THE EFFECT OF OXYTOCIN MASSAGE ON THE ADEQUACY OF BREAST MILK IN BABIES IN THE WORKING AREA OF THE KEDURANG HEALTH CENTER SOUTH BENGKULU

Dita Selvianti¹, Sari Widyaningsih², Ade Elvina³, Lensy⁴

¹D3 Midwifery Program Study, STIKes Sapta Bakti, Bencoolen
²S1 Midwifery Program Study, STikes Sapta Bakti, Bencoolen
Email correspondence: ditaselvianti93@gmail.com

ABSTRAK

Latar Belakang: Penurunan kecukupan ASI pada bayi pada hari-hari pertama setelah melahirkan dapat disebabkan oleh kurangnya rangsangan hormone prolaktin dan oksitosin yang tidak dapat mengalir lancar. Sehingga banyak ibu memberikan susu formula pada bayinya untuk memenuhi kebutuhan nutrisi pada bayi tersebut.


Metode: Penelitian yang digunakan quasi eksperimental dengan pendekatan pretest & postest without control group desain, metode pengambilan sampel total sampling.

Hasil: Hasil analisa univariat sebelum diberikan pijat oksitosin hampir seluruh 28 (93,3%) pengeluaran ASI tidak cukup. Sesudah diberikan pijat oksitosin sebagian besar 23 (76,7%) kecukupan ASI pada bayi cukup. Hasil analisa bivariat menunjukkan ada pengaruh pijat oksitosin pada ibu nifas terhadap kecukupan ASI pada bayi di Wilayah Kerja Puskesmas Kedurang Tahun 2023

Kesimpulan: ada pengaruh pijat oksitosin pada ibu nifas terhadap kecukupan ASI pada bayi di Puskesmas Kedurang (p value < 0,050)

Saran: Diharapkan Bidan bisa mengoptimalkan pemberian informasi mengenai upaya-upaya peningkatan kecukupan ASI pada bayi dengan cara melakukan pijat oksitosin.

Kata Kunci: Pijat Oksitosin, Kecukupan ASI

ABSTRACT

Background: The decrease in the adequacy of breast milk for babies in the first days after giving birth can be caused by a lack of stimulation of the hormones prolactin and oxytocin which cannot flow smoothly. So many mothers give formula milk to their babies to meet the baby's nutritional needs.

Purpose: this research is to determine the effect of oxytocin massage for postpartum mothers on the adequacy of breast milk for babies in the Kedurang Community Health Center working area in 2023.

Method: The research used a quasi-experimental approach with a pretest & posttest without control group design, total sampling method.

Results: The results of univariate analysis before being given oxytocin massage, almost all 28 (93.3%) expressed insufficient breast milk. After being given oxytocin massage, the majority of 23 (76.7%) babies had enough breast milk. The results of bivariate analysis show that there is an influence of oxytocin massage for postpartum mothers on the adequacy of breast milk for babies in the Kedurang Community Health Center Work Area in 2023

Conclusion: There is an effect of oxytocin massage for postpartum mothers on the adequacy of breast milk for babies at the Kedurang Community Health Center (p value < 0.050)

Suggestion: It is hoped that midwives can optimize the provision of information regarding efforts to increase breast milk adequacy for babies by carrying out oxytocin massage.

Keywords: Oxytocin Massage, Sufficiency of breast milk
INTRODUCTION

Providing breast milk (ASI) is very important for a baby’s growth. Considering the importance of breast milk, the Indonesian government has issued Government Regulation (PP) Number 33 of 2012 concerning exclusive breastfeeding, namely the mother’s obligation to breastfeed her baby from birth until the baby is 6 months old. However, what happens in the field is that many mothers experience problems when breastfeeding after giving birth until the baby is 6 months old. Some common problems are cracked nipples, sore nipples when breastfeeding, breast swelling, pain in surgical wounds, difficulty in taking the right position, child illnesses, maternal illnesses, breast abscesses and insufficient breast milk for babies. Regarding the insufficient adequacy of breast milk for babies, the data shows that mothers with problems are 19.5% at 0-7 days, 15.9% at 8 - 29 days, and 11.2% at 1-6 months after breastfeeding. (Babakazo, Bosonkie, Mafuta, Mvuama, & Patano, 2022). The importance of breastfeeding still depends on the factors that influence breastfeeding. Several factors that can influence the adequacy of breast milk for babies are explained by Lestari, Fatimah, & Ayuningrum (2021), namely food intake, psychology, use of contraception, physiological anatomy of the breast, breast care, rest patterns, baby sucking factors, birth weight and age, pregnancy at birth. The cause of irregular milk production on the first day after giving birth can be caused by a lack of stimulation of the hormone oxytocin and the mother’s physiological condition which plays a big role in the smooth flow of breast milk. One massage that can be done to facilitate breast milk is oxytocin massage. Oxytocin massage is one way to speed up the release of breast milk by using non-pharmacological measures by massaging the area around the back which aims to stimulate the release of breast milk so that the mother will feel satisfied, happy, confident and other positive feelings will create an oxytocin reflex. (Kholisotin, Munir, & Astutik, 2019). Oxytocin massage is carried out for the first time at the 6-hour postpartum visit for mothers who complain that their baby is not getting enough breast milk. Oxytocin massage is done twice a day to increase the adequacy of breast milk for the mother’s baby.

