PalArch's Journal of Archaeology of Egypt / Egyptology

Interest Of Midwives In Providing Midwifery Services Through Teleconsultation In The Pandemic Time Of Covid-19

Irma Yanti¹, Lilis Suryani², Raden Retna Kinanti³

^{1,2,3} Faculty of Health Sciences, Universitas Singaperbangsa Karawang, Indonesia Email: ¹irma.yanti@fikes.unsika.ac.id

Vijaya Sarathi Timmapuram, V. Suman Raju, N.Chandra Sekar Reddy: Interest Of Midwives In Providing Midwifery Services Through Teleconsultation In The Pandemic Time Of Covid-19 -- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(9). ISSN 1567-214x

Keywords: Midwife, Teleconsultation, Covid-19

ABSTRACT

Today the world is shocked by the outbreak of a new pneumonia that has spread rapidly in more than 190 countries. This outbreak is named coronavirus disease 2019 (COVID-19) which is caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). The impact of the spread of this plague affects all aspects of life, such as social, economic, health and psychological. Based on this, face-to-face services cannot be carried out as usual, so innovation is needed in the form of online consultation or services to the public. The research design used a cross sectional approach. The population in this study were all midwives who worked at the Community Health Center and the Independent Midwives in Karawang Regency, totaling 1642 midwives who were registered as active, while the sample was 164 respondents. The sample was taken using accidental sampling, where this study used primary data by distributing questionnaires. to all midwives through the Whatsapp group of the Midwives Association in the Karawang Regency area in the form of a google form and a sample of 164 respondents was obtained. The results of data collection were analyzed correlatively using SPSS, and the types of analysis were univariate, bivariate and multivariate. The dependent variable was the midwife's interest, the independent variable was knowledge, age, perception and information. This study used Univariate, Bivariate and Multivariate analysis with the Special Package for Statistics Science (SPSS) application. Data collection was done by distributing questionnaires in the form of google form. There is a significant relationship between knowledge, perception, information and interest in midwives with a P value <0.05. Of the three independent variables, the perception variable was the most dominant variable related to the interest of midwives in providing midwifery care through teleconsultation during the Covid-19 pandemic, with an OR of 3,667. With the conditions of the COVID-19 pandemic, it is hoped that midwives can improve competence in both knowledge and skills by adopting an information system to be implemented in remote midwifery care through online consultation services, and government support is needed for success so that teleconsultation services can run optimally.

1. Introduction

PRELIMINARY

Today the world is shocked by the outbreak of a new pneumonia that has spread rapidly in more than 190 countries. This outbreak is named coronavirus disease 2019 (COVID-19) which is caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). The impact of the spread of this plague affects all aspects of life, such as social, economic, health and psychological. (Susilo et al., 2020)

In December 2019, the Hospital started reporting pneumonia cases with a history of seafood exposure in Wuhan, China. Researchers quickly isolated the new coronavirus (SARS-CoV-2, also known as COVID-19) from confirmed infected pneumonia patients. Interestingly, COVID-19 cases outnumber cases of acute respiratory syndrome (SARS) and MERS. As of April 13, 2020, confirmed COVID-19 cases surpassed 1,800,000 cases and 117,000 deaths. So that WHO declared COVID-19 as a pandemic and public health emergency of international concern. (Alwashmi, 2020)

The government has designated this non-natural disaster as a national disaster. In normal situations, maternal mortality and infant mortality in Indonesia are still a big challenge, especially during the current disaster situation. Indonesia is facing a non-natural national disaster COVID-19 so that maternal and neonatal health services are among the affected services both in terms of access and quality. It is feared that it can lead to increased morbidity and mortality of mothers and newborns. (Ministry of Health, 2020)

On June 10, 2020, the Indonesian Government announced a total of 34,316 confirmed cases of Covid-19, 1241 new cases, 1959 deaths and 12,129 recovered cases from 424 districts in 34 provinces. (WHO, 2020). The current situation of the development of Coronavirus Disease (COVID-19) cases as of 10 June 2020 using WHO and PHEOC data sources from the Ministry of Health, the situation in West Java Province, the number of cases was 2506, the number of cases with 2x negative followup specimens was 995, the number of cases that died was 995. 161, while Karawang regency is included in the category of Indonesian territory with local transmission.

