



Analysis of Factors Affecting Breastfeeding Expenditure on Post Sectio Caesarea Mothers at Sidikalang Regional General Hospital Dairi Regency

Dinar Manalu¹, Sarma Lumban Raja², Mangatas Silaen²

¹Student of S2 Health Study Program Society Institute Helvetia Health, Indonesia

²Lecturer S2 Public Health Institute of Health Helvetia, Indonesia

*Corresponding Author: Dinar Manalu

Email: dinarmanalu30@gmail.com



Article Info

Article history:

Received 2 March 2022

Received in revised form 28 March 2022

Accepted 31 March 2022

Keywords:

Breastfeeding
Post SC Mother
Affecting Factors

Abstract

Breastfeeding provides both short-term and long-term benefits for both the child and the mother, including protecting the child against a variety of acute and chronic disorders. However, the high incidence of CS and the low number of breastfeeding mothers with cesarean delivery have a lot of negative effects on the breastfeeding process. Data obtained from Dairi district in 2021 showed that the coverage of breastfeeding was only 40%, while in Sidikalang Hospital, post-sc mothers gave breast milk. only 35%. The purpose of this study was to determine the effect of factors that influence the release of breast milk for post SC mothers at Sidikalang Hospital, Dairi Regency in 2021. This type of research was mixed method with sequential explanatory design. The population is 120 respondents and purposive sampling is 54 respondents. 3 key informants representing Post SC mothers , 8 supporting informants. Data analysis used univariate, bivariate and multivariate analysis as well as qualitative data analysis including reduction, display and conclusion drawing/verification. The results showed that there was an effect of breastfeeding frequency (sig 0.000), breast care (sig 0.002), mother's diet (sig 0.000) breastfeeding technique. (sig 0.000) the SPEOS method (sig 0.000) , while there was no effect of hospitalization (sig 0.210), birth weight (sig 0.201), gestational age (sig 0.201), the most influential variables were maternal food with a value of B = 4.084 and OR = 59.93 for the expenditure of breast milk for post SC mothers at Sidikalang Hospital, Dairi Regency in 2021.

Introduction

Breastfeeding provides both short-term and long-term benefits for both the child and the mother, including protecting the child against a variety of acute and chronic disorders (Lumbanraja, 2015).

In Southeast Asia, the achievement of exclusive breastfeeding rates in several countries is still low in Southeast Asia, such as the Philippines the achievement of the exclusive breastfeeding rate is 34%, Vietnam the achievement of the exclusive breastfeeding rate is 27%, while in Myanmar the exclusive breastfeeding rate is also 24% (Sudargo et al., 2019).

Based on data from the Ministry of Health of the Ministry of Health of the Republic of Indonesia in 2019, in Indonesia, namely Aceh, the achievement of exclusive breastfeeding was 48.17%, West Sumatra was 68.11%, and the smallest was in Riau at 35.01%. West Java is already high by 90.79%, and in East Java by 77.51%. In East Kalimantan it is 70.02%, South Sulawesi is 70.45%, North Maluku is 60.05%. The lowest was in Gorontalo at 30.71% (Indonesia, 2020).

North Sumatra Province from 2012-2017 tends to increase, except in 2016 there was a very drastic decrease of 16.09% from the 2015 achievement. The 2017 achievement of 45.31% has reached the national target of 40%. There are 16 out of 33 districts/cities with 40% achievement, namely Asahan 96.61%, South Labuhanbatu 89.41%, Phakpak Bharat 75.11%, Padang Sidempuan 72.05%, Batu Bara 67.77%, Tebing Tinggi 62.44%, Simalungun 61.86%, Langkat 58.93%, Humbang Hasundutan 53.52%, Karo 47.05% (North Sumatra Provincial Health Office, 2018).

Breast care is an attempt to stimulate the secretion of the hormone Oxytocin to produce breast milk as early as possible and play an important role in dealing with breastfeeding problems. The purpose of the treatment is to expedite the production of breast milk by stimulating the mammary glands and treating sore nipples and caring for the nipples to keep them limp, not hard, and not dry (Mukarramah, 2021).

