



THE EFFECT OF OXYTOCIN MASSAGE ON BREAST MILK PRODUCTION ON THE OF POSTPARTUM MOTHERS 10 DAY IN THE WORK AREA BPM HJ. UMAMAH, AMD.KEB SUMEDANG REGENCY MARCH-MAY PERIOD OF 2018

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ABSTRACT

Exclusive breastfeeding is the most appropriate nutrition for newborn babies to a minimum of 6 months old babies. There are several problems with postpartum mothers in giving their babies breast milk, one of which is the production of breast milk that is not smooth and does not come out in the first days of the baby's life, it should be anticipated since pregnancy through lactation counseling. From the results of interviews with postpartum mothers during the preliminary study it was found that postpartum mothers experience a little breast milk production problems. Therefore, one way that can be done is to stimulate breast milk production by doing oxytocin massage. Benefits of oxytocin massage provide comfort to the mother, reduce swelling (engorgement), reduce blockage of breast milk, stimulate release of oxytocin, maintain milk production when the mother and baby are sick. The purpose of this research was to determine the effect of oxytocin massage on breast milk production on the 10 th day of postpartum mothers in the BPM Hj. Work area Umamah Amd. Keb the period of March-Mey 2018. The research method used was quasi-experimental with the number of respondents 20 postpartum mothers on the 10 th day, then grouped into 2 case groups and the in each groups consisted of postpartum mothers. Data collection techniques using purposive sampling with using observation sheets, and using univariate and bivariate analysis were carried out by Independent T statistical test. The results of the study of 20 postpartum mothers respondents obtained pValue of $0.000 < (0.05)$ so that there was an oxytocin massage effect on the production of breast milk in the BPM Hj Work Area Umamah, Amd. Keb. The results of this study are recommended for breastfeeding mothers to be able to massage oxytocin, to influence breast milk production.

Keywords: *quasi experiment, oxytocin massage, breast milk production*

INTRODUCTION

Breastfeeding is well known as a way to protect, improve and support the health of infants and young children. Breast milk nourishes the growth of the baby's brain development, the immune system, and is a vital factor for preventing diseases, especially diarrhea and respiratory infections. Breastfeeding causes growth hormone release, promotes healthy mouth development and builds a trusting relationship between mother and baby, but often mothers fail to breastfeed or stop breastfeeding earlier before six months of age (Soetjningsih, 2008).

According to WHO coverage of exclusive breastfeeding in the world ranges around 40% regarding data on exclusive breastfeeding is still relatively low, while non-exclusive breastfeeding in various countries around 60% this figure is inversely proportional to the amount of increase in non-exclusive breastfeeding (Panjaitan, 2015). The decline in exclusive breastfeeding does not only

occur in developed countries but also occurs in developing countries such as in Indonesia (Kumalasari et al, 2015). Coverage of exclusive breastfeeding (ASI) 0-6 months in Indonesia is still very low. The 2015 data and information center (Pusdatin) of the Ministry of Health shows that the coverage of new exclusive breastfeeding is 54.3% of the target of 80%. Even though exclusive breastfeeding is a baby's right that must be fulfilled by the mother (Ministry of Health, 2015).

Referring to the 2016 strategic plan target of 39%, nationally the coverage of exclusive breastfeeding of 55.7% has reached the target. Based on the 2016 RI Ministry of Health report, there is only one province that has achieved the highest exclusive ASI coverage target, namely West Nusa Tenggara Province at 86.9% while the lowest is North Sulawesi Province at 26.3%. West Java Province is one of the 3 lowest regarding coverage of breastfeeding, which is around 35.3% of 33 provinces in Indonesia. Constraints and low

exclusive breastfeeding is caused by several factors including socio-cultural factors, the influence of the promotion of formula milk, support from health workers, maternal health, infant health, maternal education level (Sarhini, 2008).

