

THE EFFECT OF OXYTOCIN MASSAGE ON FLUENCY BREASTFEEDING IN MULTIPAROUS POSTPARTUM MOTHERS IN THE WORKING AREA PUSKESMAS MEDAN JOHOR YEAR 2022

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ABSTRACT

Exclusive breastfeeding in Indonesia has an achievement of 66.06% according to the Ministry of Health's 2020 research. For North Sumatra, it is 53% and exclusive breastfeeding coverage in Medan city is still low with the 9th lowest or 30.41% and IMD coverage in Medan city is 22.19%. The cause of low exclusive breastfeeding is low milk production, especially in the first day after childbirth, due to the lack of stimulation to increase oxytocin and prolactin hormones. Nonpharmacological efforts, namely oxytocin massage, can help smooth breast milk. This study aims to analyse the effect of oxytocin massage on breast milk fluency in multiparous postpartum mothers in the Medan Johor Health Centre working area in 2022. This study used quantitative research, with a Quasi Experiment research design with a Nonequivalent Control Group Design approach. Sampling technique with purpose sampling with 12 respondents for the control group and 12 respondents for the experimental group. The results of the Wilcoxon test with a p value of 0.002 showed that the p value $< \alpha$ (0.005) stated that there was an effect of oxytocin massage on the smoothness of breast milk in multiparous postpartum women in the Medan Johor Health Centre working area in 2022.

Keywords: Obstetric care, oxytocin massage, smooth breastfeeding in postpartum women.

INTRODUCTION

The World Health Organization (WHO) recommends that to improve maternal and infant health by providing exclusive breastfeeding and the World Alliance for Breastfeeding Action (WABA) if breast milk is given 1 hour at least after the baby is born, it is estimated that 1 million babies can be saved and will continue on exclusive breastfeeding. Breastfeeding is a situation between mother and baby, done with patience for at least 6 months after the baby is born. In addition, breastfeeding is not only a fulfilment of nutrition for the baby but also an important implication in the reproductive process which is very important for the health of the breastfeeding mother. The production of breast milk can be affected by the lack of stimulation of prolactin and oxytocin hormones in the first days after childbirth, resulting in a lack of breast milk. In this condition, many mothers immediately use formula milk to fulfil their baby's nutrition. It is undeniable that formula milk is an alternative as an additional food when breast milk is not smooth. Apart from helping to fulfil the baby's nutrition, formula milk is also very instant and easy to obtain (Tarigan, 2018)

In 2019, out of 29,322 under-five deaths, 69% (20,244 deaths) occurred during the neonates period. Of all reported neonate deaths, 80% (16,156 deaths) occurred in the first six days of life. Meanwhile, 21% (6,151 deaths) occurred between 29 days and 11 months of age and 10% (2,927 deaths) occurred between 12 and 59 months of age (Indonesian Ministry of Health, 2019).

The infant mortality rate in 2020 in neonates aged 0-28 days was 72.0% or 20,266 deaths out of 28,158 under-five deaths. At the age of 29 days - 11 months 19.1% (5,386 deaths and age 12 months - 59 months is 9.9% or 2,506 deaths. The things that can be done to

deal with these cases by providing exclusive breastfeeding to babies from the age of birth until the first 6 months of birth (Indonesian Ministry of Health, 2020).

UNICEF explains that formula milk can provide the possibility of malnutrition in infants in the first month after birth and the incidence of malnutrition is 25 (twenty-five) times than infants who are always exclusively breastfed by their mothers (Siregar, 2018).

Based on the health profile in Indonesia (2020) obtained data that says the nutritional status of toddlers is known by measuring body mass index per age BB / U), (TB / U) height per age and also (BB / TB) weight per height. In 2018, the weight per age of toddlers 0-23 months was 3.8% very less in Indonesia, for the percentage of less is 11.4%. Children 0-59 months were 3.9% severely underweight and 13.8% underweight. In 2020, as measured by e_PPBGGM, 49% of two-year-old infants were severely underweight 58,425 (1.3%) and underweight 248,407 (5.4%). Bali is the province with the highest rate of underweight toddlers at 100% and Papua the lowest at 20.4%. Presentation in North Sumatra (95.7%) (Indonesian Ministry of Health, 2020).

One of the efforts to deal with malnutrition in toddlers is the utilisation of breast milk. Breast milk is given for at least the first 6 months after the baby is born exclusively without any additional food or milk. After 6 months of exclusive breastfeeding, complementary foods often called MP ASI are given side by side with breast milk given until the age of 2 years. Feeding according to instructions is the most feasible intervention and has been shown to be effective in reducing infant mortality rates (IMR). Exclusive breastfeeding has an achievement of 66.06% which has exceeded the 2020 target of 40%. The highest province in exclusive breastfeeding was West Nusa Tenggara (87.33%) and the lowest was West Papua (33.96%). Provinces that have not reached the 2020 target are Maluku and West Papua (Indonesian Ministry of Health, 2020).

