


Implementation Of Breast Massage To Increase Breast Milk Production Of Post Partum Mothers In The Oesapa Community Health Center Area

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Article Info	ABSTRACT
Keywords: Knowledge, Menstruation, Health Education	Menstruation is a natural biological process that occurs in females during their reproductive years. However, many young girls lack adequate knowledge about menstruation, leading to fear and misconceptions. This study aimed to investigate the effectiveness of health education through video on improving knowledge about menstruation among elementary school students. A pre-experimental one-group pre-test post-test design with proportional random sampling was employed. The study involved 38 female students from SD Negeri 2 and SD Negeri 4 Penebel in April 2024. Data was collected using a questionnaire. The Shapiro-Wilk test was used to assess normality due to the small sample size ($n < 50$). The p-value ($p > 0.05$) indicated normal distribution of the knowledge scores. The mean score before health education was 58.68. The mean scores for posttest week 1 and week 2 were 82.89 and 87.24, respectively. Statistical analysis revealed a significant difference in knowledge scores ($p = 0.000$), demonstrating the effectiveness of the health education intervention. The study highlights the importance of health education in improving knowledge about menstruation among elementary school students. Schools should incorporate menstruation education into their curriculum to empower girls with accurate information and dispel misconceptions.
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INTRODUCTION

One of the things that can cause obstacles in providing exclusive breastfeeding is breast problems. One of the breast problems that often occurs is breast milk engorgement or breast swelling. Breast milk engorgement is the damming of milk due to narrowing of the lactiferous ducts or glands that are not completely emptied. Breast engorgement often occurs on the second to tenth day postpartum. Most patients feel swollen, red, hard, painful and hot breasts. The causes of breast milk engorgement include ineffective frequency of breast milk release, this can be caused by several things, including not carrying out joint care so that there is separation of mother and child, and incorrect and ineffective breastfeeding techniques (Lestari & Andriyani, 2023).

In Indonesia itself, maternal and child health is focused on. One of them is the exclusive breastfeeding program to encourage the number of children who live past the age of 5 years.

The results of the 2016 nutritional status monitoring (PSG), the coverage of exclusive breastfeeding at the age of 0-5 months was 54.0%, while babies who had received exclusive breastfeeding up to 6 months were 29.5% (Johan et al., 2021).

Data from the Ministry of Health noted that there was an increase in the rate of exclusive breastfeeding, from 29.5% in 2016 to 35.7% in 2017. This coverage rate is very low considering the importance of breast milk for children's lives. The minimum target for exclusive breastfeeding in Indonesia is at least 50% according to the WHO target (Muslimah et al., 2020).

Common breastfeeding problems can be caused by breast ducts, non-protruding nipples, improper breastfeeding techniques, breast engorgement, abrasions, and mastitis. The success factor for pregnant women to breastfeed during the postpartum period is breast care during pregnancy. Breastfeeding problems are a common problem that may occur in the early postpartum period. The results of a multivariate test found that mothers with breastfeeding problems were 39 times more likely to suffer from postpartum depression than mothers without breastfeeding problems. A number of studies have shown that breastfeeding has an impact on the psychology of postpartum mothers. Research by Taqiyah (2019) showed that in 16 postpartum mothers, 81.3% or 13 mothers experienced blocked breast milk. However, after being given breast massage, the analysis results showed a p-value of 0.007. Therefore, it is recommended to continue to massage the breasts before and after giving birth to prevent blocked breast milk and increase early breast milk release (Lestari & Andriyani, 2023).

Breastfeeding every 2-3 hours will keep milk production high for women in general, breastfeeding or expressing breast milk eight times in 24 hours will keep milk production high in the early stages of breastfeeding. Rest for breastfeeding mothers must be maintained and considered, especially in the first one or two weeks after giving birth. Mothers who lack rest after giving birth can experience fatigue which has a negative impact on milk production and let down reflex (Maharani et al., 2022).

The benefits of breast massage for postpartum pregnant women have several results after breast massage, namely: muscle relaxation, pain relief, and smooth breast milk flow. Based on the description above, the researcher feels the need to conduct research and analyze the application of breast massage to increase breast milk production in postpartum mothers at the Oesapa Health Center.

METHODS

The type and design of the research used are qualitative. The research design uses an observational case study. This case study research is a study to explore how the application of breast massage to increase breast milk production in postpartum mothers in the Oesapa Health Center Area. Observations were conducted for 3 days with a qualitative approach on one postpartum mother patient who experienced problems with breast milk production.

The subject in this case study is one patient (one case) of a postpartum mother who experienced problems with breast milk production in the Oesapa Health Center Area as a

research subject who meets the inclusion criteria, namely, the general characteristics of research subjects from a target population that is reachable and will be studied.

