Implementation of Job Shadowing Learning Model Towards Task Skill Practice of Normal Delivery Care for Students of Midwifery

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Abstract: This study aimed to determine the effectiveness of the job shadowing learning model in the practice of normal delivery care for task skills. This type of quantitative research has a quasi-experimental pre- and post-test design. The sample size is 33 people. The collection used a task-skill questionnaire about normal delivery care. The task skill components measured include task management skills (TMS), work environment skills (WES), interpersonal skills (IS), and workplace learning skills (WLS). The results showed a difference in the average pre-test, post-test 1, and post-test 2 task skills, which experienced an increase. Statistically, the t-dependent test shows a p-value of 0.000, meaning that the job shadowing learning model in normal delivery care effectively increases task skills. It is hoped that midwifery education institutions will strengthen the evaluation of learning about normal delivery care practices through the job shadowing learning model by paying attention to the task skill aspect. This requires increased external cooperation, such as maternity homes and hospitals, as places for midwifery students to apply their knowledge.

Abstrak: Tujuan penelitian ini untuk mengetahui efektivitas model pembelajaran job shadowing dalam praktik asuhan persalinan normal terhadap task skill. Jenis penelitian kuantitatif dengan desain quasy eksperimen pre and posttest desain. Sampel sebanyak 33 orang. Pengumpulan menggunakan kuesioner task skill tentang asuhan persalinan normal. Komponen task skill yang diukur meliputi task management skill (TMS), work environment skilli (WES), interpersonal skill (IS), workplace learning skill (WLS). Hasil penelitian diperoleh bahwa terdapat perbedaan rata-rata task skill pretest, posttest 1 dan posttest 2 yang mana mengalami peningkatan. Secara statistik uji t-dependen menunjukkan p-value 0,000 aritnya model pembelajaran job shadowing dalam praktik asuhan persalinan normal efektif terhadap peningkatan task skill. Diharapkan institusi pendidikan kebidanan memperkuat evaluasi pembelajaran praktik asuhan persalinan normal melalui model belajar job shadowing dengan memperhatikan aspek task skill. Hal ini tentunya memerlukan peningkatan kerjasama eksternal seperti Rumah Bersalin dan Rumah Sakit sebagai lahan mahasiswa kebidanan mengaplikasikan ilmunya.
A. Introduction

Task skills are skills needed to work in the world of work. Task skills consist of four components: task management skills, work environment skills, interpersonal skills, and workplace learning skills. Task management skills, namely how a person can manage various tasks in his work. For example, a midwife should only help with normal deliveries. What will the midwife do if a patient in labor arrives with a ruptured membrane at 38 weeks of gestation? Can the midwife make a referral plan for these workplace conditions (Field, 1990; Ongenae et al., 2017; Susiloningtyas, 2010)?

Work environment skill is a person's skill in managing and maintaining a stable work environment (Kvan, 2013). Interpersonal skills, namely the ability of a person to understand all the impacts of an action or behavior on others and oneself. A midwife should be able to solve problems in the work environment later (Anderson et al., 2016; Magesh & Priya, 2014). Workplace learning skills, namely the ability of a person to be skilled at learning from the workplace, Make certain conditions for new learning obtained from the workplace that needs to be studied theoretically (Fuller et al., 2007; Smith et al., 2013).

Midwifery education generally follows a curriculum that refers to the Indonesian National Qualification Framework Standards. Based on level five of the Indonesian National Qualification Framework Standards in the DIII program, namely producing graduates with the technician or analytical skills (Kemenkes, 2013), based on data from the World Health Organization (WHO) in 2011, it was reported that around the world, as many as 25% of midwifery graduates did not have competence in carrying out their work as a midwife. Midwives who have just graduated can only make referrals during an obstetric emergency. Midwives who have just graduated have yet to become skilled at carrying out normal delivery procedures, so they are still limited to parturition when they work. This happens to midwives who have worked less than one year (WHO, 2015). This data was reinforced by the International Confederation of Midwives (ICM) report in 2012, which stated that as many as 22.3% of midwifery graduates could not provide comprehensive midwifery services (WHO, 2019).

