



IMPLEMENTATION OF PRACTICAL E-LEARNING MODEL ON K.A.P (PSYCOMOTOR AFFECTIVE COGNITIVE) IN MIDWIFE STUDENTS IN THE ERA OF THE COVID-19 PANDEMIC

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ABSTRACT

The outbreak of the corona virus (Covid-19) poses challenges for educational institutions, especially those based on clinical practice skills. E-learning is one of the best solutions for distance learning to protect students and teaching staff from the transmission of the Covid-19 virus. The DIII Midwifery Study Program curriculum consists of 40% theory and 60% practice. The study program manager determines practical learning using learning videos. The purpose of this study was to determine the effect of the practical e-learning model on K.A.P (Affective Psychomotor Cognitive) in midwifery students in the era of the Covid-19 pandemic. Methods. This research was a cross-sectional conducted on May-July, 2021. Cognitive assessment used multiple choice questions (MCQ), affective assessment used a self-assessment scale questionnaire that was valid and reliable ($0.877 > 0.235$), Student psychomotor assessment was carried out using Skills checklist assessment sheet. The results showed the significance value of each variable ($0.001 < 0.05$) which means that there is an influence of the practical e-learning model on the cognitive, affective and psychomotor domains of students in the course of maternity midwifery care.

Keywords: Practical E-learning, Psychomotor Affective Cognitive

INTRODUCTION

The outbreak of the corona virus disease 2019 (Covid-19) which has hit 215 countries in the world presents its own challenges for educational institutions, especially universities. Online learning is an option that can be taken due to restrictions on learning activities that occur at schools and universities in an unspecified time. An educator has an obligation to be able to create an effective learning atmosphere in any situation and condition, so that students can still understand and follow the lesson properly. To design a quality learning process, there are several aspects that also influence it: teaching, the use of interesting and varied learning methods according to student learning behavior, conditions and a conducive environment. the use of innovative learning media to support the teaching and learning process itself, namely e-learning (Astuti & Bhakti, 2018).

E-learning is a systematic teaching and learning method for acquiring knowledge using electronic media. Academics refer to E-learning as online learning, web-based learning, internet-based learning, and during the 2020 coronavirus disease outbreak many people called it distance learning. Using e-learning learning media means bringing a new innovation in which students not only listen to material provided by educators but they can see, hear and do something related to the material being taught using technology. From this situation students will become more interested in learning and finally they are motivated so they can understand and understand what is explained by the teaching staff even with distance learning, and the results of the learning will still be good because students can still receive and understand what the teaching staff explained (Haryadi and Kansaa, 2021).

E-learning is one of the best solutions for distance learning to protect students and teaching staff from transmission of the corona virus and to

continue their education. The D III Midwifery Study Program curriculum consists of 40% theory and 60% practice. In theoretical learning, the application of e-learning does not cause many obstacles. However, during practical learning, the e-learning model may cause several obstacles that must be overcome. In midwifery care courses, there are many competencies that must be achieved through practice. The study program manager determines practical learning using learning videos. Learning videos are given to students to study and practice independently. This might cause problems for students when practicing independently due to limited tools and consumables in their respective places.

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listen to material provided by educators but they can see, hear and do something related to the material being taught using technology. From this situation students will become more interested in learning and finally they are motivated so they can understand and understand what is explained by the teaching staff even with distance learning, and the results of the learning will still be good because students can still receive and understand what the teaching staff explained (Haryadi and Kansaa, 2021).

E-learning is one of the best solutions for distance learning to protect students and teaching staff from transmission of the corona virus and to continue their education. The D III Midwifery Study Program curriculum consists of 40% theory and 60% practice. In theoretical learning, the application of e-learning does not cause many obstacles. However, during practical learning, the e-learning model may cause several obstacles that must be overcome. In midwifery care courses, there are many competencies that must be achieved through practice. The study program manager determines practical learning using learning videos. Learning videos are given to students to study and practice independently. This might cause problems for students when practicing independently due to limited tools and consumables in their respective places.

This study aims to determine the effect of the Practical E-learning Model on K.A.P (Psychomotor-Affective Cognitive) in midwifery students in the era of the co-19 pandemic. The research was carried out in the even semester of the 2020/2021 school year. Practical e-learning in the form of learning videos in the Pregnancy Midwifery Care course includes the practice of history taking, physical examination, abdomen, pelvis, genitalia and counseling.

