the two is included in a low correlation.

Conflict of Interest

There was not a conflict of interest in this article.

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