Implementation of combined care will help facilitate breastfeeding. The hormone oxytocin is very influential on the emotional state of the mother. If the mother is calm and happy because she can hug her baby, then this hormone will increase and the milk will come out quickly so that the baby is more satisfied with getting breast milk (Isnanisa et al., 2018).

Nutrition of breastfeeding mothers is one of the factors that affect the smooth production and expenditure of breast milk. Inadequate nutrition and stress can reduce the amount of breast milk production (Radharisnawati & Kundre, 2017). Postpartum mother nutrition is needed to produce breast milk and restore maternal health.

Babies with low birth weight (LBW) have a lower ability to suck breast milk compared to babies with normal birth weight >2500 grams. will affect the stimulation of the hormones prolactin and oxytocin in producing breast milk (Catur & Diati, 2015).

Gestational age plays an important role in the production of breast milk, which is related to the baby's weight, which greatly affects gestational age. When a baby is born at a premature gestational age <37 weeks, the result is that the baby's suction power is not maximal, causing no stimulation of prolactin to prepare breast milk, so that over time Breast milk production decreases or stops (Goddess, 2014).

Breastfeeding and attachment techniques cannot be performed in the first hour of cesarean delivery. The condition of post-SC mothers makes it difficult for mothers to be able to breastfeed their babies. Starting from the position of the mother who has not been able to mobilize to breastfeed before 6 hours post SC. Likewise, after the first mobilization, it was limited to left and right tilted positions. This situation is not uncommon for mothers to breastfeed with the correct breastfeeding technique. With an improper breastfeeding position, the nipples can experience blisters, cracks or fissures are formed. Usually this situation occurs in the first week after the baby is born. In this situation, a mother often rarely breastfeeds or even stops breastfeeding her baby because her nipples hurt (Evayanti, 2019)

According to Maria Porland, (2016) Most healthy babies need 8-12 feedings per day in 24 hours, but if they are sick, born prematurely, or separated from their mother, they will not do as usual. Therefore, mothers should be encouraged to excrete milk as soon as possible by expressing immediately after the baby is born. This is useful for stimulating the production of prolactin starting milk production. One way to facilitate breast milk production is the Marmet technique. The Marmet technique is a manual expression of breast milk and helps the milk ejection reflex (Milk Ejection Reflex). The Marmet technique developed massage and stimulation methods to help lock the milk ejection reflex more optimally. The success of this technique is the combination of massage and milk ejection methods. This marmet technique is a safe way to stimulate the breasts to produce more milk (Angriani et al., 2017)

The type of delivery is one that results in breastfeeding in the first hour of birth cannot be done by mothers who have problems in childbirth, for example for mothers with sectio caesarea . In deliveries by cesarean section method which will be called SC, the success of breastfeeding has fewer numbers. In the current era, SC is carried out both with and without indications.

Based on initial observations, the number of patients giving birth at the Sidikalang Regional General Hospital (RSUD) was 2120 people, mothers gave birth by spontaneous labor as much as 11.75%, while those who gave birth by caesarean section were 88.25%. In the postpartum care room, Mawar Room, Sidikalang Regional General Hospital in July 2021, the number of mothers giving birth was 118 people, of which 8.5% of mothers gave birth spontaneously and 91.5% of SC . The midwife explained that only 35% of mothers who gave birth to CS gave breast milk, while 65% of mothers who gave birth to CS did not .

One mother stated that milk production was still absent after giving birth and usually in previous pregnancies the milk came out on the third day. Another mother also said that since she gave birth, she immediately gave formula milk because she was afraid that her baby would be dehydrated. There are also other mothers who stated that SC greatly affects where due to pain in the surgical wound after the anesthetic reaction is gone, the mother is more focused on herself so that breastfeeding is early in life and recommends that the baby be given formula milk so that the mother is not disturbed in the recovery of the mother who has just had a SC . . This is the first time the baby is not given breast milk, which causes milk secretion to be very slow.