METHODS

The research was carried out in the even semester of the 2020/2021 school year. Inclusion criteria on this research was student on Diploma III Midwifery who practical e-learning in the form of learning videos in the Pregnancy Midwifery Care course including the practice of history taking, physical examination, abdomen, pelvis, genitalia and counseling. The previous midwifery practice course in pregnancy was delivered directly at the Midwifery Skillslab guided by Lecturer. Aspects assessed in this study include cognitive, affective and psychomotor aspects. Cognitive assessment in this study was carried out by giving a written test to 48 students in the form of multiple choice questions (MCQ) regarding Midwifery Care for Pregnancy through the web: spada.uns.ac.id.

This study used an analytic research method with a cross-sectional design, in which each research subject was only observed once and the measurement of subject variables was carried out during the examination. Cognitive assessment of students is carried out by giving a written test in the form of multiple choice questions (MCQ) on Midwifery Care for Pregnancy. Student affective assessment was carried out using an attitude scale questionnaire (self assessment). The self-assessment questionnaire was obtained with 12 indicators adopted from the research of Cahayani et al., Faculty of Medicine, Gajah Mada University, which had been tested for validity, the results of which were valid and reliable ($0.877 > 0.235$). Psychomotor assessment of students is carried out by assessing the Pregnancy Midwifery Care Laboratory Skills checklist sheet, where students will practice learning through video learning then practical evaluation is carried out in the skillslab using mannequins/phantoms and simulated patients while the lecturer will assess via zoom with the assessment instruments that have been prepared.

RESULT

The results of this study indicate that e-learning is a practical course in midwifery care for pregnancy. The results of cognitive domain data analysis using the one-sample test can be seen in the following table:

Table 1. The results of the One-Sample Test in the Cognitive Realm

	t	df	Sig. (2-tailed)
Result	31.392	47	0.001

Based on the table 1, the significance value is 0.001 <0.05, which means that there was an influence of the practical e-learning model on the cognitive domain of students in the Midwifery Pregnancy course.

The second aspect assessed affective. Student affective assessment was carried out through practical evaluation with a checklist of related examinations/actions. The results of affective domain data analysis using the One-Sample Test can be seen in the following table:

Table 2. Affective Domain One-Sample Test Results

	t*	df	Sig. (2-tailed)
Result	17.986	48	0.001

*t-test

Based on the table 2, the significance value was 0.001 <0.05, which means that there is an influence of the practical e-learning model on the affective domain of students in the Midwifery Pregnancy course.

The last aspect assessed is psychomotor. The psychomotor assessment of students was carried out by assessing the Midwifery Care Laboratory Skills checklist sheet. During practical courses, students will learn independently through learning videos followed by discussions and questions and answers with lecturers via zoom meeting, web on spada.uns.ac.id., google meet and whatsapp group. In the independent session, students will practice independently at home with innovative

tools at home. The response/evaluation session will be held in the midwifery skills lab. So students practice in the skillslab with Phantom while the lecturers carry out assessments via zoom meeting, web on spada.uns.ac.id., google meet and whatsapp group. Practical assessment in the skillslab is a psychomotor assessment using a checklist. The results of psychomotor domain data analysis using the One-Sample Test can be seen in the following table:

Table 3. Psychomotor Domain One-Sample Test results

	t	df	Sig. (2-tailed)
Result	16.622	47	0.001

Based on the table 3, the significance value was 0.001 <0.05, which had meaning an influence of the practical e-learning model on the psychomotor domain of students in the Midwifery Pregnancy course.

DISCUSSION

The results of this study indicate that there was an influence of the Practical E-learning Model on K.A.P (Psychomotor-Affective Cognitive) in midwifery students in the era of the co-19 pandemic. The Covid-19 pandemic that took place in Indonesia caused the learning model to be carried out online. In the UNS Vocational School Midwifery D3 Study Program, learning is carried out with a variety of media as needed. The vocational education curriculum consists of a minimum of 40% theory and 60% practice. Based on the results of the learning evaluation, theoretical courses carried out online, both zoom meeting, web on spada.uns.ac.id., google meet and whatsapp group, did not experience any obstacles in conveying learning objectives to students. However, practical learning experienced many obstacles that occurred at the start of the March 2020 pandemic. Therefore, in the new 2020/2021 school year, study program managers designed a new learning model through e-learning media.