1. Inclusion Criteria

Inclusion Criteria are general requirements or characteristics to meet the research subjects expected by the researcher, the criteria for the sample in this study are as follows:

- a. The subjects consisted of 1 postpartum mother patient with breast milk production problems.
- b. Respondents aged ≥ 20 years to 35 years.
- c. Have obtained permission from the Respondent by signing the consent form (Informed consent).

2. Exclusion Criteria

Exclusion criteria are eliminating or removing subjects who meet the inclusion criteria from the study for various reasons. The exclusion criteria in the study are as follows:

- a. Breast milk production without complications
- b. Respondents refuse to take data by returning the informed consent form in the middle of data collection.

Data collection in this case study was carried out using the assessment & questionnaire format, observation, interviews and documentation methods.

1. Questionnaire method

This data collection method is done by giving a number of written questions to the research subjects to be answered. There are two types of questions in the questionnaire, namely, open and closed. The questionnaire used in this study is a closed questionnaire, namely a questionnaire that has been provided with answers so that the research subjects only need to choose the answer.

2. Observation

This data collection method is through observation with the five senses and tools according to the assessment format, objective data collected includes: examination of general condition, awareness, TTV measurement, height measurement, weight measurement, LILA measurement, head to toe physical examination, and supporting examination.

3. Interview

Obtained through anamnesis containing the patient's identity and person in charge, main complaint, patient and family health history, menstrual history, current pregnancy history, birth control history, psychosocial aspects and daily habit patterns, and the Rhodes Index Of Nausea Vomiting And Retching (INVR) questionnaire. Data sources obtained from patients, families, nurses, and health workers

4. Documentation

In the form of medical records, patient status, and diagnostic examination results. The data collected is related to assessment, diagnosis, planning, action and evaluation.

Data analysis is done by presenting facts, then comparing them with existing theories and then poured into discussion opinions. The analysis technique used is by narrating the

answers from the case study subjects obtained from the results of in-depth interview interpretations conducted to answer the formulation of the research problem. The analysis technique is used by means of observation by researchers and documentation studies that produce data to be further interpreted by researchers compared to existing theories as material for providing recommendations in the intervention. Data presentation can be done with tables, images, charts, or narrative text. Confidentiality of respondents is guaranteed by obscuring the identity of the respondents.

RESULTS AND DISCUSSION

Research Results

Characteristics of research subjects

Table 1. Respondent Characteristics of Mrs. W

Respondents	Age	Work	Education	Parity	Knowledge
Respondent 1	22 years	housewife	SENIOR HIGH SCHOOL	G1P1A0	Not enough

Based on table 1, it can be concluded that the respondents' age of postpartum mothers is in the age range of 20-35 years with no risk, maternal parity is very risky where the first postpartum mother or G1P1A0 has a last education of high school, and the mother's knowledge is lacking.

Tabel 2. Identifying the scale of breast milk production in postpartum mothers before and after breast massage therapy.

Day Date	O'clock	Breast Action	Massage	Breast milk production		Information
				Pre	Post	
Thursday,20-06-2024	13.00	Perform breast massage techniques using the palms of your hands to gently press and perform circular massages from the chest to the nipples, while asking about the mother's response to the breast massage technique.	breast	2 cc	3 cc	Before the breast massage was carried out, the mother said that her breasts felt hard and breast milk production was not smooth. Before the massage therapy, breast milk came out with 2-3 spoons or 2 cc, while after the massage, the mother said that breast milk was still the same as 2-3 spoons.
Friday,21-06-2024	13:00	Perform breast massage techniques using the palms of your hands, pressing gently and	breast	8 cc	15 cc	Before the breast massage, the mother said that the breast milk that came out was 8 cc/8 tablespoons. Meanwhile,

		performing circular massages from the chest to the nipples, while asking about the mother's response to the breast massage technique.			after the massage, the mother said that the breast milk that came out was little by little with 15 cc.
Saturday,23-06-2024	15.00	Perform breast massage techniques using the palms of your hands, pressing gently and performing circular massages from the chest to the nipples, while asking about the mother's response to the breast massage technique.	15 cc	30cc	Before the procedure was carried out, the mother said that breast milk production had started and that the mother was also able to massage her breasts herself, with 15 cc of breast milk coming out, whereas after the massage, the patient said that around 30 cc of breast milk came out.

Research Discussions

This study discusses the suitability of theory and research results in implementing breast massage to increase breast milk production in postpartum mothers in Client Mrs. W. The implementation of this breast massage therapy was carried out 2x a day for 3 consecutive days with a duration of 10-15 minutes and refers to the Standard Operating Procedure for breast massage (SOP) on June 20 to June 23, 2024.

