

A Digital Partograph Model As Learning Media For The Normal Childbirth Care

Kiki Amelia, Mardianan Ahmad, Syafruddin Sarif, Sabrina Dwi Prihartini, Andi Nilawati Usman

***Abstract---**This research is aimed to design the digital partograph application as learning media for the normal childbirth care and to know the level of model suitability of the digital partograph as learning media for the normal childbirth care. The type of this research is Research and Development (R&D) method. This method needs several procedures started from need analysis, model design, model development, formative assessment, and the final product. The subject of this research is the midwifery students in second level of STIKES Nani Hasanuddin Makassar. The technique for collecting data is conducted by questionnaire. The data analysis applies a quantitative data analysis. The result shows that the digital partograph model as learning media for the normal childbirth care assessed by the material expert gets the average score about 3.8 (very good), assessment of media expert about 3.4 (good), and the assessment of students gets the average score about 4.3 (very good). Thus, it can be assumed that the digital partograph model as learning media for the normal childbirth care is suitable to be used to learning media.*

***Keywords---** learning media, digital partograph, childbirth*

I. INTRODUCTION

Based on the Indonesian midwife competency declared by Health Minister on number 369/MENKES/SK/2007, it shows that one of basic skill for a midwife related to fourth competency which describes that one of basic skill for a midwife is observing the progress of the childbirth by using partograph. The partograph is one of supporting tools which used to observe the childbirth progress in first period, then it will help the early childbirth process in detecting its obstacle so the delay in the clinical decision making or referral for mother and baby can be avoided (Hasibuan, 2016).

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The qualified midwife is started from the good educational process, the midwife candidate / student does not only get the education in class in form of lecture, seminar, and discussion, but it is also a clinical learning process which conducted in laboratory and the practical area. The teaching learning process is an act which conducted to apply the curriculum of an educational institution in order to reach the educational goal that has been appointed (Pusdiknakes Kemenkes RI, 2011).

The midwife care competency for childbirth that should be acquired by a midwife is the skill in doing or documenting the partograph. Partograph is a supporting tool which functioned to monitor the progress of childbirth in first period and information to clinical decision. Partograph as documentation is standard of the midwife care especially for childbirth case. Its competency needs trainings to increase the documentation skill by partograph which has been started since studied the lecturing subject of midwife care on the childbirth (Depkes, 2008).

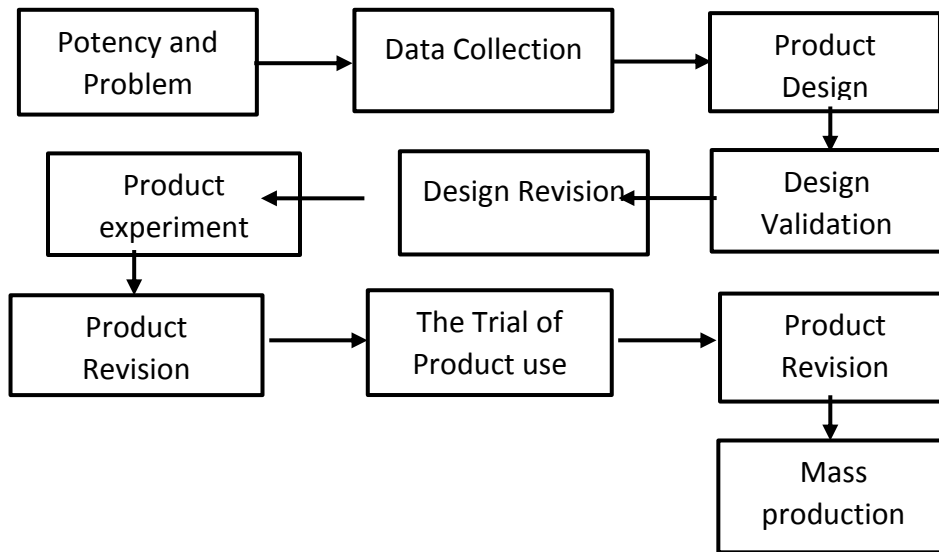
In addition, partograph is a graphic note about the progress of childbirth to monitor the condition of mother and her fetus which used to detection if there is a problem of childbirth process so it can be abnormal and needs other help action to fix its process. In line, partograph also offers an accurate system to monitor the mother and fetus condition during the childbirth process by time to time (Lindsay Elizabeth, Christina maly 2018)(Hopkins et al. 2017)(Wahyuni, Nuryuniarti, and Nurmahmudah 2019). Learning media is tools that used to make the easier understanding of students in accepting learning material. Both of innovation and creation can adorn a learning media which will increase the attractiveness on it (Sunny, wan anita 2016, Angesti 2016)(Cooper 2009)