2018 Indonesian Demographic and Health Survey (IDHS) reported that 10% of midwifery graduates working as temporary employees in rural areas needed better performance in providing midwifery services. This performance refers to aspects of the soft skills of midwives that still need to be developed so that they are skilled at carrying out midwifery actions, especially in assisting deliveries independently. This is in line with data from the Indonesian Midwives Association (IBI), which was conveyed at the 2015 Work Meeting in Jakarta that midwives who had just graduated were not yet able to provide birth assistance independently and were not responsive to obstetric emergencies, thus increasing the workload of senior midwives in the workforce to guide and re-teach competencies that a graduate of the midwifery profession should have possessed. Midwives who have just completed midwifery education are less responsive to making observations at 2 hours postpartum (childbirth), so the detection of postpartum pathology is low, which can cause maternal death (Rachmaningtyas, 2013; Depkes, 2013; Ikatan Bidan Indonesia, 2015).
The maternal mortality rate is the number of maternal deaths during pregnancy, childbirth, and postpartum caused by pregnancy, childbirth, and their management but not due to other causes such as accidents or falls in every 100,000 live births (Kemenkes, 2018). The international maternal mortality rate is used as a standard for a country's health and welfare degree. If the maternal mortality rate in a country is high, that country's health and welfare level can be said to be low (WHO, 2015).

The government has made efforts to reduce the maternal mortality rate in Indonesia. One way is through a health policy that comprehensively prioritizes women's health through the Millennium Development Goals (MDG) program or the Millennium Development Goals. The Millennium Development Goals are a declaration by heads of state members of the United Nations (UN), totaling 189 countries, to realize world health. The Millennium Development Goals were first implemented in September 2000 and contained eight goal items: 1) overcoming poverty and hunger; 2) achieving basic education for all; 3) promoting gender equality and empowering women; 4) reducing child mortality; 5) improving maternal health; 6) combating HIV/AIDS, malaria, and other infectious diseases; 7) ensuring environmental sustainability; and 8) developing a global partnership for development. In the 5th goal, which is to reduce 2/3 of the risk of maternal death in childbirth or reduce the number of maternal deaths to 102/100,000 KH in 2015, it has been reported that this has not been achieved (Stalker, 2008; Safitri & Kana, 2019, WHO, 2015).

The cross-sectoral role in reducing maternal mortality involves education as a vehicle for producing health workers. The government should not only focus on making and implementing regulations but also look at the realities on the ground. At the same time, the maternal mortality rate is closely related to the role and function of midwives. However, reviewing how the existing midwifery education is implemented and whether graduates are ready to carry out midwifery tasks in the workforce independently is necessary. The synergy between the workplace of a midwife and midwifery graduates needs to be reviewed (Arbayah, 2012; Kurnia, 2017; Depkes, 2013).

Midwifery education in various countries also experiences competency gaps between graduates produced by educational institutions and the competencies desired by the world of work. In midwifery education in Japan, theoretical study lasts one year and is intended only to assist normal delivery. So that they are not ready to face emergency conditions at work. Therefore, assessing the quality of midwives in Japan needs to be considered optimal. Midwifery education in Australia begins with studying basic nursing for 2 years and, for the next 1 year, the skills of the midwifery profession so that the midwife profession is more skilled in carrying out basic care but has yet to optimally carry out work according to midwife competence. Whereas in Ontario, Canada, a midwife who has completed three years of education is given a diploma and the opportunity to register and have permission to open a practice accompanied by a specialist doctor so that the skills of newly graduated midwives can be improved by direct practice providing services independently (WHO, 2014; Healy et al., 2012).
Therefore, a new approach is needed in midwifery students' delivery practice learning system, one of which is the job shadowing model. Job shadowing is a learning opportunity through work experience, usually lasting 3-6 hours, where one student follows one mentor at work to be interviewed and observed about a job (University of Alfabeta Career Centre, 2010). During the implementation of job shadowing, students complete written assignments before, during, and after the job shadow to help them understand and reflect on what is seen, heard, and learned in the workplace (Tennessee Department of Education, 2017; Department of Education Washington DC, 1996). Several studies have been conducted regarding the success of job shadowing programs in education, one of which was research conducted by Jones et al. (2006) entitled "Learning the house officer role: reflections on the value of shadowing a PRHO," which examined prospective fifth-semester young doctors in the integrated undergraduate medical program at the University of Manchester with a job shadowing program for mentors in the hospital registry. The research results show that the implementation of job shadowing can help students develop familiarity with the work environment and obtain special learning that cannot be obtained during class lectures, such as knowing how to manage work in the field, which is useful for prospective young doctor graduates facing the transition period from students to doctors who are ready to enter the world of work (Jones et al., 2006).