Exclusive breastfeeding in 2019 in North Sumatra was 53% with North Nias the highest (84.28%), Sibolga the second (72.12%) and Samosir (69.05%). The lowest cities were West Nias (11.96%), Serdang Bedagai (16.20%) and Nias (17.62%). Exclusive breastfeeding coverage in Medan City was 30.41%, which was the 9th lowest coverage. IMD coverage in Medan City is still relatively low with a percentage of 22.19% (Ministry of Health RI North Sumatra Province., 2019)

Another factor that causes mothers not to exclusively breastfeed their babies is breast obstruction. According to WHO 2017, in the United States the percentage of breast milk dams was 8242 (87.05%) out of 12,765 postpartum women. In 2015 there were 7198 (66.87%) out of 10,764 postpartum women and in 2016 there were 6543 (66.34%) out of 9,862 postpartum women. Based on data from the Association of Southeast Asian Nations (ASEAN) in 2015 there were 10 countries that experienced breast milk dams, namely Indonesia, Thailand, Malaysia, Singapore, the Philippines, Brunei Darussalam, Vietnam, Laos, Myanmar and Cambodia in 2015 as many as 107,654 total postpartum women and with breast milk dams 95,698 (66.78%) postpartum women. Furthermore, at in 2016 there were 76,543 (71.10%) with the highest rate in Indonesia as much as (37.12%). The Indonesian Health Research and Development Agency in 2018 found 16% of working mothers who experienced breast milk dams. The way that can be done to increase the 4 oxytocin hormone is by doing Oxytocin massage (Munawaroh, 2019).

Oxytocin massage is a strategy that can facilitate breast milk, massage is done along the Vertebrate bone to costae five to six. The massage or pressing on the back spine can increase the production of oxytocin hormone so that breast milk comes out and the mother is happy. The mother's feeling when the massage is done is happy and feels relaxed after expending energy during the process of childbirth and the most important thing is that the process of releasing breast milk smoothly occurs due to stimulating the letdown reflex and

oxytocin reflex and the absence of swelling in the breast and the milk ducts do not occur blockage (Mulyani, 2021). Research conducted by Yessi Roulina Siregar (2018) oxytocin massage can assist in the release of breast milk production (Siregar, 2018). This research is also in line with research conducted by Umy (2017) that there is a difference in the fluency of breast milk of mothers before oxytocin massage most of the milk output is not smooth and after oxytocin massage most of the milk output is smooth (Naziroh, 2017).

Based on the survey results in the Medan Johor Health Centre Working Area, there were 26 pregnant women TM III Multiparity who interpreted the date of delivery in February-April 2022 and at the time of the survey conducted interviews with postpartum mothers said that they did not provide exclusive breastfeeding to the baby because the mother's milk did not come out immediately and chose to give formula milk to the baby.

In this study, the difference from previous studies is that oxytocin massage is done to multiparous postpartum mothers who have given birth and have a history of disturbances in the fluency of breast milk before. Based on the data above, where there is still low exclusive breastfeeding given by mothers to babies, it is necessary to conduct research on "The Effect of Oxytocin Massage on the Process of Milk Fluency in Multiparous Postpartum Mothers in the Medan Johor Health Centre Working Area in 2022"

MATERIALS AND METHODS

This study uses quantitative research, with a Quasi Experiment research design which is a pseudo experiment which has better internal validity which is carried out longitudinally. This research is included in the Nonequivalent Control Group Design approach, namely in one group where half the sample is given an intervention and the other half a control. The sample in this study were 24 respondents with 12 intervention respondents and 12 control respondents. The sampling technique was purposive and data collection using observation sheets carried out from February-April 2022 in the working area of the Medan Johor Health Centre in 2022.

RESULTS

The results of research that has been conducted in the Medan Johor Health Centre Working Area which took place during February 2022 to March 2022 with a total of 24 respondents of multiparous 5 postpartum women who were divided into two groups, namely the intervention and control groups of 12 respondents each in each group. The researcher visited the respondent's home to perform oxytocin massage and observed before and after oxytocin massage using an observation sheet to obtain the results. The treatment of oxytocin massage in this study on multiparous postpartum women and in conducting oxytocin massage the researcher asked for the respondent's willingness first by filling out an informed consent sheet and signed by the respondent with the following results:

General Data

Table 1 Characteristics of Respondents based on
Genera Data

Age	Number Of Mums	Percentage
20-25	13	54%
26-30	5	21%
>30	6	25%
Total	24	100%
Education	Number Of Mums	Percentage

