

Original Research Paper

Virtual learning overview of midwifery students

Evi Wayuntari*, **Anjarwati**

Departemen Sarjana dan Profesi Bidan, Universitas Aisyiyah Yogyakarta, Jl. Siliwangi No. 63, Nogotirto, Gamping, Sleman, Yogyakarta, 55592, Indonesia

 evi.wahyuntari@unisayogya.ac.id

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Abstract

WHO's prevention efforts against the spread of COVID-19 are to temporarily stop activities related to crowds, such as on campus so that learning that was originally done face-to-face becomes online or done remotely. This study aimed to determine the description of the implementation of virtual learning for midwifery students. The research method used a descriptive approach carried out on midwifery students at Universitas Aisyiyah Yogyakarta, totaling 218 students in semesters 2, 4, and 6, which were carried out in May 2021 with a sample of 138 students according to the inclusion criteria. Samples taken from the D3 Midwifery study program at Universitas 'Aisyiyah Yogyakarta semesters 2, 4, and 6 who have done virtual learning. The research instrument used a questionnaire that included basic data and the implementation of online learning. The research data were analyzed descriptively to obtain an overview of virtual learning in midwifery students. The results showed that 127 respondents (92%) agreed with online learning, 124 respondents (89.9%) disagreed with clinical practice learning carried out using online media, 138 respondents (100%) agreed that clinical practice learning during the pandemic was still carried out on the practice field by complying with health protocols. In conclusion, learning during the COVID-19 pandemic for midwifery students who need skills can be carried out by a combination of methods, namely limited face-to-face meetings and the implementation of clinical practice by complying with health protocols.

Keywords: midwifery students; virtual learning

1. Introduction

A new type of coronavirus causes Coronavirus Disease (COVID-19). The World Health Organization (WHO), on March 11, 2020, declared that COVID-19 is a global pandemic, where 199 countries are exposed to COVID-19. WHO data on March 31, 2020, globally, 750,890 confirmed positive, and 36,405 cases died. In Europe, 423,946 cases and 26,694 deaths. In Southeast Asia 4,215 deaths (WHO, 2020). While in Indonesia, the data for March 31, 2020, obtained 1,528 cases, 81 cases were recovered, and 136 died; on April 9, there were 3,293 cases, 252 cases were recovered, and 280 died.

One of the prevention efforts carried out by WHO against the spread of COVID-19 is to temporarily stop activities that have the potential to cause crowds, such as in schools. The Indonesian government, through the Ministry of Education and Culture through circular letter Number 36962/MPK.A/HK/2020 concerning Online Learning and Working from Home in the Context of Preventing the Spread of Corona Virus Disease (COVID-19), instructs universities to organize distance learning and advises students to study from their homes. This policy is certainly a challenge for learning that demands competency skills, including for midwifery students.

Previous research suggests that online learning for medical students in 2020 helps students stay active and has the opportunity to learn independently. Most courses are practical, requiring more interactive methods, displaying medical procedures in real situations, providing concise information, and providing learning videos. Other studies have also shown that distance learning encourages social

distancing behavior, thus reducing the potential spread of COVID-19 (Rahman & Firman, 2020).

COVID-19 affects the world of education, where learning that was originally done face-to-face becomes online or done remotely. Complexity is a challenge for elearning learning in terms of accessibility, affordability, flexibility, and policy. Online learning relatively requires lower costs, besides that, in online learning, students can schedule or plan time to complete lectures available online and wherever they are (Dhawan, 2020). However, the disadvantages of online learning include students feeling less social with friends, lack of understanding, and competence of students toward learning outcomes (Song et al., 2004).

The closure of learning activities due to the Covid-19 pandemic increases stress on students, lecturers, and parents. The impact of the covid-19 pandemic makes a person experience limitations in understanding the fluctuating conditions of the COVID-19 pandemic, various developments in the course of the spread of the virus, limited access to digital information both in terms of the availability of internet network access at the location of residence or limited funds for providing internet quotas. This condition requires all parties, both students, parents, and lecturers, to monitor learning carried out from home so that it runs well. School policies from home in the form of psychological problems with new stressors that cause anxiety and even depression in addition to fears of being infected with COVID-19 as well as with tasks and learning adaptations that have not been prepared in a structured manner. So, using information technology in learning as an innovative platform that lecturers and students can utilize is needed in online learning. Technology facilitates education from various locations with approach methods and learning media that can be selected to achieve learning outcomes. The weaknesses of technology implementation, especially in developing countries, are the unavailability of optimal facilities and infrastructure, internet network barriers, quota limitations, and digital capability gaps. This study is related to virtual learning during the COVID-19 pandemic. Previous researchers obtained from other studies that have examined medical and nursing students, while this study uses midwifery students because it is still rare to examine these subjects. This study aims to determine the description of virtual learning during the COVID-19 pandemic in midwifery students.