Based on the explanation above, the researchers observed the high incidence of CS and the low number of breastfeeding mothers with cesarean delivery which had a lot of negative effects on the breastfeeding process. So that researchers are interested in analyzing the factors that influence the frequency of breastfeeding, breast care, hospitalization, maternal diet, birth weight, breastfeeding technique, gestational age, guinea pig technique, SPEOS method on breastfeeding post SC mothers at the Regional General Hospital. Sidikalang, Dairi Regency.

Methods

This research was conducted at the Sidikalang Dairi Regional General Hospital in 2021 This study was conducted in September 2021 . The population in this study were all mothers who had Post SC in Sidikalang Hospital in 2021 totaling 12 people . The sample in this study was a technical Purposive sampling as many as 54 people

The design of this research uses mix methods with sequential explanatory design. Mixed research is a research approach that combines quantitative and qualitative research. According to Sugiono (2011) states that a combined research method (mix methods) is a research method that combines or combines quantitative methods with qualitative methods to be used together in a research activity, so that more comprehensive, valid, reliable and objective data are obtained (Sugiyono, 2013).

The purpose of the study was to determine the factors of breastfeeding frequency, breast care, hospitalization, maternal diet, birth weight, breastfeeding technique, gestational age, SPEOS method that affect breastfeeding in post- SC mothers . Analysis of quantitative data used is Univariate , Bivariate , Multivariate Analysis . And qualitative data analysis is Reduction , Display , Conclusion Drawing/Verification.

Results and Discussion

Analyst Univariate

After conducting research on the Factors Affecting the Ejection of breast milk in post-SC . mothers , at Sidikalang Hospital , Dairi Regency in 20 2 1.

Table 1. Frequency Distribution of Respondents' Characteristics at the Sidikalang Regional General Hospital (RSUD) in 2021

No	Characteristics of Respondents	f	Percentage (%)
A	Mother's Age:		
1	20-35 Years	41	75.9
2	>35 Years	13	24.1
B	Mother's Education:		
1	Basic Education (SD to SMP)	12	22.0
2	Secondary Education (SMA)	33	61.1
3	higher education	9	16.7
C	Mother's Occupation:		
1	Does not work	14	25.9
2	Work	40	74.1
D	parity :		
1	Primipara	12	22.2
2	Sekundipara	20	37.0
3	Multipara	22	40.7
	Amount	54	100.0

Based on table 1. shows that the frequency distribution of respondents' characteristics at the Sidikalang Regional General Hospital (RSUD) in 2021 based on maternal age, most of the mothers aged 20-35 years were 41 people (75.9%) while for mothers >35 years old was 13 people (24.1%) , based on the mother's education, most of the mothers had secondary education (SMA) as many as 33 people (61.1%) while for elementary/junior high school and university education, respectively 22.2% and 16.7% , based on the mother's occupation, most of the working mothers were 40 people (74.1%) while for the mothers who did not work as many as 25.9%

For the characteristics of respondents at the Sidikalang Regional General Hospital (RSUD) in 2021 based on maternal parity, most of the parity mothers were multi-par as many as 22 people (40.7%) while for primiparas and secundiparas, respectively 22.2% and 37.0%.

Table 2 . Distribution of the Frequency of Breastfeeding, Breast Care, Combined Care, Mother's Food, Baby's Birth Weight, Breastfeeding Techniques, Gestational Age, Breastfeeding Production, Breastfeeding Release after the SPEOS Method at the Sidikalang Regional General Hospital (RSUD) in 2021

No	Variable	Frequency (f)	Percentage (%)
A	Breastfeeding Frequency		
1	Irregular	22	40.7
2	Regular	32	59.3
B	Breast Care		
1	Done badly	16	29.6
2	Well Done	38	70.4
C	Treat Join		
1	Is not done	2	3.7
2	Conducted	52	96.3