SD	4	17%
SMP	5	21%
High School	12	50%
S1	3	12%
Total	24	100%
Jobs	Number Of Mums	Percentage
IRT	14	58%
Employees	6	25%
Private	4	17%
Total	24	100%
Parity	Number Of Mums	Percentage
PI	0	0%
PII	11	46%
PIII	8	33%
PIV	3	13%
PV	2	8%
Total	24	100%

Table 1 shows that the majority of respondents were aged 20-25 years, namely 13 respondents with 54.00%. The minority of respondents aged 26- 30 years were 5 respondents with 21.00% and more than 30 years were 6 respondents with 25.00%. The majority of respondents have a high school education, namely 12 respondents with 50.00%. Junior high school as many as 5 respondents with 21.00%. SD as many as 4 respondents with 17.00% and the minority of respondents are S1 as many as 3 respondents with 12.00%. the majority of respondents are housewives, namely 14 respondents with 58.00%. Employees as many as 6 respondents with 25.00% and private there are 4 respondents with 17.00%. most respondents have had partus 2 times namely 11 respondents with 46.00%. History of partus 3 times as many as 8 respondents with 33.00%. History of partus 4 times as many as 3 respondents with 13.00% and history of partus 5 times as many as 2 respondents with 8.00%.

Customised Data

Table 2 Test Results of the Effect of Oxytocin
 Massage on Milk Fluency in Multiparous
 Postpartum Mothers

	<i>p</i> <i>value</i>	Decision
Experiment	0,002	Ho is rejected
Control	0,917	

Based on the Wilcoxon Test, it shows that in the experimental group Ho is rejected, which means that with a p value of $0.002 < \alpha 0.005$, it is decided that there is an increase in the fluency of breast milk in multiparous postpartum women in the Medan Johor Health

Centre working area in 2022 compared to not doing oxytocin massage to multiparous postpartum women in the Medan Johor Health Centre working area in 2022.

DISCUSSION

Based on the results in this study which are divided into two groups, namely the control group and the experimental group. In the control group, 12 respondents did not experience an increase in breast milk fluency during 7 days of monitoring or observation with 0.00% fluent, 50.00% quite fluent and even 50.00% less fluent. Where this is also supported by the calculation of the Wilcoxon test with a p value of $0.917 > \alpha 0.005$, which means that there is no increase in the fluency of breast milk in the group that did not do oxytocin massage while 12 respondents in the experimental group all experienced an increase in the fluency of breast milk with 11 respondents (92.00%) and quite smoothly 1 respondent (8.00%) who before being done oxytocin massage was in less smoothly to quite smoothly. Therefore, it can be concluded that all respondents who performed oxytocin massage experienced an increase in breast milk fluency.

Oxytocin massage is a treatment performed or massaged along the vertebrae where neurotransmitters stimulate the medulla oblongata to the hypothalamus to stimulate milk production which also provides a sense of comfort and relaxation to the mother. Oxytocin massage in this study was carried out based on Standard Operating Procedures (SOP) referred from SOP STIKes Mitra Husada Medan.

Properly performed oxytocin massage can help increase and facilitate breastfeeding. The massage is done along the vertebrae to the fifth and sixth costa to stimulate breast milk production hormones, namely Prolactin and Oxytocin or the let down reflex, with smooth breast milk can increase exclusive breastfeeding (Ode Sri Asnaniar & Fatma Jama, 2020).

Based on the results of the Wilcoxon test difference adapted p value $0.002 < \alpha 0.005$ which means H_0 is rejected so it can be said that there is an effect of oxytocin massage on the smoothness of breast milk in multiparous postpartum women in the Medan Johor Health Centre Working Area in 2022.

This study is in line with research conducted by Yessi Roulina Siregar (2018) with sign. 0.001 where p value < 0.005 which wrote that there was a significant effect of oxytocin 7 massage on breast milk fluency. So it can be concluded that oxytocin massage treatment can stimulate the oxytocin hormone to increase the fluency of breast milk and thus can help in increasing exclusive breast milk which is very useful for immunity, fulfilment of nutrients and increasing intelligence in infants.

CONCLUSION

Based on the results of research conducted on 24 respondents about the effect of oxytocin massage on multiparous postpartum women in the Medan Johor Health Centre Working Area in 2022, it can be concluded that:

1. Postpartum women who received oxytocin massage all experienced an increase in breast milk fluency with smooth 92.00% and moderately smooth 8.00%.
2. Postpartum mothers who did not have oxytocin massage had no improvement in breast milk fluency with 0.00% fluent and 50.00% moderately fluent.
3. There is an effect of oxytocin massage on the smoothness of breast milk in multiparous postpartum mothers in the Medan Johor Health Centre Working Area in 2022 with a p value = 0.002 ($p < 0.005$).

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