# Virtual learning of midwifery students during Covid-19

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#### **ABSTRACT**

**Background:** COVID-19 pandemic which has an impact on all aspects of life including the field of education by implementing the learning process conducted from home. This situation forces the world of education to create new adaptations employing virtual learning which has a complex impact on the physical, psychological, social and economic.

**Objective:** to discover the description of online learning for midwifery students during the Covid-19 pandemic.

**Method:** Quantitative research with a descriptive approach was performed on 218 students of midwifery at Universitas Aisyiyah Yogyakarta as many as 2, 4 and 6 semesters. The study was conducted in May 2021 with a sample of 138 students who met the inclusion criteria of D3 Midwifery students study program at Universitas Aisyiyah Yogyakarta who had participated in virtual learning. The research instrument employing a questionnaire includes basic data and a questionnaire for the implementation of online learning. The data were analyzed descriptively to obtain an overview of virtual learning in midwifery students.

**Result:** It was discovered that 78 (56.5%) respondents felt comfortable communicating through electronic media in learning, 120 (87%) respondents did not agree that practical learning skills were easy to understand online and 55 (39.9%) liked learning employed zoom meetings and 41 (29.7) respondents performed the WA group.

**Conclusion:** Online learning is an alternative problem solving during a pandemic, both in theory and practice. Practical learning requires important skills to be performed face-to-face even though the number of meetings and practice groups is limited and the importance of innovation in practice implementation methods in the clinic.



## 1. Introduction

Covid-19 pandemic decided by WHO since January 30, 2020 has an impact on all aspects of life. Covid-19 has changed the habits of human life around the world, and also has an impact on all aspects of life, including in the field of education. WHO has made various efforts to prevent the spread of Covid-19 by temporarily stopping activities which possess the potential to cause crowds such as school (Kassie et al., 2021).

Almost all over the world, schools and campuses are closed to avoid crowds which are one of the factors for the transmission of Covid-19. The world's response to Covid-19 is different, but many countries have closed schools to reduce the spread of Covid-19. In America and England, school activities and all evaluation activities or tests are canceled. In Australia, it was reported that learning

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activities were discontinued and replaced with online learning. Students study from home. Some are also still conducting face-to-face learning but by observing the health protocol with the approval of the local government. In India, schools are closed and all are required to study from home to break the chain of the spread of Covid-19 (Onyema et al., 2020b). In Indonesia, since March 16, all schools and universities have been closed and all are required to study from home.

The Government of Indonesia through the Ministry of Education and Culture Issues Circular No. 4 of 2020 concerning the implementation of education policies in the emergency period of the spread of Covid-19 in which all learning processes are performed from home through online learning, including the education of midwifery students. Since nobody knows when the pandemic will end, educational institutions around the world have decided to administer materials for all students in all academic fields (Astuti et al., 2021) in (Adnan, 2020). available technical resources to create online learning

The unplanned closure of schools due to the Covid-19 pandemic has had a profound effect on the world of education. Technology is indispensable and becomes one of the new platforms which can be administered for educational institutions, educators and students. Technology is an integral part of the relationship and communication between students and teachers, especially during times of isolation, quarantine and lockdown (Onyema et al., 2020a). For educational institutions which have previously implemented technology such as e-learning, definitely, it has more advantages when compared to those that have not used it at all.

The transition to online education has also caused problems in almost all countries, especially developing countries, including the unavailability of relevant facilities or facilities to facilitate online learning, in addition to the problem of the digital divide, which is a major obstacle for teachers and students in rural areas. Learning during the COVID-19 pandemic requires nurse and midwife educators to continue to provide competence to students by making changes including distance learning, this may still continue after the pandemic (Wynter et al., 2022). However, technology remains a therapy to bridge the educational gap. The results of research (Adnan, 2020) in Pakistan revealed that online learning is not effective in developing countries such as Pakistan, due to several obstacles such as lack of access to internet networks, lack of face-to-face meetings between students and lecturers, conventional classes are more motivating than classrooms. on line.

Several studies have been conducted regarding the impact of the Covid-19 pandemic on health education, including research conducted by (Abbasi et al., 2020a; Mahdy, 2020; Oducado & Estoque, 2021a). Based on this research, it has not been conducted on midwifery students. Therefore, the objective of this study is to determine the description of online learning in midwifery students.

