Journal of Midwifery and Nursing, 6 (1) (2024) pp. 293-297

Published by: IOCSCIENCE

Journal of Midwifery and Nursing

Journal homepage: www.iocscience.org/ejournal/index.php/JMN

Needs Analysis of Uterine Involution Phantoom

Lily Novianti[1], Nurul Komariah[2]

[1,2]Midwifery Department, Health Polytechnic Of Palembang, Jalan Jend. Sudirman, Palembang, Indonesia

ARTICLEINFO

Article history:

Received Jan 16, 2024
Revised Jan 18 2024
Accepted Jan 26, 2024

Keywords:

Needs Analysis;
Phantoom;
Uterine Involution

ABSTRACT

This study aims to determine whether the development of a uterine involution phantom is needed in the Midwifery Department, Ministry Health Polytechnic of Palembang. This research is quantitative research with a research instrument in the form of a questionnaire. Filling out the questionnaire was carried out by fourth semester students who had passed the postpartum midwifery care and breastfeeding course. Almost all the statements the majority of respondents strongly agree. In the statement "The phantom needed is a phantom that can be palpated at the height of the uterine fundus according to the postpartum physiological age". In the statement "In carrying out the practice of examining postpartum mothers' uterine involution in the laboratory, I need a mannequins/phantom media" 18 respondents (60%) stated that they strongly agree. Likewise, with the statement "As a prospective midwife, it is important for me to carry out physical examinations on postpartum women," there were 18 respondents (60%) who strongly agreed. Phantoom is needed for practical learning in the laboratory. Uterine involution phantoom that students need is a phantoom that can be palpated at the height of the uterine fundus, not just imagined.

Corresponding Author:

Lily Novianti,
Midwifery Department,
Ministry Health Polytechnic of Palembang,
Jl. Jenderal Sudirman KM3,5 No.1365 Kec.Kemuning, Palembang, 30126, Indonesia
Email: lily.novianty@poltekkespalembang.ac.id

1. Introduction

A university is an educational unit that provides higher education (Kemendikbudristek, 2023). Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals, and the skills needed by themselves, society, the nation and the state. Each formal and non-formal education unit provides facilities and infrastructure that meet educational needs in accordance with the growth and development of students' physical, intelligence, intellectual, emotional and psychological potential (Presiden Republik Indonesia, 2020). Facilities are anything that can be used as tools and equipment in achieving learning objectives. Infrastructure is the basic facilities needed to carry out the functions of an educational unit (Pemerintah, 2021).

An educational laboratory, hereinafter referred to as a laboratory, is an academic support unit in an educational institution, in the form of a closed or open space, permanent or mobile, managed systematically for testing, calibration and/or production activities on a limited scale, using equipment and materials based on certain scientific methods. in the context of carrying out research and

community service (Ni Luh Putu Kertiasih, 2016). The laboratory acts as a place for experiments and research (Susanti et al., 2021).

Laboratory learning is an important part of a complex educational process and must be integrated in all educational programs that refer to the curriculum, especially the achievement of competencies for students. Laboratory practice is a learning method or form of learning used to train psychomotor (skills), knowledge and affective (attitude) abilities using laboratory facilities (Zainuddin, 2001).

The midwife profession is required to have good competence because it has an impact on the quality of service. A study of Diploma III midwifery institutions shows that the competency of midwife graduates that meets job requirements is around 15%. To improve midwifery competency, a good laboratory learning process is needed during education (Ardiyanti Hidayah et al., 2016).

The implementation of the Diploma III education curriculum includes 60% practical and clinical learning and 40% theoretical learning. The curriculum is implemented through two important approaches, namely strengthening learning in the classroom for material development, and strengthening learning in the clinic for developing skills and expertise. Through the practical learning process, students are required to be able to use critical thinking skills in analyzing and dealing with every problem, issue, hope and reality in midwifery, so that through practical learning, students can understand the phenomena that exist in the field (AIPKIND, 2018).

A phantoom is a teaching aid for knowledge of anatomy or body physiology that is used by midwifery or medical school students and even nursing students in treating patients. The benefit of using a phantoom in practical learning in the laboratory for students is that they can carry out practical work repeatedly before carrying out procedures on real patients.

Preliminary studies in the laboratory of the midwifery department of the Ministry Health Polytechnic of Palembang, postpartum midwifery care practicum activities still use a pelvic phantom which is usually used for birth assistance. By using this phantom, students have not been able to examine the height of the uterine fundus as an indicator of uterine involution in postpartum mothers.

This study aims to determine whether the development of a uterine involution phantom is needed in the Midwifery Department, Ministry Health Polytechnic of Palembang. Furthermore, this research is the basis of development research which produces a product in the form of a phantoom which suits the needs of students to carry out uterine involution examination practice in postpartum and breastfeeding midwifery care courses. Needs analysis will be the initial focus to obtain accurate data in designing and developing uterine involution phantom products, therefore this research is important to carry out to facilitate educational laboratory staff and lecturers in developing valid, practical and effective uterine involution phantoms according to student competency needs in the laboratory.