Before the pandemic, practical learning would be carried out directly in the skills lab with equipment and phantom demonstrators according to skills. The lecturer explained the goals to be achieved, the equipment needed, the implementation steps and evaluation of the implementation directly. In the guided practice implementation sessions, the lecturer conducted simulations with phantoms and simulated patients.

In independent sessions, students carried out skills/practices according to topics taught and demonstrated by lecturers with phantoms and skillslab group mates as simulated patients. Practice steps according to the checklist on the learning topic. Then in the response session, students performed according to the topic of the course.

Since the Covid-19 pandemic, restrictions on campus activities have been imposed so that students will experience practical problems when they have to practice independently regarding skillslab topics. Students' independent practice at their homes during a pandemic is constrained by limited laboratory infrastructure.

Therefore, in the new academic year, lecturers design practical e-learning. All skillslab/practicum topics are given through learning videos. So the lecturer shoots the implementation of the practice which is then conveyed through a zoom meeting in class. In the independent session, students are scheduled to enter the skillslab on campus in small groups. In addition, students are given the task of searching learning videos related to the topic. In the learning evaluation session, students perform a performance that will be assessed by the lecturer according to the related topic assessment checklist.

The learning model with e-learning media is electronic-based learning media, such as using a computer, laptop or mobile phone that can be connected to the internet network. The learning model with this media will make it easier for students to

absorb the material provided because it uses multimedia such as images, videos, animations or sound when explaining material, is light in financing and the material can be accessed by students within 24 hours so that the e-learning model can improve results. learning, namely one of them is cognitive (Haryadi and Kansaa, 2021). This is consistent with the results of research that the e-learning model can affect students' cognitive (Haryadi and Kansaa). Research conducted by Ferazona and Suryanti (2020) stated that with the e-learning learning model students are enthusiastic about participating in online learning because the lecturer before the lecture sends material either in the form of videos or files via agreed online media, the learning process is also more flexible and students can attend lectures and do assignments anywhere, this is in accordance with the e-learning learning process carried out in Midwifery D III Study Program in the Pregnancy Midwifery Care course so that with this e-learning learning model it can have an impact on student cognitive achievement.

Cognitive results of students of Diploma III Midwifery Program Sekolah Vokasi UNS in the Pregnancy Midwifery Care course were assessed through tests at spada.uns.ac.id, where students worked on a number of questions online with a predetermined time limit and arranged by the lecturer in charge of the course and the questions and answer choices were randomized so that students did not can cheat. After the time limit for working is completed, students cannot work on the questions again and can see their grades and the lecturer can also access the student's grades. So that directly students must be able to work on their own questions and not cheating. With e-learning learning, students are required to be able to study independently and the material that has been given online can be accessed by students repeatedly anywhere and anytime. This shows that the e-learning learning model can affect student

cognitive. These results are in accordance with research conducted by Mulyani (2013).

In addition to cognitive, the results of this study indicate that the e-learning learning model has an influence on students' affective and psychomotor. Affective and psychomotor students in this study were measured by the ability of students to take actions or maneuvers in the Pregnancy Midwifery Course during practice evaluation through a checklist/assessment instrument. Through the e-learning learning model students can study action videos that have been made by lecturers which are uploaded on online media, students can learn from these videos repeatedly and are accompanied by independent study students with friends or relatives at home carrying out practical simulations of carrying out these actions before direct evaluation with lecturers. So that this e-learning model affects affective and psychomotor students. This is in accordance with research conducted by Muazizah (2016) which states that the use of e-learning is effective in increasing learning outcomes which include cognitive, affective and psychomotor. Another study conducted by Sadevi (2019) states that web-based learning media has an effect on learning outcomes in the psychomotor domain.

CONCLUSION

The results of this study indicate that there was an influence of the e-learning model on the cognitive, affective and psychomotor domains of students in the Pregnancy Midwifery Course with each having a $p = 0.001$. Therefore, learning using online media (e-learning) can make it easier for students to learn and practice the learning topics they get, as well as being a learning solution in the midst of the Covid-19 pandemic.

The hope is for students to be more active in participating in e-learning learning and to be more innovative in using

media when studying independently at their respective homes. It is also hoped that supporting lecturers can apply this e-learning learning model to each subject they teach.

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