The problem of breastfeeding that does not come out in the first days of a baby's life should be anticipated since pregnancy through lactation counseling (Ulfah, 2013). One way to produce milk production and expenditure by oxytocin massage. Oxytocin massage is an action taken by the family, especially by the husband in nursing mothers in the form of back massage on the back of the mother to increase the hormone oxytocin. Oxytocin massage is done to stimulate reflex let down. (Sri. 2015). In addition to stimulating the let down benefits of oxytocin massage is to provide comfort to the mother, reduce swelling (engorgement), reduce milk blockage, stimulate the release of the hormone oxytocin, maintain milk production when the mother and baby are sick (Purnama, 2013).

Based on a preliminary study conducted at BPM Midwife Hj. Umamah, Amd. Keb during the March-May period there were 25 women giving birth. The results of a preliminary study that researchers conducted on 5 first day postpartum mothers by interview on 14-15 March 2018 then obtained information that 5 postpartum mothers said breast milk production was small. This can be caused by the small amount of the hormone oxytocin to stimulate milk production so that the process of smoothing / spending of milk production also becomes uneasy apart from the nutrition that the mother obtained during pregnancy.

Researchers also conducted interviews with midwives who were at BPM. He said he never did oxytocin massage while giving care to postpartum mothers, to stimulate the release of milk production. Midwives are more likely to provide counseling about breast care and breastfeeding techniques. So the method to stimulate the release of milk production through non-pharmacological therapy such as oxytocin massage therapy has never been applied. The purpose of this study is to determine the effect of oxytocin massage on the amount of breast milk production in postpartum mothers on the

10th day in the BPM Working Area Hj. Umamah Amd. Keb March-May 2018.

METHODS

The research method used was quasi-experimental with the number of respondents 20 postpartum mothers on the 10 th day, then grouped into 2 case groups and the in each groups consisted of postpartum mothers. Data collection techniques using purposive sampling with using observation sheets, and using univariate and bivariate analysis were carried out by Independent T statistical test. The data taken is primary data that is data taken directly from respondents using observation sheets.

Results

1. Description of the Average Amount of Breast Milk Production Not Done Oxytocin Massage

Table 1: Average Distribution of Amount of Breast Milk Production at Postparum Mother Day 10 in BPM Working Area Hj. Umamah, Amd. Keb What Is Not Done Oxytocin Massage

Group	Mean	Min	Max	N
No Oxytocin Massage	57.50 ml	40	70	10

Source: Primary Data

Based on table 1 it was found that the average amount of milk production in postpartum mothers on day 10 that did not do oxytocin massage was 57.50 ml.

2. Description of the Average Amount of Breast Milk Production by Oxytocin Massage

Table 2 Distribution of Average Amount of Breast Milk Production at Postparum Mother 10th Day in BPM Working Area Hj. Umamah, Amd. Keb What Is Done Oxytocin Massage

Group	Mean	Min	Max	N
Oxytocin Massage	102.00 ml	80	150	10

Source: Primary Data

Based on the results of the analysis in Table 4.2, it was found that the average amount of breast milk production at the 10th day postpartum mothers undergoing oxytocin massage was 102.00 ml.

3. The Effect of Oxytocin Massage on Breast Milk Production

Table 3 Effects on Postpartum Mothers Day 10 in the BPM Working Area Hj. Umamah, Amd. Keb

Groups	Mean	SD	SE	p-Value	N
Oxytocin Massage	102.00 ml	19.889	6.289	0.000	10
No Oxytocin Massage	57.50 ml	9.789	3.096		10

Source: Primary Data

Based on the results of the analysis in table 4.3, it was found that the average amount of milk production in postpartum mothers on day 10 with oxytocin massage was 102.00 ml with a standard deviation of 19,889, whereas for postpartum mothers who did not do oxytocin massage 57.50 ml with a standard deviation of 9,789. Statistical test results showed that $p = 0,000$ means that in alpha 5% there was a significant difference in the average amount of milk production between postpartum mothers who did oxytocin massage and postpartum mothers did not do oxytocin massage.

