



THE EFFECT OF BOMB METHOD (BREASTCARE, OXYTOCIN MASSAGE, AND MARMET TECHNIQUE) ON BREAST MILK PRODUCTION IN POSTPARTUM MOTHERS

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ABSTRACT	Keywords
The smooth process of lactation or the production and release of breast milk is influenced by breast care, frequency of breastfeeding, mother's psychology, mother's health, and contraception. The decrease in milk production is also caused by a lack of the hormones prolactin and oxytocin which play a role in the lactation process. This study aims to determine the effect of BOM method on milk production in post partum mothers. Quasy experimental research design with a Static Group Comparison approach. The population in this study were all post partum mothers in the Working Area of the Melonguane Public Health Center, Talaud Islands Regency in December 2022-January 2023 as many as 34 people. Data collection used purposive sampling, so that a sample of 32 people was obtained. The research instrument used the SOP for the BOM method and a checklist for breast milk production. Data analysis using the Mann Whitney Test. The results showed that all milk production in the intervention group was good, as many as 16 respondents (100%), while in the control group, most were good, as many as 9 respondents (56.3%). The results of the Mann Whitney test showed that the p value $(0.000) < \alpha (0.05)$ so that H_0 was rejected and H_1 was accepted, meaning The BOM method has been proven to increase milk production in Post Partum Mothers so as to increase the degree of optimal growth and development for baby.	Breastcare, Oxytocin Massage, Marmet Technique, Milk Production

INTRODUCTION

Breastfeeding begins immediately after the baby is born while the baby is still awake. The stimulation of the baby's mouth will increase the work of the hormone oxytocin to stimulate milk production and the hormone prolactin to release milk. Babies should be given only breast milk until the age of 6 months and continue until the age of 2 years according to WHO recommendations (Winatasari &

Mufidaturrosida, 2020).

Conditions in the field show different things because there are still many mothers who do not provide exclusive breastfeeding until the age of 6 months because they feel that breast milk production is lacking so that it is unable to meet the nutritional needs of the baby, this is because in the first week breast milk often does not come out smoothly so mothers help the baby's nutritional intake by giving formula

milk (Asih, 2020).

Indonesian health profile data shows that 71.8% of infants are breastfed for less than 6 months, whereas the national exclusive breastfeeding target is 80%. Exclusive breastfeeding coverage in North Sulawesi Province is 60.1% (BPS, 2022)

The Talaud Islands Regency itself has exclusive breastfeeding coverage in 2021 of 32.9% and at the Melonguane Health Center of 50% (Talaud Islands Health Office, 2022).

Research results (Umarianti et al., 2018b) showed that respondents who had sufficient breast milk production were 53.3% after being given the BOM method, while 47.7% had insufficient breast milk production without being given the BOM method. This research is supported by research conducted by (Mega et al., 2020) which shows that 100% of respondents experienced non-fluent breast milk production before being given BOM therapy, while after being given BOM therapy, 80% of respondents had smooth breast milk production, while 20% were classified as not smooth.

If the baby is deprived of breast milk, the position of breast milk is replaced by other foods of lower quality. Increased chance of illness, because protective factors are reduced, other foods are not as pure as breast milk, other foods are more difficult to digest, and the possibility of getting pregnant soon is higher. Meanwhile, the consequences of delayed complementary feeding are that the child does not get the nutrients the body needs. Slow growth and development. Lack of substances needed by the body and malnutrition can occur (Mustika et al., 2018).

There are several ways that can be done to increase breast milk production, namely pharmacological (Domperidone and Metoclopramide) and non-pharmacological. Non-pharmacological methods to increase breast milk production can be obtained from plants or better known as family medicinal plants (TOGA) and some relatively simple methods such as acupressure, acupuncture, and massage or massage (N. Yuliani et al., 2021). One of the massage techniques that can increase breast milk production is the BOM method (Putri et al., 2022).

The BOM method (Breastcare, Oxytocin Massage, and Marmet Technique) is

the stimulation of milk production and expression with respiratory protection, which means breast massage, oxytocin massage or spinal cord stimulation massage, and marmet technique, which means a combination of milking and breast massage. BOM massage is a combination of breast care, massaging the spine (spinal column) to the fifth or sixth rib and removing breast milk (ASI) so that breast milk comes out evenly and provides a sense of comfort and relaxation. postpartum mothers or mothers who have undergone the postpartum process (Umarianti et al., 2018b).

Based on this background, the researcher is interested in examining the effect of the BOM method on breast milk production in postpartum mothers in the Melonguane Health Center Working Area, Talaud Islands Regency.

