Application of Self-Reflection Using Reflective Journal on Oxytocin Massage Skills in Diploma Three Midwifery Students

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Abstract

Midwifery is a profession based on women-centered and evidence-based care through the provision of mutually respectful professional relationships and partnerships. To train students' skills, repeated learning is needed, learning can be sourced from experiences such as doing self-reflection by keeping a reflective journal. This research aims to analyze the effect of applying self-reflection using a reflective journal on oxytocin massage skills. This research is an experimental research using a one-group pretest-posttest group design approach, taking samples using a simple random sampling technique. The research population was all level III students in a bivariate analysis using the Friedman ANOVA test. The results showed that the pretest mean value was 59.28 increasing to 79.50 in the first posttest and 83.38 in the second posttest with a p-value <0.05, which means that there is an effect of applying reflective journals using reflective journals on oxytocin massage skills. Having students write reflective journals is a great way for them to learn new concepts. This approach is also useful for lecturers to get feedback on the concepts being studied by students. The use of reflective journals will guide students to analyze what they have and do not know about the material being studied and how to overcome the obstacles encountered so that learning goals are achieved and foster independent learning in students.

Keywords: Self-Reflection, Reflective Journal, Skills.

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1. INTRODUCTION

Improving maternal and newborn health is key to meeting universal health coverage and Sustainable Development Goals (SDGs) (United Nations, 2015), (Bogren et al., 2022). The World Health Organization (WHO) interprets infant deaths as a result of acute pneumonia cases as much as 53% and 55% of infant deaths due to diarrhea related to nutrition (Erfiyani, 2020). Exclusive breastfeeding can save the lives of around 25,000 children in Indonesia and 1.3 million children worldwide every year, this is because breastfeeding supports the baby’s immune system and can protect them from chronic conditions such as obesity and diabetes (Fan et al., 2022).

The coverage of exclusive breastfeeding globally only reaches 44%, which has not yet reached the targeted coverage of at least 50% in 2012-2025 (Unicef, 2021). Based on data for 2021 at the Central Statistics Agency, the percentage of infants aged <6 months who received exclusive breastfeeding was 71.58%. However, there are still provinces that are recorded as having presentations below the national average, one of which is the province of Gorontalo (Badan Pusat Statistik, 2022). The lowest coverage of exclusive breastfeeding was in Gorontalo City, which was 43.6%, and the lowest was in Bone Bolango Regency, which was 12.7%.

One of the obstacles to the failure of exclusive breastfeeding is due to suboptimal milk production or minimal milk production which causes breast milk not to come out (Rahmadhani, Lubis & Edison, 2013), (Darmasari, Putri & Rahmadaniah, 2019). Based on the 2018 RISKESDAS data, the causes of children aged 0-23 months never being breastfed are caused by breast milk not coming out (65%) (Kementerian Kesehatan Republik Indonesia, 2019). Breast milk production is influenced by the hormone prolactin which is responsible for producing breast milk and the hormone oxytocin to release breast milk. The hormone oxytocin is released through nipple stimulation. One effort to overcome the lack of breast milk can be done by oxytocin massage which is done through massage along the spine to the fifth-sixth costae which functions to increase the hormone oxytocin (Darmasari, Putri & Rahmadaniah, 2019).

Midwifery is a profession based on women-centered and evidence-based care through the provision of mutually respectful professional relationships and partnerships. Globally, educational institutions are required to provide a professional experience for midwifery students to prepare them to become skilled midwives (Hainsworth et al., 2022). One of the evaluations used to assess students’ clinical competence is to use the OSCE (Objective Structured Clinical Examination) method. OSCE as a student competency evaluation strategy can develop clinical skills and experience skills that are more real (Nurdiyan et al., 2017). Based on the results of the OSCE exam for students in 2022, one of the skills assessed is oxytocin stimulation massage. From the results of the exam, there were 77 students (80.2%) were declared skilled, while 19 students (19.7%) were declared unskilled at the skill of oxytocin stimulation massage in one test. To train student skills, repeated learning is needed, learning can be sourced from experience. To be able to learn from experience requires the ability to do self-reflection. Many instructors suggest that educators must prepare students to be able to reflect (Alsalamah et al., 2022). Reflection is key to clinical learning and can bridge the gap between theory and practice (Graham & Johns, 2019), (Gjevjon et al., 2022). In line with research conducted in Taiwan, his research said that self-reflection and insight have a significant direct influence on coping behavior. Thus coping behavior can mediate the effect of self-reflection and insight into nursing competence (Eng & Pai, 2014).

Research on self-reflection was also researched by (Yusuff, 2015) with research results which said that the use of learner-centered teaching and assessment strategies such as student self-reflection and peer assessment of self-reflection sessions significantly increased academic
achievement. The exercise of carrying out the reflection process can be done in a written way such as making a reflective journal.

Based on the phenomenon above, the researcher is interested in researching the application of self-reflection using reflective journals on oxytocin massage skills in D3 midwifery students. So far there has been no research on the application of self-reflection by making reflective journals on skills in the laboratory. This study aims to determine whether there is an effect of applying self-reflection on improving the oxytocin massage skills of D3 Midwifery students.