In the face of a surge in COVID-19 cases, doctors and health systems around the world are competing to adopt a virtual treatment approach that eliminates the need for physical encounters between patients and healthcare providers.

In the current situation of the Covid-19 pandemic, the coverage of visits for pregnant women, post-partum and newborns has decreased, so that the presence of teleconsultation is the answer for easy access to health services. These health service innovations help patients use their time more efficiently to

consult a doctor or midwife, increase client satisfaction and increase family active participation, facilitate monitoring of services, especially populations far from services. Some of the other benefits of consulting are that it is hoped that it can save medical costs, convey complaints and diseases so that they can be handled without having to be referred far, then sharing knowledge between health workers regarding the patient's disease, then the patient's case is resolved more quickly

The COVID-19 pandemic has created systemic challenges for health care systems across the country. When the hospital is at the forefront, to protect patients and health workers can take advantage of teleconsultation. However to build virtual maintenance is so complex it requires significant operational support. Prepare a health care facility to provide patients with the care they need not only in the current pandemic, but in various emergency health care situations in the future. (Doshi et al., 2020)

One alternative solution in providing midwifery care services is teleconsultation, which has been used in previous epidemics such as Ebola or SARS. Remote consultation can solve the main problem of reducing the level of contact between people to prevent cross-contamination and avoid spreading the virus. In the United States, use of Skype, Zoom, Google Hangout, Apple and telehealth visits were permitted and replaced with the same rates as faceto-face visits from March 1, 2020. In Italy, a national strategy to promote the adoption of remote consulting is still missing. However, as in Lazio, several regional health care facilities offer specialized services to support patients during the Covid-19 pandemic. In France, patients have been reimbursed for using telemedicine solutions since September 2018. In March 2020, due to the Covid-19 pandemic, the French government issued a decision to cover all medical teleconsultation costs. In China, public health authorities encourage citizens to undertake remote medical services. The goal of teleconsultation is to provide medical support to patients whether they are infected with Covid-19 or not, because all patients with pathology must have access to health care facilities. (Baudier et al., 2020)

The Indonesian Ministry of Health in 2017 provided telemedicine services covering 4 main areas, namely Tele-Radiology, Tele-USG, Tele-Electrocardiography and Tele-Consultation. Tele-Consultation brings patients together with health workers for online consultation, knows the patient's condition and makes recommendations.

With the condition of the COVID-19 pandemic, it is very necessary for midwives to improve their knowledge and skills and adopt an information system and implement it in the services they do.

This study aims to determine the interest of midwives in providing midwifery services through teleconsultation during the Covid-19 pandemic which includes knowledge, age, perception and information variables, as well as to

find out the most dominant variables related to midwives' interest in providing midwifery services through teleconsultation during the pandemic Covid-19.

2. Method

The research design in this study used a descriptive-analytic method with a cross sectional approach, which is to find out and explain what are the factors related to the interest of midwives in providing midwifery services through teleconsultation with a research period of 6 months from September to February 2021. The population in this study were all midwives who provided midwifery care services during the Covid-19 pandemic, both midwives who worked in Puskesmas, Clinics, Hospitals or Independent Midwives in the Karawang Regency, totaling 1642 midwives who were registered as active, taking The research sample used accidental sampling, where this study used primary data by distributing questionnaires to all midwives through the Whatsapp group of the Midwives' Association in the Karawang Regency area in the form of google forms and the sample was 164 midwives.

The results of data collection were analyzed correlatively using SPSS, and the types of analysis were univariate, bivariate and multivariate.

