

Examination of Breast Pumping in Postpartum Mothers Who Have Experienced Damage to Their Breast Milk

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ABSTRACT

Many postpartum moms experience breast milk dams, which are caused by glands that restrict the lactiferous ducts and obstruct lymphatic and venous flow. This condition is most common between the second and third day of the postpartum period. Breast soreness and swelling result from this. The purpose of this study is to analyze the frequency of breast milk dams in postpartum moms by measuring their breast emptying (pumping). This study falls under the category of quantitative research. A cross-sectional method was the research design that was employed. Using the accidental sampling technique, a sample of 37 respondents was chosen from the population of all postpartum mothers. Factors relating to pumping and emptying breast milk that affect the prevalence of breast milk dams in postpartum.

Keywords: breast emptying (pumping), breast milk dam, post partum mothers

BACKGROUND

The best food that God has ever made for babies is mother's milk (ASI), as it is full of nutrients, vitamins, minerals, and antibodies that are specifically tailored to meet the needs of a baby (Roesli, 2010). From birth to six months of age, breast milk should be the only meal or formula milk given to babies. The World Health Organization (WHO) recommends exclusive breastfeeding, which is the provision of breast milk for six months. Government Regulation number 33 of 2012 concerning the Government, which ensures the fulfillment of babies' rights to receive exclusive breast milk from birth until they are six months old, taking into account their growth and development, is the government's support document for breastfeeding in Indonesia. The effectiveness of exclusive breastfeeding varied between 2011 and 2013.

After the breasts have produced milk, engorgement, or breast milk dams, will happen on the second and third day. Poor bonding, delayed breastfeeding, and increased breast milk production are the reasons of enlarged breasts (Winkjosastro, 2010). When breastfeeding incorrectly, a mother may experience pain and leakage of breast milk, which may make her desire to stop breastfeeding.

Breast milk production that isn't fluid and abundant is one of the main reasons why exclusive breastfeeding doesn't work for newborns (Perinasia, 2012).

More milk will be produced in proportion to the amount of milk that is expelled or emptied from the breast. The breast milk will be removed from the breast milk stockpile if the baby doesn't do well.

METHODS

According to Nurselam (2017), research design refers to the comprehensive planning involved in addressing research questions and foreseeing various challenges that may emerge throughout the study process. The breadth of the study, which includes inferential research,

determined the research design that was employed. Based on the data collection technique, such as survey research. This study employs a prospective strategy, namely employing data from direct measurements, and is an expose facto study (revealing facts) based on the presence or absence of treatment. This study's methodology is cross-sectional in nature, given the timing of the data collection. This study makes use of primary data, depending on the kind of data used. Considering the goals of the study, which may include correlational research that is, using a research design to ascertain the link between two or more variables.

Two variables are used in this study: the dependent variable (dependent variable) and the independent variable (free variable). The influencing factor is known as the independent variable. According to Sugiono (2017), a dependent variable is one that is affected or brought about by the presence of an independent variable. The analysis of postpartum mothers' breast emptying (pumping) is the independent variable in this study, and the prevalence of breast milk dams is the dependent variable. Based on the sample size calculation results, which were determined using the formula $n = N/(1+N(d)^2)$, the research sample consisted of 37 postpartum moms. A standard instrument was utilized in this study to gather data by determining the incidence of breast.

Tests for data reliability and validity have been conducted on this instrument. With a reliability rating of ($r=0.84$), the six-point engagement scale (SPES) has established itself as a common instrument for evaluating the occurrence of breast swelling from the second to the tenth day (Whittletstone, 2008). Data entry, tabulation, coding, cleaning, and transfer are all done on the obtained data before it is loaded into the computer for analysis. The SPSS software was used to analyze the data.

RESULTS

Table 4.1. Distribution of Response Characteristics Based on Age

Age	Frequency (f)	Percent (%)
≤ 25 years	12	32,43%
26-30 years	17	45,94%
31-35 years	7	18,9%
≥ 36 years	1	2,7
Amount	37	100%

Source: Primary Research Data 6 May-6 June 2022

Based on table 4.1 above, it is known that from 37 respondents, almost half of the respondents aged 26-30 years were 17 respondents (45.94%).

Table 4.2. Distribution of Respondent Characteristics Based on Last Education

Education	Frequency (f)	Percent (%)
No school	1	2,7%
Elementary School	5	13,51%
Junior High School	6	16,21
Senior High School	15	40,54%
College	10	27%
Amount	37	100%

Source: Primary Research Data 6 May-6 June 2022

Based on table 4.2 above, it is known that of the 37 respondents, almost half of the respondents had a high school education, 15 respondents (40.54%).