2. RESEARCH METHOD

This study uses experimental research with a one-group pretest-posttest group design approach. The population involved in this study were level III students of the midwifery study program at the Gorontalo Ministry of Health Health Polytechnic for the 2022/2023 school year who are still active. Sampling in this study is probability sampling with a simple random sampling technique. Sampling used the Slovin formula so a sample of 32 respondents was used. The independent variable in this study is the application of self-reflection, namely making a reflective journal, while the dependent variable is oxytocin massage skills. In this study, an intervention was carried out 2 times for 120 minutes/meeting, namely the first intervention was carried out in the first week after the pretest, and the second intervention was carried out in the second week after the first posttest. providing interventions in the form of guidance on oxytocin stimulation massage skills using demonstration methods and applying self-reflection by keeping a reflective journal. Reflective journals contain descriptions, namely describing situations (implementation of oxytocin stimulation massage skill guidance) in detail and accurately, feelings, namely describing what is felt and thought when following guidance, evaluation, namely assessing the good things and bad things from following a series of guidance activities, conducting an analysis that is describing an opinion about the situation when following guidance, providing conclusions such as emphasizing things that should not be done and things that should be done and making an action plan that is making an affirmation if this happens again, what will be done do it.

Skills assessment using a checklist was carried out three times, namely once in the first week before the intervention (pretest), the second assessment was carried out in the second week after the intervention (first posttest), and the third assessment was carried out in the third week (second posttest). Data processing using IBM SPSS 25 software.

Data were analyzed through univariate analysis in the form of distribution and percentage of variables in the form of frequency tables. The univariate analysis consisted of the characteristics of the respondents, namely age and grade point average (GPA) as well as the frequency of the results of the skills of the respondents. Bivariate analysis to determine the effect between the independent variables and the dependent variable uses the Friedman ANOVA test. If the p-value < 0.05 then the null hypothesis (Ho) is rejected and vice versa if the p-value > 0.05 then Ho is accepted (Dahlan, 2014). Ho means there is no effect between the application of self-reflection and oxytocin massage skills. This research has been registered with the health research ethics committee of the Faculty of Public Health, the University of Hasanuddin Makassar with number 14734/UN.4.14.1/TP.01.02/2022.

3. RESULTS AND DISCUSSION

This study observed the effect of reflective journals on the oxytocin massage skills of D3 Midwifery students. This study involved 32 female students as respondents who participated in this activity three times which was carried out for three weeks. Table 1 shows the characteristics of respondents based on age and grade point average (GPA).
Table 1. Characteristics of Respondents based on Age and GPA.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 years old</td>
<td>2</td>
<td>6.3</td>
</tr>
<tr>
<td>20 years</td>
<td>21</td>
<td>65.6</td>
</tr>
<tr>
<td>21 years</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td>Good GPA (3.51-4.00)</td>
<td>27</td>
<td>84.4</td>
</tr>
<tr>
<td>Enough (2.76-3.50)</td>
<td>5</td>
<td>15.6</td>
</tr>
</tbody>
</table>

Table 1 shows the characteristics of the respondents including GPA and age. According to the characteristics of respondents according to age, the tendency is at the age of 20 years. The characteristics of respondents based on GPA tend to have GPA $\geq 3.51$ - 4.00

Table 2. Frequency Distribution of Respondents' Skill Levels.

<table>
<thead>
<tr>
<th>Skill Implementation</th>
<th>Skilled</th>
<th>Not Skilled</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>Pretest</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>First posttest</td>
<td>22</td>
<td>68.8</td>
</tr>
<tr>
<td>Second posttest</td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2 shows Frequency The results of the skills before the intervention were carried out and found that the respondents were not skilled (100%) in performing oxytocin stimulation massage skills. After giving the intervention once, it can be seen that there was an increase in skills in the first posttest, namely 22 respondents (68.8%) were already skilled, and after giving the second intervention, it could be seen in the second posttest that all respondents (100%) were skilled in doing oxytocin stimulation massage. Based on the table, it can be seen that there was an increase in skills from before giving the intervention to after giving the intervention, which means that one intervention can change the results of student skills, but with two interventions it can change the level of student skills of all respondents.

Table 3. The effect of applying self-reflection using reflective journals on oxytocin massage skills in Diploma Three Midwifery students.

<table>
<thead>
<tr>
<th>Skill Results</th>
<th>Mean±SD</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest (first week)</td>
<td>59.28 ± 8.61</td>
<td>0.000</td>
</tr>
<tr>
<td>First post-test (second week)</td>
<td>79.50 ± 4.67</td>
<td>0.000</td>
</tr>
<tr>
<td>Second post-test (third week)</td>
<td>83.38 ± 4.39</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that there was an increase in the average value during the pretest, the average value of 59.28 increased to 79.50 in the first posttest and the second posttest increased again, namely 83.38 with a p-value <0.05. This shows that there is a significant difference in value before and after giving the intervention.

Table 4. Post-Hoc Analysis Results.