3. Results And Discussion

1. Univariate Analysis

Variables	Frequency	s Based on Variab Percentage (%)	
Interest			
- Yes	132	80,5	
- Not	32	19,5	
Knowledge			
- Good	104	63,4	
- Less	60	36,6	
Age			
- < 35 years	88	53,7	
- \geq 35 years	76	46,3	
Perception			
- Good	83	50,6	
- Less	81	49,4	
Information			
- Yes	128	78,0	
- Not	36	22,0	

Table 1 shows that respondents who were interested in providing midwifery care through teleconsultation were greater (80.5%), compared to those who were not (11.5%). Respondents who have good knowledge about midwifery care services through teleconsultation are greater (63.4%), compared to those with less knowledge (36.6). More respondents who have <35 years of age (53.7%), compared to respondents aged \geq 35 years (46.3%). Respondents who

have a good perception of midwifery care services through teleconsultation are greater (50.6%), compared to those with poor perceptions (49.4%). Respondents who already knew information about midwifery care services through teleconsultation were greater (78%), compared to those who did not (22%).

2. Bivariate Analysis

Table 2. Distribution of respondents based on variables with the interest ofmidwives in providing midwifery care through teleconsultation during theCovid-19 pandemic

	Interest				Total		P Value
Variable	Yes		Not				
	F	(%)	F	(%)	F	(%)	
Knowledge							
- Good	89	85,6	15	14,4	104	100	
- Less	43	71,7	17	28,3	60	100	0,045
Age							
- < 35 years	72	81,8	16	18,2	88	100	
- \geq 35 years	60	78,9	16	21,1	76	100	0,791
Persepsi							
- Good	75	90,4	8	9,6	8	100	
- Less	57	70,4	24	29,6	24	100	0,002
Information							
- Yes	108	84,4	20	15,6	128	100	
- Not	24	66,7	12	33,3	36	100	0,033

Based on table 2, it shows that respondents with good knowledge were more interested in providing midwifery care through teleconsultation during the Covid-19 pandemic (85.6%), compared to respondents with less knowledge (71.7%). The results of statistical tests show that the value of p < 0.05, this is proven that there is a significant relationship between knowledge and the interest of midwives in providing midwifery care through teleconsultation during the Covid-19 pandemic.

Based on (Widiawati, Puspita and Lestari, 2020) the results of telenursing research as a communication medium make it easy for health workers to provide long-distance health services. One of the duties of health workers is to provide education / knowledge to patients, both orally and in writing. The results of the study, with the knowledge obtained by midwives, are expected that midwives who have good knowledge can provide midwifery care services, according to the behavior theory described by Bloom in (Notoadmodjo, 2012).

Respondents aged <35 years were more interested in providing midwifery care through teleconsultation during the Covid-19 pandemic (81.8%), compared to respondents aged \geq 35 years (78.9%). The results of statistical tests show that the value of p> 0.05 is proven that there is no significant relationship between

age and the interest of midwives in providing midwifery care through teleconsultation during the Covid-19 pandemic.

Research (Baudier et al., 2020) observed that young people use information technology more often than older people who only use technology occasionally or only to carry out some simple tasks.

Respondents with good perceptions were more interested in providing midwifery care through teleconsultation during the Covid-19 pandemic (90.4%), compared to respondents who had poor perceptions (70.4%). The results of statistical tests showed that the p value <0.05, this proved that there was a significant relationship between perceptions and the interest of midwives in providing midwifery care through teleconsultation during the Covid-19 pandemic.

Respondents with good perceptions were more interested in providing midwifery care through teleconsultation during the Covid-19 pandemic (90.4%), compared to respondents who had poor perceptions (70.4%). The results of statistical tests showed that the p value <0.05, this proved that there was a significant relationship between perceptions and the interest of midwives in providing midwifery care through teleconsultation during the Covid-19 pandemic.