Table 4.3. Distribution of Respondent Characteristics Based on Work

Work	Frequency (f)	Percent (%)
Doesn't work	17	45,94%
Self-employed	13	35,13%
Civil servants	2	5,4%
Private	5	1,85%
Amount	37	100%

Source: Primary Research Data 6 May-6 June 2022

Based on table 4.3 above, it is known that of the 37 respondents, almost half of the respondents did not work, 17 respondents (45.94%).

Table 4.4. Distribution of Respondent Characteristics Based on Parity

Parity	Frequency (f)	Percent (%)
Primigravida	29	72,97%
Multigravida	8	21,62%
Amount	37	100%

Source: Primary Research Data 6 May-6 June 2022

Based on table 4.4 above, it is known that of the 37 respondents, more than half of the parity respondents were primigravida, 29 respondents (72.97%).

Table 4.5. Frequency Distribution of Breast Emptying (Pumping) in Post Partum Mothers in the Boro Selorejo Community Health Center Working Area

Emptying breast(pumping)	Frequency (f)	Percent (%)
Doing pumping	31	84%
Do not do	6	16%
Amount	37	100%

Source: research questionnaire dated 6 May-6 June 2022

Based on table 4.5 above, it is known that of the 37 respondents, 31 (84%) post partum mothers pumped, while 6 respondents (16%) did not pump.

Table 4.6. Frequency distribution of breast milk dams in post-partum mothers

ASI Dam	Frequency (f)	Percent (%)
Yes	6	16%
No	31	84%
Amount	37	100%

Source: research questionnaire dated 6 May-6 June 2022

Based on table 4.6 above, it is known that of the 37 respondents, 31 respondents (84%) did not have breast milk dams and 6 respondents (16%) had breast milk dams.

Table 4.7. Analysis of breast emptying (pumping) in post partum mothers with the incidence of breast milk dams

Breast Emptying (pumping)	ASI Dam				Total		X ²	
	Yes		No		F	%	Count	Table
	F	%	F	%				
Yes	2	5,4%	4	10,8%	6	16%	31,9	3,8
No	29	78,4%	2	5,4%	31	84%		
Amount	31	83,8	6	16,2%	37	100%		

Processed Primary Data, (2022)

Of the six responders that performed breast emptying (pumping), Table 4.7 above demonstrates that 5.4% of them had breast milk retention. The remaining 10.8%, however, did not have breast milk dams. While 5.4% of respondents did not experience breast milk dams, 78.4% of respondents did not empty their breasts (pumping) and reported having them. Based on the findings of the chi square test conducted with SPSS, it can be inferred that there exists a correlation between the incidence of breast milk dams the calculated X^2 value, which is greater than the X^2 table ($31.9 > 3.8$).

DISCUSSION

Identify Breast Emptying

The study's findings indicate that whereas 6 respondents (16%) did not practice breast emptying (pumping), 31 respondents (84%) did. This needs to be used right away when pumping because if it is done well, there won't be any issues with producing breast milk or knowing how to express it so the baby can keep getting breast milk and formula milk use in the early postpartum period can be decreased (Roesli, 2010). According to the study, breast emptying, or pumping, is a way for postpartum moms to succeed in the exclusive and unrestricted nursing process. Postpartum women must receive the appropriate postnatal care.

Identification of ASI Dam Events

Table 4.6 indicates that 6 respondents (16%), who do not pump, had breast milk dams among postpartum moms in the Boro Community Health Center UPT work area. Meanwhile, 84% of breast milk dams did not occur.

It is stated by Prasetyono (2009). The mother's breasts typically swell, feel hot, firm, and unpleasant after giving birth. The breasts' increased blood supply and milk production are the causes of this growth. This usually persists for a few days. There is no reason to be concerned as this situation is usual. But occasionally, the expansion hurts so much that the mother can't wear a bra or let anything touch her breasts. In light of the findings.

The opinion of researchers is that breast milk dams are a problem often encountered in post partum mothers which results in a feeling of fullness, pain and swelling of the breasts. This causes post partum mothers to become uncomfortable in the process of breastfeeding their children, so that the breastfeeding process becomes disrupted. Thus, pumping is one way to overcome this so that complications that may occur as a result of breast milk dams, such as mastitis, can be properly prevented.