D	Mother's Food		
1	Bad	21	38.9
2	Well	33	61.1
E	Baby Birth Weight		
1	<2500 grams	2	3.7
2	≥2500 grams	52	96.3
F	Breastfeeding Techniques		
1	Bad	17	31.5
2	Well	37	68.5
G	Gestational Age		
1	Premature (<37 weeks)	2	3.7
2	Mature (37-40 weeks)	51	94.4
3	Postdate (>40 weeks)	1	1.9
H	Breast milk production		
1	Not smooth	25	46.3
2	Fluent	29	53.7
I	SPEOS method		
1	Not smooth	14	25.9
2	Fluent	40	74.1
	Amount	54	100.0

Based on table 2. above, it shows that the distribution of breastfeeding frequency at the Sidikalang Regional General Hospital in 2021 is mostly the frequency of regular breastfeeding mothers as many as 32 people (59.3%) while the frequency of irregular breastfeeding mothers is 40.7%.

Based on the frequency distribution of breast care, most of the mothers breast care was done well as many as 38 people (70.4%) while the breast care was not done well 29.6%.

Based on the frequency distribution of hospitalization, most of the mothers were admitted as many as 52 people (96.3%) while the mothers were not hospitalized with 2 people (3.7%).

Based on the frequency distribution of maternal food, the majority of maternal food consumption was good as many as 33 people (61.1%) while poor maternal food consumption was 21 people (38.9%) . as many as 52 people (96.3%) while the baby's birth weight <2500 grams was 3.7%.

Based on the frequency distribution of breastfeeding techniques, the majority of mothers with breastfeeding techniques performed well as many as 37 people (68.5%) while breastfeeding techniques were carried out poorly 31.5% .

Based on the frequency distribution of gestational age, most of the gestational age of mothers were mature (37-40 weeks) as many as 51 people (94.4%) while the least was postdate (>40) as many as 1.9%.

Based on the distribution of the frequency of breastfeeding before the SPEOS method was used, most of the breast milk expenditures were smooth as many as 29 people (53.7%) while the non-current breastfeeding was 46.3%.

Based on the distribution of the frequency of breastfeeding after the SPEOS method, the majority of the flow of breast milk was smooth as many as 40 people (74.1%) while the expenditure of breast milk was not smooth as much as 25.9%

Bivariate Analysis

Table 3. Cross-tabulation of Breastfeeding Frequency, Breast Care, Combined Care, Mother's Feed, Baby's Birth Weight, Breastfeeding Techniques, Gestational Age on Post SC Mother's Breast Milk Expenditure at the Sidikalang Regional General Hospital (RSUD) in 2021

No	Variable	Smooth Expenditure of breast milk						P-Value
		Not smooth		Fluent		Total		
		f	%	f	%	f	%	
A	Breastfeeding Frequency							
1	Irregular	18	33.3	4	7.4	22	40.7	0.000
2	Regular	7	13.0	25	46.3	32	59.3	
B	Breast Care							
1	Done badly	13	24.1	3	5.5	16	29.6	0.002
2	Well Done	12	22.2	26	48.2	38	70.4	
C	Treat Join							
1	Is not done	2	3.7	0	0	2	3.7	0.210
2	Conducted	23	42.6	29	53.7	52	96.3	
D	Mother's Food							
1	Bad	20	37.0	1	1.9	21	38.9	0.000
2	Well	5	9.3	28	51.8	33	61.1	
E	Baby Birth Weight							
1	<2500gram	2	3.7	0	0	2	3.7	0.210
2	≥2500gram	23	42.6	29	53.7	52	96.3	
F	Breastfeeding Techniques							
1	Bad	16	29.6	1	1.8	17	31.5	0.000
2	Well	9	16.7	28	51.9	37	68.5	
G	Gestational Age							
1	Premature <37 weeks	2	3.7	0	0.00	2	3.7	0.000
2	Maturity 37-40 weeks	23	42.6	28	51.9	51	94.4	
3	Postdate >40 weeks	0	0	1	1.9	1	1.9	
	Amount	25	46.3	29	53.7	54	100	

Post SC . Breastfeeding Expenditure

Based on table 3. above, it was obtained from 54 mothers whose frequency of breastfeeding was irregular as many as 22 people (40.7%) with non-fluent breastfeeding as many as 18 people (33.3%) and smooth breastfeeding as many as 4 people (7, 4%). Meanwhile, mothers who breastfeed regularly are 32 people (59.3%) with non-smooth breastfeeding as many as 7 people (13.0%) and smooth breastfeeding as many as 25 people (46.3%). The results of statistical tests using the chi-square test showed that the value of p (sig) = 0.000 is smaller than 0.05, so it can be concluded that there is an influence between the frequency of breastfeeding on breastfeeding mothers in Post SC .