MATERIALS AND METHODS

This research uses a "quasi-experimental" design. The experimental method in this study uses a type of research design with a two-group method, one for the control group and the other for the treatment group or called static Group Comparison. Each postpartum mother was analyzed on the effect of the BOM method on breast milk production, where different treatments were given between the control group in the form of measuring breast milk production and the intervention group in the form of being given BOM method treatment and measuring breast milk production. The subjects of this study were some postpartum mothers in the Melonguane Health Center Working Area of the Talaud Islands Regency in December 2022-January 2023 as many as 32 people. Data obtained from data collection were subjected to Mann Whitney bivariate test using SPSS 20.0.

RESULTS

Descriptive analysis

1. Characteristics of Respondents by

Age

Table 4. 1 Frequency Distribution of Respondents Based on Age in the Melonguane Health Center Working Area, Talaud Islands Regency in December 2022-January 2023

Age Characteristic s	Intervention Group		Control Group	
	F	%	F	%
< 20 year	5	31,2	5	31,2
20-35 year	11	68,8	11	68,8
> 35 year	0	0	0	0
Sum	16	100,0	16	100,0

Table 4.1 shows that based on age characteristics, most respondents in the intervention group and control group were 20-35 years old, namely 11 respondents (68.8%).

2. Characteristics of Respondents Based on Education

Table 4. 2 Frequency Distribution of Respondents Based on Education in the Melonguane Health Center Working Area, Talaud Islands Regency in December 2022-January 2023

Education Characteristic	Intervention Group		Control Group	
	F	%	F	%
Elementary (elementary, junior high)	5	13,2	7	43,7
Secondary (Senior High)	7	43,8	7	43,8
Collage	4	25,0	2	12,5
SUM	16	100,0	16	100,0

Based on table 4.2, it is known that almost half of the respondents in the intervention group and control group had secondary education (SMA), namely 9 respondents (56.2%).

3. Characteristics of Respondents Based on Occupation

Table 4. 3 Frequency Distribution of Respondents Based on Occupation in the

Working Area of the Melonguane Health Center, Talaud Islands Regency in December 2022-January 2023

Occupation Characteristic	Intervention Group		Control Group	
	F	%	F	%
Housewife	7	43,8	8	50,0
privately	0	0	0	0
Self Employed	0	0	0	0
State civil apparatus	3	18,7	2	12,5
Farmers	6	37,5	6	37,5
sum	16	100,0	16	100,0

Table 4.3 shows that almost half of the respondents in the intervention group were housewives, namely 7 respondents (43.8%), and half of the control group respondents were housewives, namely 8 respondents (50%).

4. Characteristics of Respondents Based on Parity

Table 4. 4 Frequency Distribution of Respondents Based on Parity in the Melonguane Health Center Working Area, Talaud Islands Regency in December 2022-January 2023.

Parity Characteristic	Intervention Group		Control Group	
	F	%	F	%
Primipara	6	37,5	6	37,5
Multipara	10	62,5	9	56,3
Grandemultipara	0	0	1	13,2
Sum	16	100	16	100

Table 4.4 shows that based on the characteristics of parity, most respondents in the intervention group were mostly multiparous, namely 10 respondents (62.5%), and most of the control group were also multiparous, namely 9 respondents (56.3%).

5. Breast milk production in postpartum

mothers given the BOM method

Table 4. 5 Frequency Distribution of Breast Milk Production in Postpartum Mothers Given the BOM Method in the Melonguane Health Center Working Area,

Milk production	Frequency	Percentage (%)
good	16	100
Lack	0	0
sum	16	100

Talaud Islands Regency

Produksi ASI	Frekuensi	Persentase (%)
Baik	16	100
Kurang baik	0	0
Jumlah	16	100

Table 4.5 shows that breast milk production in the group given the BOM method was entirely good, namely 16 respondents (100%).

6. production in postpartum mothers who were not given the BOM method

Table 4. 6 Frequency Distribution of Breast Milk Production in Postpartum Mothers Who Were Not Given the BOM Method in the Melonguane Health Center Working Area, Talaud Islands Regency

Milk production	Frequency	Percentage (%)
Good	7	43,7
Lack	9	56,3
Sum	16	100

Table 4.6 shows that breast milk production in mothers who were not given the BOM method was mostly poor, namely 9 respondents (56.3%).