Thus, learning media is a supporting tool in teaching learning process which functioned as the mediator among the learning subject and object that will exposure the both of meaning and message on a learning. By the existence of learning media, it is expected to make the teaching learning process running well, so the goal of its process can be reached. The learning media is also considered as the facility that purposed to increase the teaching learning process because it does not only show the writing or pictures, but it is also the voice which can clarify the material that will be taught. There are many forms of learning media, the teacher or instructor should be smart in media selection, so it can be used correctly and suitably to early goal. By providing of learning media, it expects that learning goal can be transferred maximally, the teacher does not get the difficulties in giving learning material, and students can accept the learning material in highly understanding (Cecep Kustandi and Bambang Sutjipto, 2013, Irma gustiawati 2017)(Donkin, Askew, and Stevenson 2019)

II. RESEARCH METHOD

The type of this research is Research and Development (R &D) which considered as a research method to product certain product and to test the effectiveness of those method. In educational field, Research and Development (R&D) is used to develop or to validate the products applied in education and learning. The test procedure in this research is through validation tests by media expert, material expert, and students (Nana Syaodih Sukmadinata, 2006, Sugiyono 2012).

Picture Procedure of the Development Research (Sugiyono, 2012)



This research is conducted in the Stikes Nani Jasanuddin Makassar and the subject is all of Diploma III midwifery students about 50 persons who studying in second level at third semester.

III. DATA ANALYSIS

This research applies the descriptive data analysis as suitable with the conducted development procedure. The instrument point answer is classified into five choices which each indicator is scored with scale 1-5 such as 5 (very good), 4 (good), 3 (enough), 2 (less) and 1 (very less). Then, the average score is calculated by using the formula as following:

$$X = \frac{\sum x}{N}$$

Description:

- X : Average score
- $\sum x$: the each total score
- N : the amount of assessor

Table 1. The criterion of media suitability

Formula	Average score	Classification
$X > \bar{X}_i + 1,8 \times sb_i$	>4,2	Very good
$\bar{X} + 0,6 \times sb_i < X \leq X_i + 1,8 \times sb_i$	>3,4 – 4,2	Good
$\bar{X} - 0,6 \times sb_i < X \leq X_i + 0,6 \times sb_i$	>2,6 – 3,4	Enough
$\bar{X}_i - 1,6 \times sb_i < X \leq X_i - 0,6 \times sb_i$	>1,8 – 2,6	Less
$X \leq \bar{X}_i - 1,8 \times sb_i$	$\leq 1,8$	Very less

Then, the average score can be converted to qualitative score by the assessment criterion as following: (Eko Putro Widoyoko ,2009).