The novelty in research is that the job shadowing learning model has never been applied in an integrated manner with a comprehensive measurement of task skills in midwifery care practice learning, so this study aims to determine the effectiveness of the application of the job shadowing learning model on the task skill practice of normal childbirth care for midwifery students.

B. Method

This type of research is quantitative with a quasi-experimental design by applying the job shadowing learning model to normal delivery care practices and measuring students' task skill abilities in three measurements: pre-test, post-test 1, and post-test 2. Student pre-test task skills are measured after students complete practical learning in the laboratory. Post-test 1 is carried out after students practice Stage 1 for 3 weeks (24 January–14 February 2022), where job shadowing is only given in 50% of the implementation. Post-test 2 is carried out after students practice Stage 2 for 3 weeks (15 February–5 March 2022), where job shadowing is given 100% of the implementation. Each stage 1 and stage 2 of the Student Midwifery Clinical Practice III activities consisted of 8 groups, distributed to the Lancang Kuning Hospital and the Independent Practicing Midwives. The sampling technique in this study was total sampling, with the number of registered Midwifery Clinic Practice III semester V students reaching as many as 33 D3 Midwifery students.

The data collection method used in connection with the study was a task-skill questionnaire regarding normal delivery care. The application of job shadowing through education is conveyed to academic supervisors and field supervisors, also known as "preceptor-mentors." When the mentor, as the field supervisor, takes action and the student
observes, then when there is the same action, the mentor will guide the student to take action so that the task skill aspect, which consists of four skill components, namely Task Management Skill (TMS), Work Environment Skill (WES), Interpersonal Skills (IS), and Workplace Learning Skills (WLS), in reasonable delivery care can be increased. The study's results consisted of univariate and bivariate analyses using the T-dependent test. The following is the research flow from start to finish.

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**Stage 1**
- Study Literature
- Preliminary Study
- Data collection
- Situation Analysis

**Stage 2**
- Coordination with obstetric practice
- Coordination with midwifery institutions

**Stage 3**
- Midwifery Clinical Practice II (Job Shadowing 20 days)
- Midwifery Clinical Practice I (Job Shadowing 10 hours, without job shadowing 10 days)
- Midwifery Laboratory sample size: 33

**Stage 4**
- Post-test II
- Post-test I
- Pretest

**Stage 5**
- Processing and analysis of
- Results
- Conclusion
- Recommendation
- Publication
- Finish

**Figure 1. The Research Flow**
C. Result and Discussion

Result

Based on the results of the univariate analysis shown in Table 4.1, it can be seen that the average task skill of the respondents before being given job shadowing was 66.33 (SD 2.74) and increased after being given job shadowing for the first 3 weeks, as seen from post-test score 1 with an average task skill of 71.24 (SD 2.42), and also increased after applying job shadowing in the following 3 weeks, as seen from the value of post-test 2 with an average task skill of 81.45 (SD 4.18). The results of the univariate analysis can also be seen: the pre-test task skill has a minimum value of 61 and a maximum of 71; post-test 1, the minimum task skill value is 64, and the maximum is 76; and post-test 2, the task skill value is a minimum of 73 and a maximum of 92. This means that the frequency distribution of task skill values increases with every measurement. Can be seen in Table 1.

