The Use of Partograph Bugis Midwives Application as a Learning Media for Normal Labor Care by Lecturers and Land Preceptor

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Abstract

This article aims to discuss the design of a web-based Bugis Midwife application as a learning media for normal childbirth care for lecturers in terms of improving the skills of providing normal delivery care and filling out student partographs and SOAP before going to the field. The type of research used in this research is Research and Development (RnD). The test analysis uses the experimental design model One Group pretest - posttest Design to see whether the application of web-based Bugis Midwives can be better in improving the provision of normal delivery care for students, with a sample of 40 students divided into two groups, a small sample of 10 people and a sample 30 people then analyzed the data using the Wilcoxon Test on SPSS. The results of the posttest after using the application for 3 weeks showed that there were 28 students who scored above 75 with the pass category (93.33%) and there were 2 students who scored below 75 with the category of still needing guidance (6.66%). Furthermore, based on the Wilcoxon test, the results obtained were P value 0.00 <0.05, which means that there is a significant difference between the pretest and posttest scores with the pretest average value of 74 with a sufficiently increased category in the posttest score to 82 in the good category. Based on the analysis of the test results, there is an increase in student learning outcomes on the post-test scores, so the web-based learning media application of the Bugis Midwife is more effective in increasing the knowledge and skills of students.

Introduction

The development of information technology which is increasingly rapid in the current era of globalization cannot be avoided anymore its impact on the world of education. Global demands require the world of education to always and constantly adapt technological developments to efforts to improve the quality of education, especially adjusting its use for the world of education, especially in the learning process. Information technology is the development of information systems by combining computer technology with telecommunications. According to a survey by the United Nations of Educational, Scientific, and Cultural Organization (UNESCO), there are five benefits that can be achieved through the application of Information Technology (IT) in the education system: (1) simplifying and expanding access to education; (2) increasing equality in education (equity in education); (3) improving the quality of learning (the delivery of quality learning and teaching); increasing teacher professionalism (teachers professional development); and (4) increasing the effectiveness and efficiency of management, governance, and education administration (Suwastarini et al., 2015, Nugraheni et al, 2012).

The use of partograph by health personnel during delivery assistance is very important. World Health Organization (WHO) highly recommends the use of partograph in the delivery room,
15% of complications in labor cannot be detected early due to negligence of partograph filling. The impact of neglecting to fill in an undetected partograph will cause abnormalities that may occur during delivery, such as fetal distress, hypertension, prolonged labor, and bleeding. The partograph is one of the tools to monitor the progress or observation of stage I labor which will make it easier for birth attendants to detect difficult labor early so that delays in making clinical decisions or referrals to mothers and babies can be avoided (Bernadhed et al., 2016, Octarini & Sihombing, 2019).

Web-based learning media is one of the web-based educational services that allows the realization of edutainment using the internet media. Web-based learning media can connect learning between educators and students in an online learning room. Conventional learning problems compared to web-based learning can be viewed in terms of the limited interactivity of educators and students, flexibility in terms of providing time, space and teaching materials and accessibility of learning material sources. (Yadav et al, 2016; Ren et al., 2017; Own et al, 2010; Darmiany et al., 2010; Puspitasari et al 2018; Wahyunita et al 2020).

Based on the description above, the researcher has the idea that increasing student competence can be improved through the use of normal childbirth care learning media that is appropriate to the student's learning style, designing a digital partograph application as a learning medium for normal childbirth care. It is hoped that digital partographs as learning media for normal childbirth care for lecturers can improve student knowledge and competenceso that students are truly competent when they go to the field so that the number of practical students can automatically be filtered so that the initial goal between campus and land for increasing student competence during practice can be fulfilled, especially in terms of filling in partograph skills and analyzing student midwifery care. Therefore, this article aims to present the use of partograph midwife application as a learning media for normal childbirth care of lecturers and land preceptors DIII midwifery level II.

**Methods**

The type of research used in this research is Research and Development (RnD). Research and Development (RnD) is a research method used to produce certain products and test the effectiveness of these methods. In the field of education, research and development or Research and Development (RnD) is a research method used to develop or validate products used in education and learning. The research location was carried out on the YAPMA campus and RSUD (Regional General Hospital). Syekh Yusuf, Gowa Regency. The population in this study were 16 Lecturers of DIII Midwifery YAPMA, midwives at RSUD. Syekh Yusuf, Gowa Regency, 52 people and 40 students of DIII Midwifery YAPMA level II.

**Results and Discussion**
Based on Figure 5, the application menu of the web-based Bidan Bugis application as a learning medium can help improve student competence through the use of normal childbirth care learning media that is appropriate to student learning styles, designing digital partograph applications as learning media for normal childbirth care.

Validation was carried out to determine the feasibility of the developed Bugis Partograph application of learning media products. This research data is obtained from the results of filling out a set of instruments in the form of a questionnaire. The following is the implementation and presentation of data on the validation of learning media products for the Bugis Midwife Partograph application:

**Validation of Media Experts**

![Figure 1. Validation Results of Media Experts on Learning Media Products Application of Partograph Bugis Midwives](image)

**Material Expert Validation**

![Material Expert Validation Chart](image)
Lecturer and Land Preceptor Validation

![Figure 2. Validation Results of Material Experts on Learning Media Products Application of Partograph Bugis Midwives](image)

Student Validation (Large Group)

![Figure 3. Results of Lecturer Validation and Land Receptors on Learning Media Products for the Application of the Bugis Midwife Partograph](image)

![Figure 4. Large Group Trial Results on Learning Media Products Application Partograph Bugis Midwives](image)

From the overall results of the assessment carried out by media experts, material experts, lecturers and land preceptors as well as students, the bugis midwife learning media product is suitable for use as a web-based learning media. Furthermore, to test the effectiveness of the learning media, the Willcoxon test was carried out with the results shown in the table below.

<table>
<thead>
<tr>
<th>Data</th>
<th>Mean</th>
<th>Conclusion</th>
<th>Asymp. (2-Tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>73.76</td>
<td>Enough Category</td>
<td>0.000</td>
</tr>
<tr>
<td>Postest</td>
<td>82.23</td>
<td>Good Category</td>
<td></td>
</tr>
</tbody>
</table>

The table above shows the pretest median value of 73.76 rounded to 74 from this data, it can be concluded that the respondent's knowledge is stated in the sufficient category, after using the learning media the application of the Bugis Partograph Midwife has increased to 82.23 rounded to 82 from the data it can be concluded that respondent's knowledge is stated in good category. Meanwhile, the significance p-value is 0.000 <0.05, it can be concluded that there
are differences in student learning outcomes after using the Partograph Bugis Midwife application so that the Partograph Bugis Midwife application can be better in improving the skills of providing normal childbirth care and documentation.

The use of website-based learning media has an effect on cognitive learning outcomes, the effect of using website-based learning media on cognitive learning outcomes is smaller than the influence of other factors (Rahman et al 2014; Wardani et al 2018). The product analysis developed is compiled based on field studies and library studies conducted by researchers. The following features are the results of the development results that have been developed from previous media learning products.

**Conclusion**

Based on the results of the validator's score, the bugis midwife learning media is suitable for use as a web-based learning media and based on the results of the analysis of the test results there is an increase in student results on the post-test scores, the web-based learning media application of the Bugis Midwife is more effective in increasing the knowledge and skills of students.

**References**