The Effect of Breast Care on Breast Milk Production

Based on table 3 above, the results of the cross tabulation of breast care on the smooth release of breast milk at the Sidikalang Regional General Hospital (RSUD) in 2021 were obtained from 54 mothers who did not perform breast care, 16 people (29.6%) and 13 people did not express breast milk smoothly. (24.1%) and 3 people (5.5%). Meanwhile, among mothers who did breast care properly, there were 12 people (22.2%) with non-smooth breastfeeding and 26 people (48.2%) with smooth breastfeeding. The results of statistical tests using the chi-square

test show that the p value of 0.002 is smaller than 0.05 which means that there is an influence between breast care on the smooth flow of breast milk for post-SC mothers.

Influence of Admission to Breastfeeding

Based on table 3 above, it shows the results of the analysis of the influence between hospitalization and the smooth expenditure of breast milk for post-SC mothers, obtained from 54 mothers who were not admitted to the hospital with non-current milk expenditure as many as 2 people (3.7%) and there was no smooth breastfeeding. Meanwhile, among mothers who were admitted to hospital with 52 people (96.3%), 23 people (44.2%) did not express breast milk smoothly and 29 people (53.7%). It was found that the value of p (sig) = 0.210, greater than 0.05, it was concluded that there was no effect between hospitalization and post-SC mother's milk expenditure.

The Effect of Mother's Food on Smooth Expenditure of Breast Milk

Based on table 3 above, it shows the results of the analysis of the relationship between maternal food and the smooth release of breast milk, obtained 21 people (38.9%) out of 54 mothers whose mother's diet was bad with non-fluent milk expenditure as many as 20 people (37.0%) and smooth breastfeeding. Only 1 person (1.9%). Meanwhile, among mothers with good maternal food, 33 people (61.1%) had non-fluent breast milk production, there were 5 (9.3%) and 28 people (51.8%). Statistical test results used chi-square test. It is obtained that the value of p (sig) = 0.000 is smaller than 0.05; it can be concluded that there is an effect between maternal food and post SC ibu maternal milk expenditure

Infant Birth Weight on Breast Milk Expenditure

Based on table 3. above, the results of the cross tabulation of birth weight on the smooth release of breast milk were obtained from 54 people, mothers who had babies with birth weight <2500 grams were 2 (3.7%) with non-smooth milk expulsion as many as 2 people (3.7%) and there is no smooth breastfeeding. Meanwhile, mothers who have babies with birth weight > 2500 grams are 52 people (96.3%) with 23 people (42.6%) non-fluent breast milk and 29 (53.7%). Statistical test using the chi-square test showed that the p value of 0.210 was greater than 0.05, so it was concluded that there was no effect between birth weight on the smooth flow of breast milk in post SC mothers.

The Effect of Breastfeeding Techniques on Smooth Expenditure of Breast Milk

Based on table 3 above, the results of the cross tabulation of breastfeeding techniques on the smooth flow of breast milk for post-SC mothers were obtained from 54 people, mothers with poor breastfeeding techniques were 17 (31.5%) with non-smooth milk expulsion as many as 16 people (29.6%). and 1 person (1.8%). Meanwhile, mothers with good breastfeeding techniques were 37 (68.5%) with non-fluent milk expulsion as many as 9 people (16.7%) and smooth breastfeeding as many as 28 people (68.5%). Statistical test results using the chi-square test shows that the p value of 0.000 is smaller than 0.05 which means that there is an influence between breastfeeding techniques on the smooth flow of breast milk for post SC mothers.