2. Method

This research is descriptive research. It was conducted at the midwifery department of the Ministry Health Polytechnic of Palembang, from April to May 2023, with the research subjects being 30 fourth semester students who had passed the postpartum midwifery care and breastfeeding course. Data collection was carried out directly from respondents using an instrument in the form of a questionnaire which is using a likert scale measurement. Data analysis using frequency distribution.

3. Results and Discussion

The results of the phantoom needs analysis can be seen in table 1 below:

Tabel 1.
Phantoom Needs Analysis

No.	Statements	Student's Attitude									
		Strongly Disagree		Not Agree		Nervous		Agree		Very Agree	
		n	%	n	%	n	%	n	%	n	%
1.	Postpartum mothers are at risk of bleeding			1	3.3	2	6.6	11	36.6	16	53.3
2.	Bleeding in the first 24 hours is primary			2	6.6	2	6.6	11	36.6	15	50

	bleeding.										
3.	Bleeding > 24 hours is secondary bleeding			1	3.3	2	6.6	12	40	15	50
4.	One of the causes of secondary bleeding is retained placenta	1	3.3					13	43.3	16	53.3
5.	One of the characteristics of a retained placenta is the presence of sub-uterine involution			2	6.6	4	13.3	12	40	12	40
6.	Uterine subinvolution is obtained from palpation of the uterine fundus height			1	3.3	4	13.3	15	30	10	33.3
7.	Uterine subinvolution is the failure of the uterus to follow the normal pattern of uterine involution	1	3.3	1	3.3	4	13.3	14	46.6	10	33.3
8.	The phantom needed is a phantom that can be palpated at the height of the uterine fundus according to the postpartum physiological age	1	3.3			1	3.3	10	33.3	18	60
9.	The phantom needed is a uterine subinvolution phantom	1	3.3			2	6.6	10	33.3	17	56.6
10.	As a prospective midwife, it is important for me to carry out physical examinations on postpartum women.	1	3.3			2	6.6	9	30	18	60
11.	One of the points in the examination of postpartum mothers is the examination of uterine involution.			2	6.6	3	10	12	40	13	43.3
12.	Uterine involution examination is carried out by feeling the height of the fundus of the uterus in postpartum mothers.	1	3.3			2	6.6	13	43.3	14	46.6
13.	In carrying out the practice of examining postpartum mothers' uterine involution in the laboratory, I need a mannequins /phantoom media.	1	3.3			2	6.6	9	30	18	60
14	Phantoom in the laboratory has not yet described uterine involution in postpartum mothers.	6	20	-	-	6	20	12	40	6	20

Source : Processed Data

Based on the table of all statements, almost the majority of respondents strongly agree. In the statement "The phantom needed is a phantom that can be palpated at the height of the uterine fundus according to the postpartum physiological age", most respondents strongly agree 18 (60%). In the statement "In carrying out the practice of examining postpartum mothers' uterine involution in the laboratory, I need a mannequins/phantom media" 18 respondents (60%) that they strongly agreed. Likewise with the statement "As a prospective midwife it is important for me to carry out physical examinations on postpartum women" there were 18 respondents (60%) who strongly agreed.

Practical learning requires students to be skilled and able to analyze and think critically in dealing with problems. The use of a mannequins or props reduces the risk of discomfort for the patient and is able to provide a standard image and can be repeated (Dyan Puji Lestari et al., 2023). Phantoom is one of the learning media. Learning media aims to make the learning process more effective and easier to apply. The use of learning media generates new desires and interests for students. Generating motivation to learn and even having a psychological influence on students (Fadhilah et al., 2020). Phantoom is an important learning medium. Learning media has a valuable contribution in terms of quality during the teaching and learning process. Quality learning media is media that has learning components, benefits and media functions, so that media involvement will bring benefits to the learning process (Nurfa A, 2012)

Simulation-based clinical learning can be a valuable tool for better clinical practice. This learning emphasizes a safe and controlled environment with problem-based learning developed and competencies put into practice. Simulation-based clinical education is a useful pedagogical approach that provides students with the opportunity to practice their clinical and decision-making skills through a variety of real-life situational experiences, without compromising patient well-being (Weller et al., 2012).

The practicum student learning experience in the midwifery laboratory is a learning process that must continue to be improved in an effort to hone students' lab skills. The real practicum setting in the laboratory must be able to provide opportunities for students to practice as often as possible until they are able to independently carry out laboratory skills according to the competency targets set (Ulya R & Dielsa F, 2020)

A student can use this model repeatedly until he is declared competent by the lecturer or practicum supervisor in the class laboratory. When students feel competent in this model, then it is carried out on real patients, so that this phantoom really maintains patient safety when students provide care to patients directly. Patient safety is something that must be provided to patients as a form of quality and best care for the patient (Jones F et al., 2015)(Weller et al., 2012)(Kim et al., 2016).

