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The Use Of Digital Partograph As A Learning Media For Normal Childbirth Care

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Abstract: The research was aimed to develop a learning media product namely the digital partograph which able to be used during the learning process in case for increasing the learning motivation of midwifery students.

Method: the research applied the quantitative method that designed in cross sectional study. The use of sample was 50 midwifery students in second level and using pre test and post test analysis to test the effectiveness of digital partograph as learning media.

Result: the median score of pretest was 71.09 of those data which can be concluded that the respondent knowledge was included into the sufficient category, after doing learning using the digital partograph media, the partographic filling skills on students had increased into 85.95 with very good category. Meanwhile the significance of p-value was 0,000 < 0,05, it means that the digital partograph as learning media was very effective for developing the partographic filling skill.

1. INTRODUCTION

Education is an effort which aims to prepare the youth generation in case of facing the globalization era. As the consequence, the education must be implemented well so it can produce the qualified education and getting the increase of human source quality. The development of modern technology is being the important media to reach the goal of the more effective and efficient education. Similarly, it also encourage the education world to utilize the technology and several educational organizations have used the method based on innovative technology in education especially in learning process is believed that it can give the significant change in developing the quality of education. The educational system must be responsive towards the dynamics of life which requiring the change in various field, and the dynamics of world change which called as the globalization wave. The education in knowledge era requires the existence of modern and professional educational management with the use of technology nuance. (River *et al.*, 2016)(Risling, 2017)(Sanghvi *et al.*, 2019)(Lau, Lakhan and Achike, 2018)

The role of learning media in teaching learning process is considered as the unit which cannot be separated from the education field. The learning media is everything that can be used to distribute the message from sender to receiver, so it can stimulate the mind, feeling, attention, and interest of students to learn. The use of media in teaching should be a part which must get the attention from teacher as the facilitator in every learning activity. Furthermore, every educator must learn how to choose and set the learning media in order to reach the goal in ISSN 2515-8260 Volume 07, Issue 03, 2020 teaching learning process optimally although the learning media is still getting the ignorance with many reason. (Usmeldi, 2017)(Soimah, 2018)(Usmeldi, 2017)

The development of learning media on medical students especially midwife must be adapted with the progress of health care feed facilities. One of the midwifery basic skill in the fourth competency shows that it is the act of monitoring the childbirth progress by using partograph. Moreover, the partograph is a tool which used globally to monitor the progress or childbirth observation in stage I which will help the officer to detect the obstacle in childbirth process earlier so the late of making clinical decision or recommendation for mother and baby can be avoided. The qualified midwife is formed from the good education process, the candicate of midwife or student does not only get the education or lecture in classroom, seminar, and discussion, but it is also through the clinical learning process is an activity which conducted in laboratory and practical place. The teaching learning process is an activity which conducted in case of implementing the curriculum of educational organization in order to be able to reach the goal of education that has been set. (Wahyuni, Nuryuniarti and Nurmahmudah, 2018)(Herman and Aristiawan, 2019)(Donkin, Askew and Stevenson, 2019)

The development of technology on the health care also has being developed, for instance, the developed digital partograph based web is used by health officer or midwife during monitoring the childbirth process and it is also used as the tool for deciding a decision. Based on the result of the research, the partograph based computer system is more effective than the conventional one viewing on the easiness and filling time speed aspects. (Yayu, 2018)(Diane O'Doherty, Marie Dromey, Justan Lougheed, Ailish Hannigan, 2018)(Car *et al.*, 2019)

Based on the explanation above, the researcher is interested to design the digital partograph based web which can be used as one of learning media for midwifery students then it can be one of innovation in the learning media development which able to developed the partographic filling skill on midwifery students.

2. METHOD

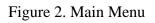
The method of research was qualitative with cross sectional study which involving 50 midwifery students in second level of STIKES NANI HASANUDIN MAKASSAR. The pre test was conducted before the students got the treatment on the use of digital partograph model with the similar case. The instrument used in this research was Technology Acceptance Model (TAM) questionnaire, the case question of pre and post test about the partographic filling skill. The pretest was conducted before the students accessing the material in the learning media, digital partograph which its aimed to know the basic capability of students in fulfilling partograph.

3. **RESULT AND DISCUSSION**

The analysis of the developing product is composed based on the field study and literature study conducted by the researcher. The result of the product analysis is a reference in the early composition of the digital partograph as the product of learning media. The features of the development result on the digital partograph model as learning media of normal childbirth care can be seen as following:

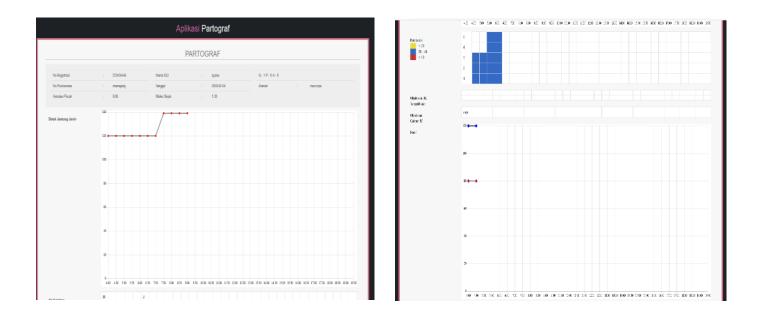
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ISSN 2515-8260 Volume 07, Issue 03, 2020 Figure 1 Main page display or login page (student)