<table>
<thead>
<tr>
<th>p-value</th>
<th>Posttest with Pretest</th>
<th>Posttest with Pretest</th>
<th>Posttest with the first Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Post hoc analysis using the Wilcoxon test obtained p = 0.000 <0.05 for comparison of all groups. It can be concluded that statistically the results of the skills scores after the intervention carried out in the first posttest were different from before the intervention, the results of the skills performed in the second posttest were different from before the intervention, and the results of the skills performed after the intervention, namely the second posttest, were significantly different from the assessments carried out in the first posttest.
Reflection has been defined by Moon as a set of abilities and skills, to demonstrate taking a critical attitude, and problem-solving orientation. Reflection, too, is that adult learning depends on understanding and evaluating our experiences for better achievement. Reflective writing has been shown to improve problem-solving attitudes by providing a better understanding of oneself, especially what is already known (individuals), and identifying what needs to be known for a more advanced understanding of the subject (Hargreaves, 2016), (Kadam et al., 2022). Research on the application of self-reflection has also been researched at the University of Florida School of Nursing which shows that student self-reflection provides valuable insights into the challenges and successes of telehealth practice. Through reflection, students can identify their strengths and weaknesses, improve remote communication skills, and understand the role of technology in health care. Engaging students in the reflection process and using their insights in curriculum development can improve the quality of telehealth education and prepare students for the practical challenges they face (LaManna, Eckhoff & Duncan, 2023).

Based on Table 3, there was an increase in the results of oxytocin stimulation massage skills before and after the intervention. This is because at the time after the pretest was given an intervention in the form of practical guidance on oxytocin stimulation massage skills and the application of self-reflection by making a reflective journal which was proven to improve skills results during the first posttest. After the first posttest, the same intervention was given again, and it was proven that there was an increase in the mean value during the second posttest. So it can be concluded that giving one intervention can increase the value of student skills, and giving intervention twice can improve the massage skills of oxytocin stimulation of all respondents.

The more often we repeat and hone our skills, the more often we save files in the subconscious mind. So that without realizing it or not, a person will easily repeat the skills he has acquired to produce skilled and competent respondents (Kurniawati et al., 2014), (Nurlaily et al., 2021). This is in line with research which states that every learning activity that is carried out repeatedly and continuously will become a permanent and automatic learning habit so that the result of the learning process objectives can be achieved optimally (Andrie et al., 2019).

Self-reflection is very important for student health workers who work daily to apply theory and practice to clients, so students must learn to be aware of their professional performance (Oktaria, 2015). Self-reflection involves self-awareness, self-evaluation, and critical thinking. Self-reflection is part of achieving self-awareness competencies, and the application of lifelong learning and self-regulation which are important aspects of professional development (Meidianawaty, 2019). In recent years, reflection has been used in education and is now recognized as a component of competency acquisition. The Nursing and Midwifery professions in Ireland and the UK have promoted reflection in educational programs (Graham & Johns, 2019). It is proven that the positive contribution of reflective practice is to student development. This is evidenced by the publication of reflective practice as a strategy in the learning process (McCarthy et al., 2013), (Gallagher et al., 2017).

Reflective journals are considered a means of reflection by educators. By doing reflection, students gain new knowledge. Reflection is an intellectual and emotional activity that a student thinks about when receiving new knowledge (Jarvis, 2001; Park et al., 2019). Reflection has the potential to help students improve their understanding, enrich lifelong learning, and reduce clinical errors (Jarvis & Baloyi, 2020). Writing a reflective journal is a logical approach that helps someone express a view or situation by thinking, remembering, or explaining it in their way (Lin et al., 2022). The use of reflective journals will guide students to analyze what they have and do not know about the material being studied and how to overcome the obstacles encountered so that learning goals are achieved and foster independent
learning in students. When students can consciously design, monitor, and reflect on their learning process, they will become more self-confident and independent in learning.

Writing a reflective journal regularly is beneficial for medical or professional graduates (Kadam et al., 2022). Having students write reflective journals is a great way for them to learn new concepts. This approach is also useful for lecturers to get feedback on the concepts being studied by students (Mansor, 2011). The use of reflective journals will guide students to analyze what they have and do not know about the material being studied and how to overcome the obstacles encountered so that learning goals are achieved and foster independent learning in students. When students can consciously design, monitor, and reflect on their learning process, they will become more self-confident and independent in learning.

The results of this study are in line with previous research conducted at private Catholic universities on third-year nursing students using qualitative research methods. The research results show that keeping a reflective journal can lead not only to an increase in skill competence in patient care but can also reduce severe bias in clinical practice (Oliver et al., 2021). Another study also conducted at the Kwazulu Natal University in Africa stated that reflection by keeping a reflective journal has a significant role in the development of clinical reasoning skills in midwifery students (Baloyi & Mtshali, 2018).

4. CONCLUSION

The application of self-reflection using reflective journals which is carried out twice can have a significant effect on oxytocin massage skills in D3 midwifery students. The findings in this study revealed that there was a significant increase in skills from before the application of self-reflection to after the application of self-reflection. Writing a reflective journal helps increase self-awareness. Through written reflection, students can observe, analyze, and interpret their experiences more deeply. This allows the development of a better understanding of thoughts, feelings, values, and motivations for performing skills.

REFERENCES