### 2. Methods

Quantitative research employing research methods to create a picture or descriptive virtual learning of midwifery students. The population in this study were all students of the D3 Midwifery Study Program, Universitas Aisyiyah, Yogyakarta, with a total of 218 students. The sample was obtained by purposive sampling, it was discovered that 138 students with the inclusion criteria of D3 Midwifery study program students, Universitas Aisyiyah, Yogyakarta semester 2, 4 and 6 who have completed virtual learning.

The research instrument employed a questionnaire about basic data (age, semester, domicile) and a questionnaire on the implementation of online learning which had been assessed by expert judgment. Data collection was performed in May 2021 using a google form and distributed to research samples that met the inclusion criteria.

The data that has been processed is then analyzed computerized in stages according to the research objectives, which was the results of data collection in this study processed computerized. Then, the collected data was analyzed descriptively presented in tabular form based on the frequency and variables studied to obtain an overview of the research object in the form of a percentage of each variable. The variables analyzed were the characteristics of the respondents including age, student attitudes towards virtual learning.

# 3. Results/Findings

Based on the research results obtained, it is presented in table 1:

**Table 1.** Online Learning

| Statement  | Total | Percentage |
|--|-------|------------|
| I feel comfortable communicating through electronic media for learning |       | _          |
| Agree  | 78    | 56,5       |
| Do not agree   | 60    | 43,5       |
| Learning Practice skills are easy to understand online                 |       |            |
| Agree  | 18    | 13         |
| Do not agree   | 120   | 87         |
| The most suitable online learning media for current conditions         |       |            |
| LMS  | 28    | 20,3       |
| Zoom meeting   | 55    | 39,9       |
| GCR  | 7     | 5,1        |
| WA Group   | 41    | 29,7       |

Based on table 1, it was discovered that 78 (56.5%) respondents feel comfortable communicating through electronic media as a learning suggestion, 120 (87%) respondents do not agree that learning practice skills are easy to understand online, 55 (39.9%) respondents have appropriate learning methods using zoom meeting, 41 (29.7%) using group WA.

## 4. Discussion

The results revealed that 78 (56.5%) respondents felt comfortable communicating through electronic learning media. In this case, students have experienced a pandemic for one year so they are more adaptive to online learning methods. The online learning method which has been followed during this time can better understand the mechanics and techniques of following the learning process through all courses that facilitate two-way interaction with various platforms. The results of the study (Nan et al., 2020) were discovered in online learning that students were more comfortable in expressing opinions or questions. Interaction with friends and lecturers were performed in online learning so that they did not meet physically or in person make students not awkward in expressing their opinions. Furthermore, there was no psychological pressure from peers when they learn face-to-face. Online learning eliminated a lack of confidence so that students are more courageous in expressing their opinions and questions without the limitations of space and time. Distance learning during a pandemic makes it possible to maintain the quality of midwifery education by integrating technology (Sögüt et al., 2022).

The results presented that 120 (87%) respondents did not agree that learning practical skills was easy to understand online. Practical learning prioritizes competence including knowledge, attitudes and skills should have been practiced simultaneously. It required time and demonstration and redemonstration models to be competent. The COVID-19 pandemic has limited face-to-face learning strategies so that midwifery students are not optimal in achieving standard skill targets (Luyben et al., 2020b). With virtual learning, it was necessary to identify in a structured manner the material employed for online and offline virtual activities because there should be a policy of limiting activities and community mobility during a pandemic that must be followed. The university has regulated learning activities during the pandemic through the Vice 1st Rector's Circular No. 72/UNISA/AD/VII/2020 regarding the implementation of odd semester learning that learning is conducted online and for practical activities that cannot be performed online to be conducted offline according to faculty level considerations.