Based on research (Baudier et al., 2020), it explains that the conclusions of the study that have been conducted discuss the perception of teleconsultation by individuals in providing health services during the Covid-19 pandemic with a technology acceptance model that is tested in professional medical services. Previous studies have focused on the negative effects of being infected through physical contact with other people. Thus, perception plays an important role in the acceptance of remote solutions and can be applied not only in a medical context, but also in other technological applications such as making contactless payments, online shopping and online education.

Research (Spiby et al., 2019) conducted a qualitative study to explore midwives' perceptions of video calling as a method for assessing a mother who is about to give birth. The method used was an analysis of 8 midwives with focus group discussion (n = 45) interviews (n = 4) in the Midlands Region of England and the southern and central regions of the United States. The results obtained were generally midwives with positive perceptions about video calls at the onset of labor.

More than 400 midwives filled out a questionnaire to determine perceptions about the extent to which midwives mastered technology, so that training and competency improvement were felt. (Sinclair and Gardner, 2001)

Meanwhile (Lukasse and Henriksen, 2019) conducted a mixed methods study to measure midwives' perceptions of their workplace environment. In order for midwives to gain experience, a more flexible approach is required in the delivery of care services. In order for midwives to remain within the scope of midwifery services, continuous professional education is required and is given the opportunity to practice high-quality, women-centered midwifery care.

Respondents with information were more interested in providing midwifery care through teleconsultation during the Covid-19 pandemic (84.4%), compared to respondents without information (66.7%). The results of statistical tests show that the value of p < 0.05 is evident that there is a significant relationship between the information and the interest of midwives in providing midwifery care through teleconsultation during the Covid-19 pandemic.

Based on the research conclusions (Lima-Pereira, Bermúdez-Tamayo and Jasienska, 2012) the internet can be widely used as a source of information among participants in antenatal classes, for both women and men. About 95% have used it to find information during pregnancy, but the majority (about 90%) do not have a website. Meanwhile (Kamali et al., 2017) conducted a descriptive study method conducted on pregnant women who attended an obstetric clinic / gynecologist in Kerman, Iran in 2015. Data were collected using self-administered questionnaires, tested for validity and reliability. A total of 400 pregnant women participated in this study.

Based on research (Sharifi et al., 2020) it is confirmed that women are actively seeking health-related information as part of their role as mothers. When choosing sources of information, more than half were willing to refer to health services for information, followed by family, friends and relatives. Furthermore, demographics (education level, length of stay in Iran and insurance status) and midwifery characteristics (number of children) influence the choice of sources of information. The results of this study can help nurses and midwives to prioritize the types of information sources with the demographic and obstetric characteristics of pregnant women when providing the necessary pregnancy-related information.

3. Multivariate Analysis

nformation with Midwives' Interests in Providing Midwifery Car Services through Teleconsultation During the Covid-19 Pandemic						
	Variable	p value	OR	95% C.I.	for EXP (B)	
				Lower	Upper	
	Knowledge	0,050	1,660	0,722	3,818	
	Perseption	0,002	3,667	1,493	9,008	
	Information	0,033	2,532	1,038	6,178	

Table 3.The Relationship Between: Knowledge, Perception and
Information with Midwives' Interests in Providing Midwifery Care
Services through Teleconsultation During the Covid-19 Pandemic

From table 3 it can be concluded that:

a. Respondents who have good knowledge have the opportunity to be 3,818 times interested in providing midwifery care services through teleconsultation during the Covid-19 pandemic.

- b. Respondents who have good perceptions are likely to be 9.008 times interested in providing midwifery care services through teleconsultation during the Covid-19 pandemic.
- c. Respondents who already know the information have the opportunity to be 6,178 times interested in providing midwifery care services through teleconsultation during the Covid-19 pandemic.

Of the three independent variables, the perception variable is the most dominant variable related to the interest of midwives in providing midwifery care through teleconsultation during the Covid-19 pandemic, with an OR of 3,667. This means that respondents who have good perceptions are three times more likely to be interested in providing midwifery care services during the Covid-19 pandemic, compared to respondents who have low perceptions after being controlled for the knowledge and information variables.