<table>
<thead>
<tr>
<th>Task Skill</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>66.33</td>
<td>2.74</td>
<td>61</td>
<td>71</td>
</tr>
<tr>
<td>Post-test 1</td>
<td>71.24</td>
<td>2.42</td>
<td>64</td>
<td>76</td>
</tr>
<tr>
<td>Post-test 2</td>
<td>81.45</td>
<td>4.18</td>
<td>73</td>
<td>92</td>
</tr>
</tbody>
</table>

The subsequent analysis is a bivariate analysis using the T-dependent test. This test compares two assessments in pairs consisting of three stages of assessment: stage 1, assessment of task skill post-test, and pre-test 1. Stage 2 assesses task skill pre-test 1 and 2, and stage 3 assesses task skill post-test and pre-test 2. In detail, it can be seen in Table 2 as follows:

<table>
<thead>
<tr>
<th>Task Skill</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test - Post-test 1</td>
<td>4.91</td>
<td>3.39</td>
<td>0.59</td>
<td>0.000</td>
</tr>
<tr>
<td>Post-test 1 - Post-test 2</td>
<td>10.21</td>
<td>4.55</td>
<td>0.79</td>
<td>0.000</td>
</tr>
<tr>
<td>Pre-test - Post-test 2</td>
<td>15.12</td>
<td>5.12</td>
<td>0.89</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on Table 4.2, it can be seen that the mean value of the task skill measurement stage 1 (pre-test and post-test 1) is 4.91 with a standard deviation of 3.39, stage 2 (post-test 1 and post-test 2) is 10.21 with a standard deviation of 4.55, and stage 3 (pre-test and post-test 2) is 15.12 with a standard deviation of 5.12. The results of the dependent T-test show that the p-value for each task skill measurement is 0.000, meaning that there is a significant difference in the respondent's task skills between pre-test, post-test 1, and post-test 2.
Discussion

The results of this study are in line with research (Moriarty et al., 2013; Demiral, 2017), which says that job shadowing has great benefits for students because they can directly learn by imitating what is seen when the instructor is working and then the instructor responds to student work. It also fosters intense communication between instructors and students. The job shadowing approach allows students to learn by shadowing or following the actions of the same instructor. Therefore, the job shadowing approach is very important in guiding and directing student task skill competencies.

Task skills consist of four aspects. The first task management skill is the first part of the task skill, where students are expected to have the ability to carry out basic tasks according to their work. In this study, students who were midwife candidates were expected to be able to carry out their main duties as midwives. Learning outcomes in the Midwifery Care course aim to ensure that students can carry out midwifery care for women giving birth normally. Task management skill of a midwife, namely having the ability to carry out the main tasks of a midwife to take the following actions: a) planning: planning work as a midwife; b) organizing: being able to set work stages so that they work systematically; c) action: being able to work according to existing systems at work; d) controlling: being able to work according to standard operating procedures; e) evaluating: being able to evaluate his work (Starr et al., 2010; Bayani et al., 2015).

Task management skill is a dimension of competence related to the characteristics that underlie a person's ability to carry out duties and responsibilities at work (Murakami et al., 2010; Gaskell & Beaton, 2010). Competence is a person's characteristic that underlies performance at work. Performance illustrates the achievement of work implementation through strategic planning. A person's task management skills will affect the quality and quantity of a job. Usually, the outcome of a good performance is the presence of an element of satisfaction from the parties affected by the performance itself. For example, regarding patient satisfaction when served by midwives, self-satisfaction when providing optimal health services, and instructor satisfaction when successfully transferring skills to students (Aprianti et al., 2020; Depkes, 2013).