Effect of Gestational Age on Smooth Expenditure of Breast Milk

Based on table 3. above, the results of the cross tabulation of gestational age on the smooth flow of breast milk for post-SC mothers were obtained from 54 mothers who gave birth with premature gestational age <37 weeks as many as 2 people (3.7%) with non-smooth milk expulsion as many as 2 people (3.7%) and non-existent breastfeeding. And mothers who gave birth with a gestational age of 37-40 weeks were 51 people (94.4%) with 23 people (42.6%) of non-fluent milk production and 28 (51.9%). Meanwhile, gestational age >40 weeks only 1 person (1.9%) with smooth breastfeeding. The results of statistical tests using the chi-square

test indicate that the p value of 0.201 is greater than 0.05 which means that there is no effect between gestational age on smooth production of breast milk for post SC mothers

Table 4. The effect of before and after the SPEOS method on breast milk production for post SC mothers at the Sidikalang Regional General Hospital (RSUD) in 2021

No	Variable Name	mean	SD	SE	Sig.	n
	SPEOS method					
1	Pre-Test Experiment SPEOS	4.89	1,850	0.252	0.000	54
2	Post Test Experiment SPEOS	6.70	1,798	0.245		

The average milk production before the SPEOS method was performed was 4.89 with a standard deviation of 1.850. After using the SPEOS method, the average milk output was 6.70 with a standard deviation of 1.789. It can be seen that the mean difference between before and after the SPEOS method is 1,815 with a standard deviation of 1,100. The results of the statistical test showed that the value of $p = 0.000$ is smaller than 0.005, so it can be concluded that there is a difference in the smooth flow of breast milk before and after the SPEOS method so that H_a is accepted and H_0 is rejected.

Multivariate Analysis

Table 5. Logistic Regression Test Results

No	Variable Name	B	SE	Wald	df	Sig.	Exp(B)
1	Breastfeeding Frequency	2,311	1.065	4,712	1	0.030	10.089
2	Breast Care	1.484	1.232	1,451	1	0.228	4,410
3	Treat Join	-19,307	630206	0.000	1	1,000	0.000
4	Mother's Food	4.084	1.384	8,707	1	0.003	59.938
5	Baby Birth Weight	16,210	40192	0.000	1	1,000	1.096
6	Breastfeeding Techniques	1,930	1,621	1,419	1	0.234	6,892
7	Gestational Age	18,316	40192	0.000	1	1,000	9.010
	Constant	-47.1 71	55284,957	0.000	1	0.999	0.000

Based on table 5. The results of the Logistic Regression test above are obtained that all research variables are analyzed. These variables include the frequency of breastfeeding obtained sig value. 0.030, breast care obtained sig value. 0.228, hospitalization obtained sig value. 1000 mother's food obtained sig value. 0.003, the baby 's birth weight obtained a sig value. 1000, breastfeeding technique obtained sig value. 0.234, gestational age obtained sig value. 1,000. The most dominant factor that affects the smooth flow of breast milk is the mother's food variable with a Sig value. 0.003 with a value of $B = 4.084$ and $OR = 59.938$

Quantitative Research

The Effect of Breastfeeding Frequency on Post SC Mother's Milk Expenditure

Regular breastfeeding frequency can affect milk production. The nipple and areola contain nerve endings which are essential for the suckling reflex. If the nipple is often sucked by the baby, the stimulation will be transmitted to the hypothalamus to secrete prolactin and oxytocin. This causes milk to be produced and flowed (Angriani et al., 2017).

The results of the cross tabulation between the frequency of breastfeeding and the smooth release of breast milk were obtained from 54 mothers showing the results of the analysis of the relationship between the frequency of breastfeeding and the release of breast milk at the Sidikalang Regional General Hospital in 2021, which was obtained from 54 mothers whose frequency of breastfeeding was 22 people (40.7%) with non-smooth milk expenditure as many

as 18 people (33.3%) and smooth breastfeeding as many as 4 people (7.4%). Meanwhile, mothers who breastfeed regularly are 32 people (59.3%) with non-smooth milk expulsion as many as 7 people (13.0%) and smooth breastfeeding as many as 25 people (46.3%).