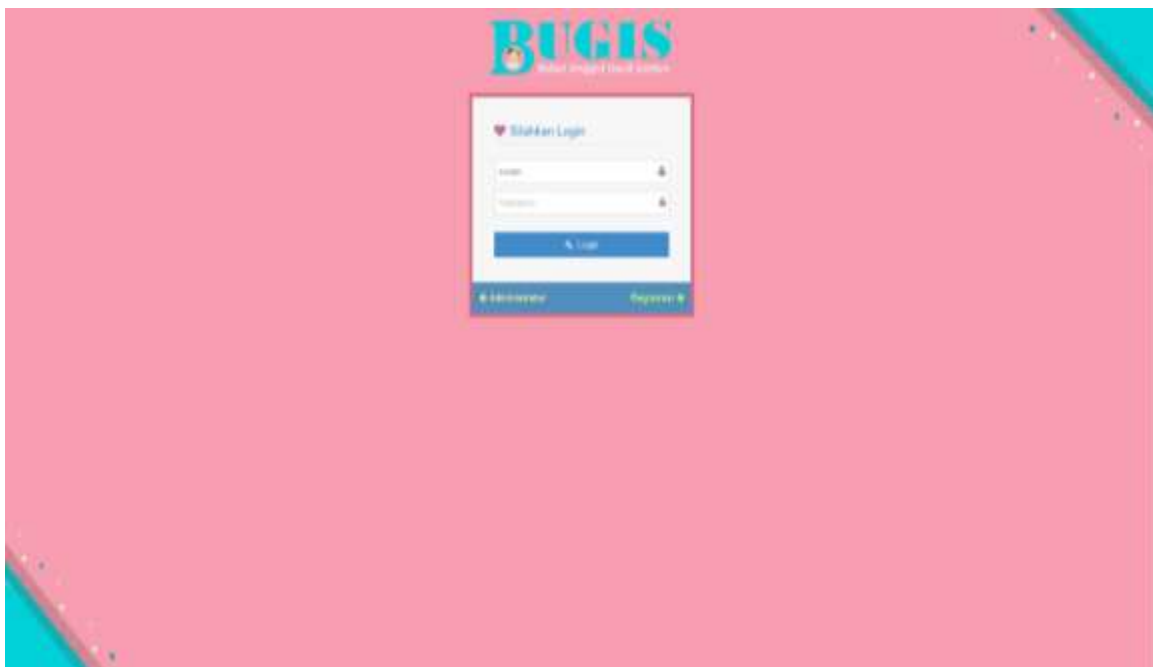
In this research, the score of product suitability is decided on minimum score “3.4” categorized into “good”, so the result is good from assessment of media expert, material expert, and students, if it has been obtained the final result with minimum score, so the product is fit to be used.

IV. RESULT

The data from the result of questionnaire filling that given to an media expert, a material expert, and the second level midwifery students as the subject of this research to assess the appropriateness of interactive learning media that being developed are used as the research instrument. From the result of the product appropriateness test, it can be assumed that the result of material expert assessment shows the average score 3.8 (very good), while the media expert assessment shows the average score 3.4 (good), and the students assessment shows the average score 4.3 (very good). Based on the last description, it can be decided that the score of the product appropriateness in minimum score 3.4 is classified into “good” category.

V. DISCUSSION

The digital partograph as a developed learning media is a learning media based on web which contains the introduction material of normal childbirth, case study, and the partograph filling skill. This media is made for assisting and increasing the learning spirit for the midwifery students especially in partograph filling skill. The feature of this partograph digital media application is called by BUGIS (*Bidan Unggul Gesit Santun*) as following:



Picture 1. Login Menu



Picture 2. Application Figure

Picture 3. Digital Partograf



Learning media is positioned as the important learning component. The use of it in learning process is one of efforts purposed to create more meaningful and qualified learning. Besides, the use of media in learning process has the aim which its process can be carried out appropriately and efficiently so the educational quality is able to be increased (Chaudhuri n.d.2016)(Ren et al. 2015).

The result of the research conducted by Erfan Priyambodo & Antiniwiyarsi (2012) shows that the learning using interactive media based on web can increase the learning motivation for the students is about 3,5%.

This research is in line with the research by Liza Yuliana Sari & Diana Susanti. Viewed from overall aspects, it can be assumed that learning media in form of interactive learning media gets the score 79.16% that categorized into effective. It means that the interactive media oriented to constructivism can make the effective learning activities.

VI. CONCLUSION AND RECOMMENDATION

Based on the result of this research, it can be assumed that the suitability of the digital partograph as learning media assessed by the material expert gets the average score about 3.8 (very good), assessment of media expert about 3.4 (good), and the assessment of students gets the average score about 4.3 (very good). Based on the average score that obtained by the media expert, the material expert and the second level of midwifery students, it can be concluded that the product of the digital partograph application as learning media for the normal childbirth care is recommended to be used as one of the interactive learning media.

For the recommendation of this research, the implementation should not do for only one educational institution, so its benefit can be felt by others. Then, the development of learning media does not only evaluate until the suitability, but it also should take on learning media assessment until its effectiveness on learning process later. Moreover, this development program is expected to be a recommendation program in all educational institution so it ensures the students to improve their competency in learning every time and everywhere. Next, this learning media application is expected to be developed on the both of feature and learning scope which contained on it and updated based on its development and curriculum change.

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