7. Differences in breast milk production between groups of postpartum mothers who were given and not given the BOM method

Table 4. 7 Differences in breast milk production between groups of postpartum mothers who were given and not given the BOM method in the Melonguane Health Center Working Area, Talaud Islands Regency.

Milk production	Intervention Group		Control Group	
	F	%	f	%
good	16	100	7	43,7
lack	0	0	9	56,3
Sum	16	100	16	100

Table 4.7 shows that breast milk production in the intervention group was entirely good, namely 16 respondents (100%), while in the control group most of them were less good, namely 9 respondents (56.3%).

The Mann Whitney Test results show that the p value for breast milk production is 0.000 or the value is $< \alpha$ (0.05) so that H1 is accepted, which means that there is an effect of the BOM Method on breast milk production in postpartum mothers in the Melonguane Health Center Working Area, Talaud Islands Regency.

DISCUSSION

Based on the results of the study, it is known that in the intervention group all respondents' breast milk production was classified as good, namely 16 respondents (100%). All indicators including frequency and characteristics of BAK, frequency and characteristics of defecation, sleeping hours, and weight gain all received a score of 1 because they were in accordance with the indicators of good breast milk production.

Smooth breast milk production can be known from the baby's indicators, which include the baby's BAK more than 6 times a day with clear yellow urine characteristics, the baby's defecation at least 2 times a day with golden yellow defecation characteristics, the baby sleeps at least 8 to 16 hours per day and the baby's weight has increased (Widyawaty & Fajrin, 2020).

Based on the results of the study in table 4.1, it shows that most of the respondents in the

control group were 20-35 years old, namely 11 respondents (68.2%). Women aged 20-35 years have more breast milk production than mothers who are older than 35 years. Age 20-35 years is a healthy reproductive age and a safe age for pregnancy, childbirth, and breastfeeding. Therefore, the age range of 20-35 years is a very good reproductive period and supports exclusive breastfeeding. Ages less than 20 years are still considered physically, mentally, and psychologically immature in the face of pregnancy, childbirth and breastfeeding, while ages over 35 years are considered dangerous, because the reproductive and physical organs of the mother have been much reduced and decreased (Sukriana et al., 2018). have just given birth to their first child because they do not have experience so that changes in the role of motherhood become a severe stressor for mothers which can interfere with breast milk production.

Based on the research results in table 4.2 which shows that half of the respondents in the control group had a secondary education (SMA), namely 9 respondents (56.3%). The higher a person's education, the higher the demand for health quality. However, one's level of education cannot be used as a guideline that one will be successful during the breastfeeding process, but the correct information received about the previous breastfeeding process will determine the success of the breastfeeding process (Sukriana et al., 2018).

The results of the study in table 4.3 show that in the control group half were housewives, namely 8 respondents (50%). Mothers who do not work may breastfeed more often, so that breast milk production increases. The more often the baby suckles on the mother's breast, the more milk production and release will be. Suction from the baby's mouth will stimulate the hypothalamus gland in the posterior pituitary. The anterior pituitary produces stimulation (prolactin) to increase the release of prolactin hormone to produce breast milk (Sukriana, 2018).

The results of the study in table 4.4 show that most of the respondents were multiparous, namely 9 respondents (56.3%). Mothers who

give birth to the second child and so on produce more breast milk than mothers who give birth to the first child. Another thing is the body mass factor Low birth weight babies (LBW) have a low ability to absorb breast milk compared to normal weight babies. The lower ability to absorb breast milk affects the frequency and duration of breastfeeding. Thus affecting the stimulation of prolactin and oxytocin hormones in milk production (Pramana et al., 2021).

Based on the results of the study, it is known that breast milk production in the intervention group is entirely good, namely 16 respondents (100%), while in the control group most of them are less good, namely 9 respondents (56.3%). The results of the Mann Whitney Statistical Test showed that the p value for breast milk production was 0.000 or the value was $< \alpha$ (0.05) so that H1 was accepted, which means that there is an effect of the BOM Method on breast milk production in postpartum mothers in the Melonguane Health Center Working Area, Talaud Islands Regency.

CONCLUSIONS

Breast milk production of postpartum mothers who were given the BOM Method in the Melonguane Health Center Working Area of the Talaud Islands Regency showed that all were good, and Breast milk production of postpartum mothers who were not given the BOM Method in the Melonguane Health Center Working Area of the Talaud Islands Regency showed that most were not good. So, there is an effect of the BOM Method on breast milk production in postpartum mothers in the Melonguane Health Center Working Area of the Talaud Islands Regency as evidenced by the results of the Mann Whitney test p value = 0.000.

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