4. Conclusion

There is a significant relationship between knowledge, perception and information with the interest of midwives in providing midwifery care services through teleconsultation during the Covid-19 pandemic. Perception is the most dominant variable, which means that midwives who have a good perception of interest tend to be interested in providing midwifery care through teleconsultation during the Covid-19 pandemic with an optimal 3,667 times compared to respondents who have low perceptions, after being controlled for the variable knowledge and information.

5. Suggestion

With this COVID-19 pandemic condition, it is hoped that midwives can improve competence in both knowledge and skills by adopting an information system to be implemented in remote midwifery care through online consultation services.

The role of the government, in this case the District / City Health Office, is to continue to facilitate the use of remote information technology to replace routine face-to-face services, by preparing regional readiness, acceptance and community literacy..

References

- Alwashmi, M. F. (2020) 'The use of digital health in the detection and management of COVID-19', *International Journal of Environmental Research and Public Health*, 17(8). doi: 10.3390/ijerph17082906.
- Baudier, P. et al. (2020) 'Patients' perceptions of teleconsultation during COVID-19: A cross-national study', *Technological Forecasting and Social Change*. Elsevier Inc., (December), p. 120510. doi: 10.1016/j.techfore.2020.120510.

- Doshi, A. *et al.* (2020) 'Keep Calm and Log On: Telemedicine for COVID-19 Pandemic Response', *Journal of hospital medicine*, 15(5), pp. 302–304. doi: 10.12788/jhm.3419.
- Kamali, S. *et al.* (2017) 'Health information needs of pregnant women_ information sources, motives and barriers - Kamali - 2018 - Health Information & amp; Libraries Journal - Wiley Online Library.pdf', pp. 1–5.
- Kementerian Kesehatan (2020) Pedoman Bagi Ibu Hamil, Ibu Nifas, dan Bayi Baru Lahir Di Era Pandemi Covid-19.
- Lima-Pereira, P., Bermúdez-Tamayo, C. and Jasienska, G. (2012) 'Use of the Internet as a source of health information amongst participants of antenatal classes', *Journal of Clinical Nursing*, pp. 322–330. doi: 10.1111/j.1365-2702.2011.03910.x.
- Lukasse, M. and Henriksen, L. (2019) 'Norwegian midwives' perceptions of their practice environment: A mixed methods study', *Nursing Open*, 6(4), pp. 1559–1570. doi: 10.1002/nop2.358.
- Sharifi, M. *et al.* (2020) 'Sources of get information and related factors during pregnancy among Afghan migrant women in Iran', *Nursing Open*, pp. 1–14. doi: 10.1002/nop2.707.
- Sinclair, M. and Gardner, J. (2001) 'Midwives' perceptions of the use of technology in assisting childbirth in Northern Ireland', *Journal of Advanced Nursing*, 36(2), pp. 229–236. doi: 10.1046/j.1365-2648.2001.01963.x.
- Spiby, H. *et al.* (2019) 'A qualitative study of midwives' perceptions on using video-calling in early labor', *Birth*, pp. 105–112. doi: 10.1111/birt.12364.
- Susilo, A. *et al.* (2020) 'Coronavirus Disease 2019 : Tinjauan Literatur Terkini Coronavirus Disease 2019 : Review of Current Literatures', *Jurnal Penyakit Dalam Indonesia*, 7(1), pp. 45–67.
- WHO (2020) 'Coronavirus Disease Coronavirus Disease Coronavirus Disease World Health World Health Organization Organization', 19, pp. 1–21.
- Widiawati, S., Puspita, M. and Lestari, R. D. (2020) 'Pengaruh Telenursing Terhadap Pengetahuan Ibu Tentang Perawatan Nifas', Jurnal Endurance : Kajian Ilmiah Problema Kesehatan, 5(2), pp. 305–312.