The Faculty of Health Sciences in the policy document no 47/FIKES-UNISA/KD/III/2020 concerning the Learning Process in Vigilance of the Spread of Covid-19 provides a policy for online learning activities to be performed flexibly while prioritizing competency achievement. Monitoring is performed by study programs and practical learning is optimized online so that 100% of the theoretical meetings are online and a maximum of 20% are offline practice/practice meetings. This activity is in addition to considering pandemic policies at the government, association and university levels because it considers aspects of competency achievement. To support midwifery practice learning during the COVID-19 pandemic, it can be combined with videos or games through media such as those available

in e-learning (Di Marco, 2021). It is in accordance with previous research conducted on nursing students that not all components of nursing education can be performed digitally or online, especially in courses that require hands-on practical skills in the laboratory or in the clinic which will not be effective when conducted using e-learning (Abbasi et al., 2020b). Other research discovered that not all components of nursing education can be performed digitally, especially in courses that require practice skills (Oducado & Estoque, 2021b).

The most suitable online learning media are 55 (39.95%) using zoom meeting and WhatsApp Group. The zoom meeting form plate has been well known since the beginning of the pandemic for learning activities and other types of meetings. The online learning experience using zoom meetings is very helpful for students in understanding the material. Lecturers are able to interact directly in space and time, share screens of learning materials and virtually meet all personal students with a gallery view or take advantage of menus that support each other to interact with chat, or raise hands for those who will ask questions and other facilities at the zoom meeting. The COVID-19 pandemic has changed the midwifery education model to maintain competence as before the COVID-19 pandemic (Luyben et al., 2020a).

Previous research found that the learning process was mostly performed using media such as WhatsApp (WA), video conference (zoom meeting). Other research mentions the effectiveness of using zoom meetings in students who are more able to receive material, to study anywhere. Moreover, lecturers and students can meet virtually, hence, they know the activities performed while learning even though they are far away. The use of zoom meetings is very helpful for students to increase knowledge when lecturers explain directly and face to face online (Nikmah & Azimah, 2020b).

Another learning media considered appropriate is the WA group. Based on the results of the study, 41 (29.7%) respondents chose the WA group media (WAG). WA groups are considered capable of bridging two-way discussions and can help bridge signal constraints when using the application. Learning activities through WA groups can also be employed optimally according to the set learning plans, can monitor student activity by means of the ability to respond via chat either written or voice messages. It is also very possible to direct links to various learning resources such as e-books, YouTube for practical activities, journals and others. The use of WA groups as one of the asynchronous media, in which the use of WAG students and teachers can discuss by sending materials, videos and giving quizzes. It is in accordance with research (Nikmah & Azimah, 2020a) that the use of WA by Arabic language students is very effective. Lecturers and students discuss by writing chat or by sending voice recordings.

The results presented that the most suitable online learning media with the current conditions of students stated that the Learning Management System (LMS) through e-learning provided by the campus was 28 students (20.3%). The use of LMS as one of the academic policies at UNISA has been employed to support student learning since before the pandemic and has been optimized as a support for asynchronous learning for students including midwifery students. In general, students are familiar with the menus administered and during this pandemic, a sub domain was developed to facilitate learning activities. For activities that are more frequently administered with forum discussions, when compared to using a more interactive zoom or WA group which is tremendously easy to implement if there are network obstacles. The LMS still has several obstacles besides the network which is also less than optimal for direct interaction between lecturers and students. LMS is employed for all courses ranging from providing course module learning plans, evaluations and course exams. Previous research conducted on nursing students in Spain, lecturers used e-learning as an online learning medium (Ramos-Morcillo et al., 2020). Another study conducted to evaluate the use of e-learning on nursing students in Turkey revealed that e-learning greatly helped students' understanding of learning using videos uploaded in the LMS. Learning employing e-learning combines student activities, individual learning, and repetition of material as needed (Yangoz, 2017a, 2017b).

# 5. Conclusion

The Covid-19 pandemic has an impact on all aspects of life, including the education aspect, including education for midwifery students. Online learning is an alternative problem solving during a pandemic, both in theory and practice. Practical learning which requires important skills is performed face-to-face even though the number of meetings and practice groups is limited and the importance of innovative methods of implementing practice in the clinic. Suggestions for midwifery

study programs are conducting evaluations from lecturers and students, identifying and prioritizing materials and types of skills according to the percentage capacity set by the faculty every semester. The next researcher developed an online learning method that is able to accommodate the skill needs of students.

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