Assessment of uterine fundus height is one of the competencies that must be achieved by graduates of the Diploma III Midwifery Study Program. To improve these competencies, mannequins or simulators are needed which are used to practice skills in the laboratory. Based on Minister of Health Decree Number 320 of 2020 about Midwife Professional Standards, the ability to detect early complications during the postpartum period is an independent competency of the midwife profession. Standard operational procedures include carrying out an examination for uterine involution. The midwife can determine whether the uterus is subinvolution or normal. When she encounter a case of uterine subinvolution, she should immediately refer it to prevent bleeding (Kemenkes RI, 2020).

4. Conclusion

Phantoom is needed for practical learning in the Laboratory. Uterine involution phantoom that students need is a phantoom that can be palpated at the height of the uterine fundus, not just imagined. The results of this research contribute and can be used as basic information in planning research and development of uterine involution phantom props in the Midwifery Department, Ministry Health Polytechnic of Palembang. The limitation of this research is the minimum sample of 30 respondents. It is hoped that future researchers will conduct research in larger numbers.

Referensi

AIPKIND. (2018). *Buku 1 : Panduan Pengembangan Kurikulum Pendidikan Diploma III Kebidanan.* (AIPKIND (ed.)).

Ardiyanti Hidayah, Samsi, & Haryanto S.J. (2016). Ardiyanti Hidayah, Samsi Haryanto, S. J. (2016). Implementasi Proses Pembelajaran Praktik Laboratorium Mata Kuliah Asuhan Kebidanan I (Kehamilan) Mahasiswa Semester II Program Studi D-III Kebidanan Sekolah Tinggi Ilmu Kesehatan Husada Jombang. Hospital Ma. *Hospital Majapahit*, *8*(1), 34–41. https://doi.org/https://doi.org/10.15797/concom.2019..23.009

Dyan Puji Lestari, Wigunarti, M., & Deasy Erawati. (2023). Pengembangan Alat Peraga Sabvida (Saya Bisa Periksa Dalam) Sederhana sebagai alat penunjang praktikum pemeriksaan dalam pada ibu bersalin. *MANUJU : Malahayti Nursing Journal*, *5*(11), 3953–3965.

Fadhilah, A. N., Khikmah, N., & Salsabila, W. T. (2020). Analisis kebutuhan pengembangan alat peraga materi segitiga dan segiempat kelas vii smp islam al bayan. *Konferensi Ilmiah Pendidikan Universitas Pekalongan 2020*.

Jones F, Passos-Neto CE, & Braguiroli OFM. (2015). Simulation in Medical Education. *Brief History and Methodology. PPCR*, *1*(2), 56–63.

Kemendikbudrisetek. (2023). *PP no. 53 tahun 2023*. Kemendikbud ristek dikti.

Kemenkes RI. (2020). *Kepmenkes 320 Tahun 2020*. http://dx.doi.org/10.1016/j.ndteint.2014.07.001%0Ahttps://doi.org/10.1016/j.ndteint.2017.12.003%0Ahttp://dx.doi.org/10.1016/j.matdes.2017.02.024

Kim, J., Park, J.-H., & Shin, S. (2016). Effectiveness of simulation-based nursing education depending on fidelity: a meta-analysis. *BMC Medical Education*, *16*(1).

Ni Luh Putu Kertiasih. (2016). Peranan Laboratorium Pendidikan Untuk Menunjang Proses Perkuliahan Jurusan Keperawatan Gigi Poltekkes Denpasar. *Jurnal Kesehatan Gigi*, *4*(2), 59–66.

Nurfa A. (2012). *The use of human respiratory system props on the quality of breast props in practicum activities in the laboratory of the Faculty of Nursing*.

Pemerintah, P. (2021). *PP no.57 Tahun 2021*.

Presiden Republik Indonesia. (2020). *PP No. 23 Tahun 2020*.

Susanti, Lina Herlina, & Fitri arum Sasi. (2021). *Teknik Pengelolaan Laboratorium.* Andi.

Ulya R, & Dielsa F. (2020). The Relationship between Laboratory Management and the Achievement of KDPK and

Antenatal Care Competencies for Semester IV Midwifery Study Program of West Sumatra Health Center. *Jurnal Bidan Komunitas*, *3*(2), 73–79.

Weller, J. M., Nestel, D., Marshall, S. D., Brooks, P. M., & Conn, J. J. (2012). Simulation in clinical teaching and learning. *The Medical Journal of Australia*, *196*(9), 594.

Zainuddin, M. (2001). *Mengajar-Praktikum*. PAU-PPAI Universitas Terbuka.