Respondent Characteristics

1. Age

For the characteristics of postpartum mothers who experience problems with breast milk production with breast massage treatment or action, they are 22 years old with No risk, namely age (20-35 years). Sufficient age will affect the level of maturity and strength of a person who will be more mature in thinking and working. In terms of public trust, someone who is more mature is trusted than someone who is not yet mature. This is because increasing age will also increase experience and maturity of the soul. So the more age increases, it is possible that more experience will be gained and the more experience will increase the level of knowledge. Age is one factor that can affect breast milk production, mothers who are younger will produce more breast milk compared to mothers who are older. Mujib (2016). Another opinion by Ningrum et al. (2017) that mothers aged 19-25 can generally produce enough breast milk compared to mothers aged 30 years and over.

2. Parity

For the characteristics of respondents based on primiparous parity or G1P1A0, or at risk to the baby. This study is in line with Anggraini, Erika, and Ade Dilaruri (2022) assuming that multiparous mothers are experienced, they have also prepared the physical and psychological needs related to the economy in a structured manner to facilitate breast milk production. Primiparous mothers who are less experienced often feel anxious and tense after giving birth which results in the physical and psychological condition of the mother, this psychological condition of the mother can cause disruption of the oxytocin hormone, where in breastfeeding mothers this hormone is useful for secreting breast milk.

3. work

For the characteristics of the respondents' work, they work as housewives. The benefits of working for women include: supporting the household economy, increasing self-esteem and strengthening identity, healthy and positive relationships with family, fulfilling social needs, increasing skills and competencies, One of the influences on family life is knowledge because in working, mothers will certainly interact with other people, work together with other people and in working together, and interacting, there must be communication.

Education

For the characteristics of the Last Education Based on the last one, namely High School. Judging from the education element, it can be seen that education is a planned process in increasing a person's knowledge so that it can be useful for that person, which in this case is about the danger signs of irregular breast milk production so that the mother immediately responds if the danger signs are felt by the postpartum mother which can finally be handled immediately by medical personnel and can reduce the risk.

Knowledge

Based on the results of the study using questionnaire data on pregnant women's knowledge about the danger signs of irregular breast milk production, the results of measuring the knowledge of pregnant women showed that their knowledge was less effective due to lack of exposure to information. Higher education will make a mother more able to think rationally about the benefits of exclusive breastfeeding and higher education makes it easier to be exposed to information. Yolanda (2021). In general, people with higher education will have broader knowledge than people with lower education and education can increase one's insight or knowledge (Anggraini, Erika, and Ade Dilaruri, 2022). One of the factors that influences human knowledge is education, the higher a person's level of education, the easier it is for him to obtain information, which ultimately results in more knowledge being received. But on the other hand, if the level of education is low, it can hinder the development of a person's attitude in receiving information about the values introduced. (Arbaiyah, 2021).

CONCLUSION

This study aims to identify the comparison of breast milk production volume before and after the application of breast *massage* therapy in post partum mothers. The results showed that regular application of breast *massage* can significantly increase breast milk production. In the case of Mrs. W, before the intervention on the first day, breast milk production only reached 2 cc. After the application of therapy, the volume of breast milk increased gradually until it reached 30 cc on the third day. This finding shows that breast *massage* is effective in increasing breast milk production of postpartum mothers, especially in the working area of Puskesmas Oesapa, Kupang City. Prolactin and oxytocin hormones have important roles in breast milk production and secretion. Prolactin hormone contributes to the formation of breast milk, while oxytocin hormone facilitates its secretion. Based on observations, breast *massage* helps stimulate these two hormones, which significantly increases the volume of breast milk. This finding is reinforced by the fact that breast *massage* also reduces breast tension, pain and engorgement, which are common obstacles to successful breastfeeding in the postpartum period. In addition, this study shows that the early postpartum period, especially the first and second days, is a critical phase where mothers often experience anxiety, discomfort and fatigue that affect milk production. By performing regular breast care, mothers can overcome these obstacles, increase milk flow and provide optimal nutrition for their babies. The study also highlighted the importance of education and support for post partum mothers in breast care. Mothers who understand breast *massage* techniques and their benefits are more likely to be successful in increasing milk production. In this context, the results of the study are in line with previous studies showing that non-pharmacological interventions such as breast *massage* contribute positively to breastfeeding success. However, this study has limitations, especially in terms of the scale of the study which was limited to one case study and the descriptive approach which focused on one location. Research limitations include potential bias related to client perceptions and limited exposure to information that may affect the results. The researcher recommends expanding the study with a larger sample size and applying quantitative research methods to measure the effectiveness of breast *massage* more comprehensively. The results of this study can serve as a foundation for health workers to implement breast *massage* therapy as one of the effective interventions in supporting breastfeeding success, especially in postpartum mothers with breast milk production problems.

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