The results of statistical tests using the chi-square test showed that the value of p (sig) = 0.000 is smaller than 0.05; then the hypothesis is accepted (H_0 is rejected and H_a is accepted) and it can be concluded that there is a relationship between the frequency of breastfeeding and breastfeeding at the Sidikalang Regional General Hospital in 2021. Meanwhile, the results of the logistic regression test show a sig value of 0.046 < 0.05 with the value of $B = 2.157$, it means that there is a positive and significant relationship between the frequency of breastfeeding and the smooth discharge of breast milk (H_a is accepted and H_0 is rejected).

This study is in line with research conducted by Sasmita (2018) entitled Factors with a cross-sectional design which states that there is a significant relationship between breastfeeding frequency (p value = 0.001) and milk production.

Breastfeeding frequency can affect milk production. The more often you breastfeed, the more milk production increases. Therefore, give breast milk as often as the baby wants. Based on the results of the study, breast milk production will be optimal when mothers breastfeed their babies 8 or more times per day during the first month of breastfeeding.

In the findings of the researcher, the frequency of breastfeeding should continue to be carried out at least 8-12 times to breastfeed the baby. The frequency of breastfeeding is closely related to the baby's process or the baby's ability to suck the mother's nipples so that the effect of sucking on the nipples carried out by the baby can stimulate the production of milk secretion which is related to the prolactin reflex. The baby's ability to suck can be influenced by the baby's weight and the condition of the mother's breast, for example the shape of the nipple that doesn't stand out causes the baby to not be able to suck the mother's nipple perfectly. The results showed that the majority of the frequency of breastfeeding the baby was regularly on the second day.

According to the theory, this is related to the condition of the mother who is still in the post-SC recovery process and the pain of the surgical wound. During this postpartum period, the mother is also in the taking -in period which occurs 1-2 days after giving birth. During this period, the mother is generally passive and dependent, her attention being focused on concerns about her body. This situation causes mothers to only focus on themselves. And not paying attention to the environment around him, especially the baby. Coupled with formula feeding, so babies prefer to drink formula milk that tastes sweeter and babies don't have to struggle hard to suck. Meanwhile, the factor of mothers giving birth with the SC process causes mothers to be afraid to breastfeed their babies, because they believe the wound will open due to moving too much.

The regression coefficient value for the breastfeeding frequency variable is positive, indicating that by assuming the absence of other independent variables, if the frequency of breastfeeding increases, then the milk output will increase. This shows that the more regular the frequency of breastfeeding, the smooth milk production will increase.

The Effect of Breast Care on Post SC Ibu Mother's Breast Milk Expenditure

Breast care in pregnancy (Breast Care Antenatal) is an effort to facilitate the flow of breast milk, and prevent problems that may arise during breastfeeding such as sore nipples or blisters, swollen breasts, blocked milk ducts. Breast care is not only done before giving birth but also after giving birth. Breast care is done twice a day while bathing and if there are problems with breastfeeding, it is also done twice a day (Wahyuningsih, 2018)

The results of the cross-tabulation test between breast care and milk production showed that of the 54 mothers who did not perform breast care, 16 (29.6%) with non-smooth milk expulsion

were 13 (24.1%) and 3 were fluent (5.5%). Meanwhile, among mothers who did breast care properly, there were 12 people (22.2%) with non-smooth breastfeeding and 26 people (48.2%) with smooth breastfeeding.

The results of statistical tests using the chi-square test show that the p value of 0.002 is smaller than 0.05 which means that there is a relationship between breast care and the smooth discharge of breast milk at the Sidikalang Regional General Hospital (RSUD) Dairi District in 2021, so H_a is accepted and H_o was rejected. Meanwhile, the results of the logistic regression test showed a sig value of $0.228 < 0.05$ with a value of $B = 1.484$, meaning that there was a positive and significant effect between breast care and the smooth flow of breast milk (H_a was accepted and H_o was rejected).