2. Research Methods

This study uses a quantitative design with descriptive research methods to provide an overview of the response to the impact of virtual learning on midwifery students during the COVID-19 pandemic. The research was conducted in May 2021. The population in this study were all students of the D3 Midwifery Study Program at Universitas 'Aisyiyah Yogyakarta, totaling 218 students. The sample was taken by purposive sampling, totaling 138 students with the inclusion criteria of D3 Midwifery study program students at Universitas 'Aisyiyah Yogyakarta semesters 2, 4, and 6 who have done virtual learning.

The research instrument used a questionnaire in the form of basic data (age, semester, domicile) and a questionnaire developed by the researcher related to the implementation of online learning, including aspects of perceptions and attitudes towards the implementation of learning during the pandemic, which had been assessed by expert judgment. Data were collected in May 2021 using Google Forms and distributed to research samples that met the inclusion criteria.

The data that has been collected is processed and then analyzed computerized in stages in accordance with the research objectives, namely the results of data collection in this study are processed, then the collected data is analyzed and presented in tabular form based on the frequency and variables studied so as to obtain an overview of the research subjects and students' real responses to virtual learning that has been implemented during the COVID-19 pandemic in the form of a percentage of each variable.

3. Results and Discussion

3.1. Results

Discussion and analysis results related to the research questions are discussed and discussed based on the research objectives. The discussion contains the meaning of the results and comparisons with theory and or similar research results.

Table 1. Online learning

Question	Total	Percentage (%)
Online face-to-face with lecturers is required for online learning.		
Agree	127	92
Disagree	18	8
Clinical practice learning during the pandemic needs to go to the practice site by following health protocols.		
Agree	138	100
Disagree	0	0
Clinical practice learning is sufficient with online methods.		
Agree	14	10.1
Disagree	124	89.9
More		
Skills practice learning method that suits my condition to understand better		
Video and lecturer explanation	74	54.7
Practice guide	29	21,2
Demonstration video	14	10.2
More	21	13.9

Based on table 1, 127 (92%) respondents agreed with face-to-face or online learning, 138 (100%) respondents agreed that clinical practice learning during the pandemic was still carried out on the ground by following health protocols, and 124 (89.9%) respondents disagreed with online learning methods.

3.2. Discussion

Clinical practice learning is not sufficient to use only online media. Regarding the appropriate skill practice learning media, 74 (54.7%) in the form of videos and explanations from lecturers, 29 (21%) respondents used practice instructions, and 14 (10%) used demonstration videos.

The results showed that 127 (92%) respondents agreed with face-to-face or online learning. There are two types of learning methods, including synchronous and asynchronous. Synchronous learning is a learning process where learners and instructors interact directly in online learning within a predetermined time. Online learning with the asynchronous method, where instructors and learners can communicate directly, with the synchronous method increasing motivation to learn online (Harstinki, 2008; Fadhillah et al., 2021). Synchronous learning is supported by teleconference, which allows students to ask questions directly. This is in accordance with the expectations of midwifery students that online face-to-face is needed for explanations, especially practical skills, and explanations of practicum procedures. The advantages of synchronous learning are that students can improve their learning ability and reduce stress while learning and learning media can use video or conference. (Nagodavithana & Premarathne, 2022).

Previous research found that the need for verbal lecturer explanations of complex material is not enough to provide material, do assignments, and communicate nonverbally through chat forums provided in virtual class applications (Rahman & Firman, 2020). This is in accordance with the results of research on medical students who will take the OSCE exam, where students are not enough to see

videos alone from lecturers but require direct explanation through the Zoom application to discuss related unclear information that has been conveyed through videos (Herlambang et al., 2021). Research by Nuryati (2021) states that communication problems with lecturers can make learning ineffective (Nuryati et al., 2021). Previous research found that online face-to-face methods with lecturers help students to understand the material. Students can discuss directly, interact and build closeness with students, and lecturers can see student enthusiasm for learning (Nikmah & Azimah, 2020).