RESEARCH METHODS
Research design

This type of research with the research design chosen by the researcher is Quasi Experimental Design or what is usually called quasi-experiment. The research design used was quasi-experimental using a pretest & posttest approach without a control group design. The population in this study was 30 patients who gave birth in the Kedurang Community Health Center Work Area in January-February 2024. The sampling technique was a total sampling of 30 people. Before the oxytocin massage is carried out, a pre-test is carried out using a questionnaire, and after the oxytocin massage is carried out, the test is carried out again using a questionnaire regarding signs that the baby is getting enough breast milk. Oxytocin massage is carried out starting from 6 hours post partum, carried out 2 times for 7 days with a duration of 5 minutes. After the data is collected, data processing and data analysis are carried out including Univariate and Bivariate data analysis.

RESEARCH RESULTS

Respondent Characteristics

Table 1

Frequency distribution of characteristics of postpartum mothers in the Kedurang Community Health Center Working Area in 2023

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Ammount</th>
<th>Persentase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;20 year</td>
<td>11</td>
<td>36,7</td>
</tr>
<tr>
<td>20-35 year</td>
<td>19</td>
<td>63,3</td>
</tr>
<tr>
<td>Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>18</td>
<td>60</td>
</tr>
<tr>
<td>Work</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>11</td>
<td>36,7</td>
</tr>
<tr>
<td>Secondary</td>
<td>14</td>
<td>46,7</td>
</tr>
<tr>
<td>Height</td>
<td>5</td>
<td>16,7</td>
</tr>
<tr>
<td>Amount children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>&gt;3</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Research data on checklist for signs that a baby is breastfed (2024)

The results of table 1 obtained that most postpartum mothers (36.7%) aged 20-35 years, most 18 (60%) were domestic workers, almost half 14 (46.7%) had completed secondary education and half 15 (50%) had children 2.

Analysis Univariat

the results of table 2 show that almost all 28 (93.3%) babies had insufficient breast milk before being given oxytocin massage.
The results of table 3 show that after being given oxytocin massage, the majority of 23 (76.7%) babies had enough breast milk.

**Analisis Bivariat**

This analysis was carried out to determine the effect of oxytocin massage on postpartum mothers on the adequacy of breast milk for babies in the Kedurang Community Health Center Work Area in 2023. The analysis was carried out by carrying out a normality test on both groups with the following results.

**Table 4**

<table>
<thead>
<tr>
<th>Sufficiency of breast milk</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>before</td>
<td>0.000 Not normal distributed</td>
</tr>
<tr>
<td>after</td>
<td>0.000 Not normal distributed</td>
</tr>
</tbody>
</table>

Based on table 4, the results showed that data on breast milk adequacy before and after the intervention were not normally distributed because the p-value was <0.05, so the statistical test used was Wilcoxon non-parametric statistics.

**Table 5**

<table>
<thead>
<tr>
<th>Oxytocin massage</th>
<th>Mean± SD</th>
<th>Mean Rank</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>2.87±0.730</td>
<td>0-15,5</td>
<td>4.838</td>
<td>0.000</td>
</tr>
<tr>
<td>After</td>
<td>7.20±1.472</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 5, it is found that the positive rank value shows that of the 30 postpartum mothers who were given oxytocin massage, it shows that the average value of breast milk adequacy for babies has increased from 2.87 to 7.29. Based on the results of the Wilcoxon test, it was found that before and after being given oxytocin massage the p-value obtained = 0.000 <0.05, meaning it is significant, then Ho is rejected and Ha is accepted, meaning there is an influence of oxytocin massage on postpartum mothers on the adequacy of breast milk for babies in the Kedurang Community Health Center Working Area in 2023.