Discussion

1. Comparison of the Average Amount of Breast Milk Production in Postpartum Mothers Day 10 Oxytocin Massage and Oxytocin Massage Not Done

The results showed that in the control group, the average amount of postpartum maternal breast milk production was 57.50 ml. As for the case group, the average amount of milk production in postpartum mothers was 102.00 ml.

From the results of the study it appears that there is a significant difference between the amount of milk production in the case and control groups in postpartum mothers. As we already know that the amount of milk production in the first weeks of birth is usually large, but after that around 450-650 ml. A baby needs 600 ml of milk per day. This amount can be achieved by breastfeeding her baby during the first 4-6 months. Therefore during this time period ASI is able to meet its nutritional needs (Atikah et al, 2010). If we look at the average amount of postpartum maternal breast milk production in both the case and control groups of which are 57.50 ml to 102.00 ml. This is different from the amount of milk production mentioned in the theory above.

Researchers suspect that the amount of low milk production can be caused by: 1. Squeezing techniques that are not true during the research process, 2. Poor nutritional status, 3. Hormonal influences. The following will clearly discuss these three factors with the theories that support them. Inappropriate technique for extorting breast milk can reduce the amount of milk that is obtained or the milk does not come out. However, during the research the massage technique that was carried out should have been felt correctly, seeing that there were no mothers who felt pain during the milking process. Ari (2009) states that the massage is done by moving

the thumb and other fingers to press the warehouse of ASI until it is empty. If done properly, the mother will not be in pain when blushing. This shows that the factor of the low amount of milk production in this study was not due to the milking technique.

Another guess that researchers feel influences the amount of milk production in the milking technique is that the strength of the milking technique on both breasts must be the same. Nutritional status factors can also be one of the causes of low milk production produced. Hariyani (2011) states that one of the problems in the process of breastfeeding is rooted in one of which is rooted in the quality and quantity of mother's food. Mothers with less daily food intake, especially since pregnancy can cause milk production to decrease or not come out so that this situation will affect the baby. In order for the milk to be produced to meet the needs of the baby, it is necessary to pay attention to the quality and quantity of the mother's food. One of them is an increase in the amount of protein that affects the synthesis of the hormones prolactin and oxytocin. According to Hariyani (2011) in the book Nutrition for Maternal and Child Health states that every 100 cc of breast milk contains 1.2 grams of protein, so during breastfeeding, mothers need extra protein as much as 20 grams per day. The increasing need for this protein, in addition to forming milk protein is also needed for the synthesis of hormones needed in the production of milk (prolactin) and the hormone that secretes milk (oxytocin).

2. The Effect of Oxytocin Massage on the Amount of Breast Milk Production at Postpartum Mother Day 10 in BPM Working Area Hj. Umamah, Amd. Keb

Statistical test results obtained p value = 0.000, meaning that alpha 5% seen the influence of oxytocin massage on the amount of milk production released by postpartum mothers at BPM Hj. Umamah, Amd.Keb.

Thus doing oxytocin massage can help postpartum mothers to expel more amount of milk production when compared to postpartum mothers not doing this oxytocin massage. The results showed that the amount of milk production produced by postpartum mothers by oxytocin massage was 102.00 ml with a standard deviation value of 19,889, while the amount of milk production produced by postpartum mothers without oxytocin massage was 57.50 ml with a standard deviation of 9,789. As we already

know that oxytocin massage is very beneficial in nature stimulating the release of the hormone oxytocin which starts when the baby sucks on the milk nipple and areola, stimulation is transmitted to the hypothalamic central nervous system, then proceed to the posterior pituitary to release the hormone oxytocin, then this hormone will enter blood and cause contraction of myoepithelial cells that surround the mammary alveoli and lactiferous duct so that milk comes out. (Mera, 2016).