This study found that 124 (89.9%) respondents disagreed with clinical practice learning conducted with online media. Midwifery graduates are expected to be able to provide care to patients after being declared competent. One of the students' competencies is obtained through midwifery clinical practice conducted at the Hospital/Puskesmas/Independent Midwife Practice (PMB). Midwifery Clinical Practice allows students to provide a real experience to improve their skills in providing midwifery care. According to Bloom's taxonomy, to achieve the highest skills, especially in the psychomotor domain, students must be able to master the levels below. Online learning is less effective because health education requires direct practice with patients who provide a real experience to students. This is in accordance with Mahdy's research (2020) that online learning helps students stay up and running by providing opportunities for student self-study with challenges, where most courses are practical, more interactive methods are needed, displaying medical procedures in real situations, providing concise information, and providing learning videos.

The demonstration method or practicing directly can increase student understanding. This is like the research conducted by Susilowati and Wahyuntari (2019), which examined SADARI in class X students at the Krapyak Yogyakarta Islamic Boarding School (Susilowati & Wahyuntari, 2019). Another similar study conducted on veterinary students in Egypt found that learning that requires skills is not easily learned online. Research conducted by Nuryati (2021) found that students' understanding was lacking in courses that required skilled care (Nuryati et al., 2021). Students expect online learning that requires skills to be improved to be more interactive, display medical procedures in real situations, and provide 3D virtual tools to be able to perform demonstrations and redemonstrations (Mahdy, 2020).

Clinical practice learning for midwifery students during a pandemic is still carried out by following health protocols. Based on the study's results, 138 (100%) respondents agreed that clinical practice learning during the pandemic was still carried out on the field by following health protocols. Midwives, as the frontline in facing a pandemic, must be able to provide services so that midwifery students are required to have the knowledge and skills to provide the care needed for various midwifery cases. This is to ensure the quality of alumni as well as the needs of health workers and accountability to parents. To support the achievement of midwifery student competencies with the changing situation of COVID-19 development, updated infrastructure, and information technology facilities are needed in virtual learning or a combination (virtual and face-to-face) following developments and applicable government policies.

Research conducted in Spain on nursing students at three universities found that clinical practice learning is indispensable for nursing students, and face-to-face learning for achieving student skills is needed to support nursing student competence (Ramos-Morcillo et al., 2020). In research conducted by Abbasi et al. (2020), most nursing students considered elearning learning ineffective in courses requiring practical laboratory or clinical skills.

Implementing clinical practice during the pandemic is indeed a dilemma and challenge for midwifery students. Clinical practice can be carried out by adapting to new habits by implementing health protocols, namely wearing masks, maintaining a distance of 1-2 meters, and washing hands with soap and running water (Kemenkes, 2020). In addition, health screening is carried out by checking body temperature, history of illness, travel history, and history of contact with positive patients with COVID-19. The practice site requires antigen swabs for practice students. The method of learning practical skills

that students easily understand 74 (55%) in the form of videos and lecturer explanations, 29 (21%) respondents use practice instructions, 14 (10%) use demonstration videos. Previous research on nursing students in Italy found that web-based video learning can reduce the gap between theory and practice and must pay attention to the quality of videos made so that they can have a positive and significant effect on learning (Barisone et al., 2019). In addition, lecturer explanations during skill practicum are needed, especially in terms of explaining new work procedures for the first time.

According to Barison *et al.* (2019) (Barisone et al., 2019), although videos can bridge the gap between theory and practice, students need to emphasize communication with the supervisor, namely the tutor, to communicate actions being performed for the first time (Lahti et al., 2014).

4. Conclusion

Implementing virtual learning is the main alternative in paying attention to security and safety for students, patients, and lecturers during the COVID-19 pandemic, including midwifery students. Learning for midwifery students who need to practice virtual modification skills with face-to-face or clinical practice by paying attention to competency outcomes and policies during the COVID-19 pandemic. Learning during the covid-19 pandemic needs media innovation and learning methods that support the learning of appropriate virtual clinical skills practice to support the achievement of midwifery student competencies by actively following developments and facilitating facilities and infrastructure as well as learning information technology and policies during the Covid- 19 pandemic. Suggestions for further researchers by developing skill learning media that can facilitate students in online learning.

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