The second aspect of task skills is work environment skills, namely the competence of a person to carry out work by the conditions of the work environment. In normal conditions, work environment skill covers various aspects, namely the location of the workplace, the size of the workspace, the position at work, the ergonomics between the tools used and the way they are used, noise, smell, pressure from customers, and other work environment factors (Field, 1990). This competence will not be found when lessons are taught theoretically and practically in the midwifery laboratory. With job shadowing, this competency can be taught and acquired by students.

The results of this study are also in line with the research of Hughes et al (2016), which states that work-related skills can be developed through work-based learning. However, it is still influenced by the personality factors of co-workers and the discomfort of the work environment itself. Work-related skills can be developed through work-based
learning. However, it is still influenced by co-worker personality factors and the discomfort of the work environment itself (Hughes et al., 2016).

Kalinova (2008) says that to overcome a less conducive work environment, and one must have two combinations of skills: 1) skills appropriate to the field of work and 2) skills needed to suppress the direct influence of an uncomfortable work environment. Both skills are categorized as skills in the work environment. Kalinova further explained that these two skills could be developed if you work continuously and consistently for a certain period so that work habits can build work environment skills (Kalinova, 2008).

The third aspect of task skills is interpersonal skills in maintaining work relationships. These skills are needed to build good relationships with others individually and in teams. Interpersonal skills are needed to overcome problems that arise when doing work through information sharing or discussion (Field, 1990). This study’s results align with research conducted by Padron et al. (2017), which states that applying for job shadowing at tourism academies can improve student communication skills. The more often students practice and communicate with travelers, and the better their communication skills will be, making it easier to increase promotion in the world of tourism (Padron et al., 2017).

In midwifery practice, interpersonal skills have a great opportunity to be developed independently by students. For example, communicating actively with patients who are about to give birth, providing information related to the progress of labor to husbands or family members who are present during the delivery process, communicating with superiors in the event of an emergency for decision-making, and communicating with colleagues to obtain information about health status. A midwife is expected to have effective communication skills in carrying out her duties as a midwife.

The fourth aspect of the task skill is the workplace learning skill, a person’s skill for learning in the workplace. Workplace learning skills can be developed by increasing sensitivity to workplace mistakes. Someone with workplace learning skills can analyze their own learning needs and overcome deficiencies or errors in doing work (Field, 1990). In midwifery practice, for example, when finished acting, confirming the practical knowledge that has been carried out determines whether what has been done is correct or still needs improvement. There is a response in a person that the actions taken are inappropriate so that they will not make the same mistake for similar actions in the future. Workplace learning skills are also influenced by external factors that exist in the work environment, such as the characteristics of colleagues, individual personalities, social interactions, time, and learning abilities in the workplace itself (Skår, 2010; All4Ed, 2017; Kontula, 2010; Schmidt, 2007).

Task skills are work skills built by the four (4) factors above to demonstrate a person's competence according to his area of expertise. The presence of knowledge, skills, and ability shows competence. If someone has knowledge, skills, and willingness, it can be said that they are considered competent (Ardhika, 2019; Hutapea, 2011). Competence is influenced by five (5) characteristics, namely: 1) character or trait is the way a person behaves to respond to something in a certain way; 2) motives or motives are a person's desire
that is thought consistently so that the desire to take action arises from within; 3) Innate or self-concept: attitudes and values that a person owns, 4) Knowledge is information that a person has in a particular field, marked by what a person can do, not what a person does. 5) A skill is the ability to carry out certain tasks (Putriana, 2012; Mardalena, 2009; Jalali et al., 2019; Schmidt, 2007).

D. Conclusion

Through the perceiver-mentor concept, the job shadowing learning model effectively improves the practice of maternity care during clinical midwifery practice by students through statistically increasing task skill measurements. The implications of this research are very important in midwifery practice by students because it can improve the quality of measuring midwifery practice from four aspects of task skills, including task management skills (TMS), work environment skills (WES), interpersonal skills (IS), and workplace learning skills (WLS). Therefore, midwifery institutions can innovate in assessing midwifery clinical practice learning through the integration of task skills in evaluating practice learning. For future researchers to be able to develop research on the same topic through different research methodologies.

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