This is according to Ari (2009) that to stimulate the oxytocin reflex can be done by massaging the neck and back of the back (parallel to the breast area) using the thumb with the technique of turning in a clockwise direction 5-10 minutes. Not much different from the opinion of Desmawati (2013) oxytocin massage is done by massaging the spinal nerves until the 5-6 costae of the bone widens into the scapula which will speed up the work of the parasympathetic nerve to deliver commands to the brain so that the release of the hormone oxytocin increases. According to Vivian (2011) the oxytocin hormone is strongly influenced by mood, feeling happy, feeling loved, feeling safe, calm and relaxed. It is hoped that by doing this oxytocin massage the mother is in a calm condition so that it can help release these hormones (Yusari, 2017).

Midwives who work in health services are expected to make various efforts to protect, enhance and support breastfeeding and provide objective and consistent counseling and advice to pregnant women and new mothers giving birth about breastfeeding (Yetti, 2010).

CONCLUSION

Based on the results of research conducted, a conclusion can be drawn as follows:

1. The average amount of breastmilk production in the 10th day postpartum mothers in the control group was 57.50 ml
2. The average amount of breastmilk production in postpartum mothers the 10th day in the case group was 102.00 ml.
3. There is an influence of oxytocin massage on the amount of milk production in mothers postpartum day 10 (p value 0.000 <0.05).

REFERENCES

- Ari, 2011. *Metodologi Penelitian Kebidanan DIII, DIV, SI dan S2*. Yogyakarta; Nuha medika.
- Atikah dkk. 2010. *Produksi ASI*. Yogyakarta. Cipta Medika.
- Desmawati. 2013. *Pijat Oksitosin*. Yogyakarta. Cipta Medika.
- Hariyani. 2011. *Gizi untuk Kesehatan Ibu dan Anak*. Jakarta: PT. Rhineka Cipta.
- Kumalasari, dkk. 2015. *Cakupan ASI Eksklusif*. Yogyakarta. Nusa Medika.
- Mera Delima dkk. 2016. *Pengaruh Pijat Oksitosin Terhadap Peningkatan Produksi ASI Ibu menyusui di puskesmas plus mandiingin*. Jurnal Iptek Terapan: [http : https://www.researchgate.net/publication/312380741_pengaruh_pijat_oksitosin_terhadap_peningkatan_produksi_asi_ibu_menyusui_di_puskesmas_plus_mandiingin/link/599ed70345851574f4b86b02/](http://https://www.researchgate.net/publication/312380741_pengaruh_pijat_oksitosin_terhadap_peningkatan_produksi_asi_ibu_menyusui_di_puskesmas_plus_mandiingin/link/599ed70345851574f4b86b02/) Diperoleh tanggal 05 Desember 2017
- Panjaitan E. Laktogogue: Seberapa Besar Manfaatnya dalam Buku IDAI Indonesia Menyusui. Jakarta: Badan Penerbit IDAI; 2010. 34
- Purnama. 2013. *Manfaat ASI dan Hormon yang Berpengaruhnya*. Yogyakarta. Salemba Medika.
- Soetjiningsih. 2008. *Tumbuh Kembang dan Permasalahannya*. Jakarta: PT. Rhineka Cipta.
- Sri Mukhodim dkk. 2015. Efektivitas Pijat Oksitosin Terhadap Produksi ASI. *Journal Midwifery* Vol1. Universitas Muhammadiyah Sidoarjo. http://ojs.umsida.ac.id/index.php/midwifery/article/view/343/294. Diperoleh tanggal 05 Desember 2017.
- Ulfah. 2013. *Cakupan ASI Eksklusif*. Jakarta. Salemba Medika.
- Vivian, 2011. *Asuhan Kebidanan Pada Ibu Nifas*. Jakarta; Salemba Medika.
- Yetti. 2010. *Asuhan Kebidanan Kehamilan*. Yogyakarta. Nusa Medika
- Yusari Asri. 2017. *Pengaruh Pijat Oksitosin Terhadap Produksi ASI Ibu Nifas*. *Jurnal Keperawatan, Poltekkes Tanjung Karang* Volume XIII, No. 2. <https://ejurnal.poltekkes-tjk.ac.id/index.php/JKEP/article/view/931/709> Diperoleh tanggal 5 Desember 2017.