Identify the relationship between breast emptying (pumping) and the incidence of breast milk retention

Table 4.7 indicates that 5.4% of the 6 respondents who performed breast emptying, or pumping, reported having breast milk retention. The remaining 10.8%, however, did not have breast milk dams. In the meantime, 5.4% of respondents reported experiencing breast milk retention and 78.4% reported breast emptying (pumping) but did not experience it. With a correlation coefficient value of 0.911, the calculated X^2 value is greater than the X^2 table ($31.9 > 3.8$), (Breast Emptying (Pumping) > Events of Breast Milk Damage), according to the results of the chi square test conducted using SPSS. This indicates that the level of relationship is within the very strong relationship category, with a correlation value range of 0.80-1.00 (Sugiyono, 2010).

According to the experts, one of the most significant factors in resolving the issue of breast milk dams in postpartum women is breast emptying, or pumping. Breast emptying, or pumping, offers a remedy by lowering the risk of complications like mastitis that might result from issues with the breast milk dam. Postpartum moms who perform breast emptying, or pumping, on a regular and proficient basis have the potential to avoid breast milk dams in

addition to lowering the occurrence of these conditions. In this instance, if the post-partum woman does not empty her breasts (pumping), the chance of breast milk dams is increased.

CONCLUSION

Based on the results of the research and discussion described previously, the following conclusions can be drawn:

1. Breast emptying (pumping) was achieved. Most of them did this, 31 respondents (84%) and 6 respondents (16%) of them did not pump.
2. Breast milk dams were found. Most of the respondents who did breast emptying (pumping), namely 29 respondents (78.4%) did not experience breast milk dams, while there were 4 respondents (10.8%) who experienced breast milk dams and 2 respondents (5.4%) of them occur in breast milk dams.
3. There is a relationship between breast emptying (pumping) and the incidence of breast milk dams in the working area of the Boro Health Center, Selorejo District, Blitar District, with a p-value of 0.000 and an OR value of 5.167. It can be interpreted that post partum mothers who empty their breasts (pumping) have a 5.167 chance of avoiding breast milk dams. The direction of the correlation is positive, meaning that the more breast emptying (pumping) is done, the fewer cases of breast milk dams.

REFERENCES

- Arikunto, S. (2006). *Prosedur Penelitian Suatu Pendekatan Parktik*. Jakarta: Rineka Cipta
- Badan Pusat Statistic. (2013). *Kejadian Bendungan Asi Tahun 2013*. Jakarta: Badan Pusat Statistic
- Bahiyatun. (2009). *Buku Ajar Asuhan Kebidanan Nifas Normal*. Jakrta : EGC.
- Arianai Pa. (2013). *Aplikasi Metodologi Penelitian Kebidanan dan Kesehatan Reproduksi*. Medika N, editor. Yogyakarta.
- Hidayat, A.A.. (2014). *Metode Penelitian Keperawatan Dan Teknis Analisis Data*. Jakarta : Salemba Medika.
- Hidayat. (2007). *Metodologi Penelitian*. Jakarta: Rineka Cipta.
- Manuaba, Dkk. (2010). *Ilmu Kebidanan, Penyakit Kandungan Dan KB* Jakarta: EGC.
- Myles Fraser, Diane. (2009). *Ilmu Kebidanan*. Jakarta: EGC.
- Prawirohardjo, S. (2010). *Ilmu Kebidanan*. Jakarta: EGC.
- Prawirohardjo S. (2010). *Ilmu Kebidanan*. Jakarta: PT. Bina Pustaka.
- Sugiyono. (2014). *Metode Penelitan Kuantitatif, Kualitatif,Dan Kombinasi (Mixed Methods)*. Bandung: ALVABETA.
- Saifudin. (2010). *Pelayanan Maternal Dan Neonatal*. Jakarta: Yayasan Bina Pustaka
- Saleha S. (2010). *Asuhan Kebidanan Pada Masa Nifas*. Jakarta: Salemba Medika.
- Sarwono. (2007). *Buku Asuhan Pelayanan Kesehatan Maternal Dan Neonatal*. Jakarta PT. Bina Pustakasarwono Prawirohardjo.
- Soepardan, Suryani. (2010). *Konsep Kebidanan*. Jakarta: Buku Kedokteran: EGC.
- Suherni. (2011). *Perawatan Masa Nifas*. Jogjakarta: Fitramaya.
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif Dan R&D*. Bandung: PT. Alfabet.
- Yuli R. Payudara dan Laktasi. (2014). 1 st ed. Salemba Medika, editor. Jakarta Selatan: Salemba Medika.