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PENGANTAR PERSALBAN	PENGENALAN PARTOORAS	TEKNIK PENDIBIAN PARTOGRAF	SOAL LATTHAN	THREET

Figure 3. Model Partograph Digital



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the result of statistic analysis is processed by using wilcoxon test because the data are not distributed normally. The hypothesis of this research can be seen as following:

- Ho : there is no influence of the digital partograph as learning media towards the increase of partographic filling skill on students
- Ha : there is a significant influence of the digital partograph as learning media towards the increase of partographic filling skill on students

the basic of making decision of hypothesis using wilcoxon test, as following:

- a. If the probability score < 0,05, so Ho is rejected and Ha is accepted.
- b. If the probability score > 0,05, so Ho is accepted and Ha is rejected.

The result of analysis can be seen on the table below :

The result of knowledge test on students towards the effectiveness of the digital partograph as the learning media

	Median	Minimum – Maksimum	P-Value
Pretest (n=85)	71.09	56 - 86	
Posttest n=85)	85.95	73 – 98	0,000

The table above shows the median score of pretest is about 71.09 of those data which can be concluded that the respondent knowledge is included into sufficient category, after conducting a learing using the digital partograph as the media, the partographic filling skill on students has increased up to 85.95 with very good category. Meanwhile, the significance of p-value was 0,000 < 0,05, thus it can be concluded that the digital partograph as learning media is effective to develop the partographic filling skill.

4. CONCLUSION

The implication of this research is to develop the partographic filling skill on students, besides its application can motivate and attract the students' attention to utilize it as one of the interested learning media. Based on the result of test analysis, it shows that there is the increase of the partographic filling skill result on students on the post test score, thus the digital partograph as the learning media is very effective towards the increase of the partographic filling skill on students.

5. **REFERENCE**

- [1] Car, L. T. *et al.* (2019) 'Digital problem-based learning in health professions: Systematic review and meta-analysis by the digital health education collaboration', *Journal of Medical Internet Research*, 21(2), pp. 1–12. doi: 10.2196/12945.
- [2] Diane O'Doherty, Marie Dromey, Justan Lougheed, Ailish Hannigan, J. L. and D. M. (2018) 'Barriers and solutions to online learning inmedical education-an integrative review'. BMC Medical Education, 20(22), pp. 832–834.
- [3] Donkin, R., Askew, E. and Stevenson, H. (2019) 'Video feedback and e-Learning enhances laboratory skills and engagement in medical laboratory science students'. BMC Medical Education, pp. 1–12.

ISSN 2515-8260 Volume 07, Issue 03, 2020

- [4] Herman and Aristiawan, D. (2019) 'PENGGUNAAN METODE AUDIOVISUAL DALAM MENGANALISA KEMAMPUAN MENDENGAR (LISTENING) DAN MENULIS (WRITING) MAHASISWA KEPERAWATAN DAN KEBIDANAN STIKES YARSI', 2(2).
- [5] Lau, K. H. V., Lakhan, S. E. and Achike, F. (2018) 'New Media , Technology and Neurology Education', (1).
- [6] Risling, T. (2017) 'Nurse Education in Practice Educating the nurses of 2025: Technology trends of the next decade', *Nurse Education in Practice*. Elsevier Ltd, 22, pp. 89–92. doi: 10.1016/j.nepr.2016.12.007.
- [7] River, J. *et al.* (2016) 'A systematic review examining the effectiveness of blending technology with team-based learning', *Nurse Education Today*. Elsevier Ltd, 45, pp. 185–192. doi: 10.1016/j.nedt.2016.08.012.
- [8] Sanghvi, H. *et al.* (2019) 'Effectiveness of an Electronic Partogram: A Mixed-Method, Quasi-Experimental Study Among Skilled Birth Attendants in Kenya', *Global health, science and practice*, 7(4), pp. 521–539. doi: 10.9745/GHSP-D-19-00195.
- [9] Soimah, I. (2018) 'Pengaruh Media Pembelajaran Berbasis Komputer Terhadap Hasil Belajar Ipa Ditinjau Dari Motivasi Belajar Siswa', *Natural: Jurnal Ilmiah Pendidikan IPA*, 5(1), p. 38. doi: 10.30738/natural.v5i1.2559.
- [10] Usmeldi, U. (2017) 'Efektivitas Penerapan Media Pembelajaran Interaktif Dengan Software Autorun Untuk Meningkatkan Kompetensi Fisika Siswa Smk Negeri 1 Padang', Jurnal Eksakta Pendidikan (Jep), 1(1), p. 79. doi: 10.24036/jep/vol1-iss1/38.
- [11] Wahyuni, S., Nuryuniarti, R. and Nurmahmudah, E. (2018) 'Mobile Partograf: Aplikasi Untuk Memantau Kemajuan Persalinan', *Jurnal Riset Kebidanan Indonesia*, 2(2), p. 75. doi: 10.32536/jrki.v2i2.34.
- [12] Yayu, P. (2018) 'Efektivitas Partograf Berbasis Sistem Komputer Terhadap Pengambilan Keputusan Klinik Pada Proses Persalinan', *Gastrointestinal Endoscopy*, 10(1), pp. 279–288. doi: 10.1542/peds.2006-2099.