**DISCUSSION**

**Characteristics of Postpartum Mothers in the Kedurang Community Health Center Work Area in 2023**

Age

The research results obtained were mostly postpartum mothers (36.7%) aged 20-35 years. Women of reproductive age are included in the young adult category, where women are able to make independent decisions and give the best to their babies. Mothers who are at reproductive age are able to produce more breast milk than mothers who are at reproductive risk age, namely less than 20 years and more than 35 years. This is because the body's physiology is still good and optimal. Age is one of the factors that influences breast milk production. Mothers who are of mature age will give the best for their babies so that the babies can grow and develop optimally.
The research results were obtained mostly by 18 (60%) housewives. The employment status of respondents shows that the majority of respondents are not working. The mother's job is closely related to the mother's availability of time to be with her baby. Mothers who do not work have more free time to spend with their babies. Housewives have enough time to rest, so that mothers are not too tired and this will influence the release of the hormones oxytocin and prolactin which facilitate the production and release of breast milk. But on the other hand, even though my mother doesn't work, every day she carries out daily activities as a multi-tasking housewife. A housewife has many duties, including cooking, washing, taking care of her children and husband. This is related to excessive workload. If there is no support from the husband and family, the piling up of work can cause fatigue or tiredness and stress in the mother which triggers a decrease in breast milk production.

Education
The research results showed that almost half 14 (46.7%) had completed secondary education. Education is one of the factors that influences the smooth production of breast milk. Education influences the knowledge a person has, where someone who has higher education is expected to have good discourse and knowledge so that positive attitudes and behavior are formed. According to Notoatmodjo (2018), the higher a person's education, the easier it is for that person to receive information so that their knowledge increases. Mothers with medium to high educational status are able to receive new information and can accept changes to improve health, in this case regarding breastfeeding or lactation.

Number of children
The research results obtained that half 15 (50%) of the number of children were 2. The parity status of most of the respondents was multiparous. Parity describes the number of births a woman has. Parity is a factor that does not directly influence the smooth production of breast milk. This is due to other factors, especially external factors, which also influence, including knowledge, culture and beliefs, as well as previous experiences that the mother has previously had.

Frequency distribution of adequate breast milk for babies before being given oxytocin massage in the Kedurang Community Health Center Work Area in 2023
The research results were obtained before giving oxytocin massage, almost all 28 (93.3%) of them did not produce enough breast milk. These results indicate that there were 2 respondents who had sufficient breast milk for their babies, this was influenced by the mother's diet during pregnancy.

Frequency distribution of adequate breast milk for babies after being given oxytocin massage in the Kedurang Community Health Center Work Area in 2023
The research results showed that after being given oxytocin massage, the majority of 23 (76.7%) babies had enough breast milk. After being given an oxytocin massage, the 8 indicators with the lowest percentage not yet reached were the mother not touching the breast area which was full of breast milk. Many people don't do this because mothers want to breastfeed their babies immediately.

The effect of oxytocin massage for postpartum mothers on the adequacy of breast milk for babies in the Kedurang Community Health Center Work Area in 2023
The results of the positive rank value research showed that of the 30 postpartum mothers who were given oxytocin massage, it showed that the average value of breast milk adequacy for babies had increased from 2.87 to 7.29. The results of the Wilcoxon test showed that before and after being given oxytocin massage, the p-value = 0.000 <0.05, meaning it was significant, then Ho was rejected and Ha was accepted, meaning that there was an effect of oxytocin massage on postpartum mothers on the adequacy of breast milk for babies in the Kedurang Tahun Health Center Working Area. 2023.

CONCLUSION
Based on the results of research on the effect of oxytocin massage for postpartum mothers on the adequacy of breast milk for babies at the Kedurang Community Health Center, the conclusion was that before being given an oxytocin massage, almost all 28 (93.3%) had insufficient breast milk, after being given an oxytocin massage, the majority were 23 (76.7%) the adequacy of breast milk for babies is sufficient, there is an influence of oxytocin massage for postpartum mothers on the adequacy of breast milk for babies in the Kedurang Community Health Center Working Area in 2023.

SUGGESTIONS
For Community Health Centers, the program that already exists at the Community Health Center
should be optimized to improve health education regarding exclusive breastfeeding and ways to increase breast milk apart from food can be done with oxytocin massage so that babies get enough breast milk and the need for baby massage training for health workers there so that oxytocin massage can be spread to all mothers. Postpartum.

REFERENCES