The results of this study are in line with Fatonah U's research in 2017 entitled "Effectiveness of Oxytocin Massage with Breast Care on Breast Milk Smoothness in Post SC Mothers in the Bougenvile Room at Dr Sodermin Hospital Kebumen". With a quantitative research with an observational method with a cross sectional design approach. A sample of 38 people was taken by purposive sampling. The results showed that there was an effect of oxytocin massage with breast care on the smoothness of breast milk in post SC mothers, but Breast Care was more effective in increasing the smoothness of breast milk than Oxytocin massage (Fatonah, 2017)

During pregnancy from 7-8 months, you have started to do breast care, so that the breasts can produce enough milk and the nipples are not cracked when the baby is sucked. The purpose of breast care after giving birth is to maintain breast hygiene to avoid infection and increase milk production by stimulating the mammary glands through massage. In addition, this treatment is also useful for preventing damming of breast milk / breast swelling, psychological preparation of breastfeeding mothers as well as flexing and strengthening the nipples (Mukarramah, 2021).

According to the findings of researchers, breast care that is carried out properly will give a response to the smooth release of breast milk. While breast care is not good then the milk production is not smooth. The results showed that there were mothers who did breast care but the milk production was not smooth. From the researchers' findings, it was associated with a nipple deformity that was flat and too large, resulting in the baby not being able to suckle the breast properly. Breast care is not just massage on the breast. However, it is to clear the blockage and detect early any abnormalities in the shape of the mother's nipple and can make efforts to overcome it.

Breast care should be carried out at the end of pregnancy which aims to clean the breasts, so that there is no blockage that can affect the release of breast milk at the time the baby is born and the baby is avoided from giving formula milk before breast milk is produced by the mother's breast. Then this treatment should be resumed after giving birth to avoid nipples that are easy to blister, infection and pain due to the presence of breast milk dams.

The results showed that the regression coefficient of the breast care variable was positive, indicating that by assuming the absence of other independent variables, if the treatment increased, the smoothness of breast milk production would increase. This shows that the better breast care, the smooth milk production will increase.

The Effect of Admission on Breastfeeding Expenditure Post SC

Joining in is a method of care in which the mother and newborn are in a room or place together 24 hours a day. So that whenever the baby needs, the mother can immediately give attention (Susanthi, 2021).

The results of the tabulation show the results of the analysis of the relationship between hospitalization and the smooth release of breast milk at the Sidikalang Regional General Hospital in 2021, obtained from 54 mothers who were not admitted to the hospital with non-current milk expenditure of 2 people (3.7%) and there was no smooth breastfeeding.

Meanwhile, among mothers who were hospitalized with 52 people (96.3%), 23 people (44.2%) had non-smooth breastfeeding and 29 (53.7%).

The results of statistical tests using the chi-square test showed that the value of p (sig) = 0.210 is greater than 0.05; then the hypothesis is accepted (H_0 is accepted and H_a is rejected) and it can be concluded that there is no relationship between hospitalization and breastfeeding expenditure at the Sidikalang Regional General Hospital (RSUD) in 2021. Meanwhile, the results of the logistic regression test show a sig value of $1,000 > 0.05$ with a value of $B = -19.307$, it means that there is a negative and significant effect between hospitalization and the smooth discharge of breast milk (H_a is accepted and H_0 is rejected).

The results of research by Isnanisa et al. (2018) in a study entitled investigate the Relationship between Inpatient and Breast Milk Production in Postpartum Mothers in the Melati Room of the Jombang Regency Hospital. The research design was quantitative method with a cross sectional design approach . The sample in this study was 50 respondents. selected by purposive sampling technique. Data collection using questionnaires and observation. The results obtained almost all of the respondents (84%) were admitted to hospital and almost half of the respondents' milk production (36%) was in the good category. There was a significant relationship between hospitalization and milk production. in postpartum mothers in the jasmine room of the Jombang District Hospital.

The results of Isnanisa et al., (2018)'s research are not in line with the results found by the researchers. It is known that the researcher concludes that there is no relationship between hospitalization and breastfeeding expenditure at the Sidikalang Regional General Hospital (RSUD) in 2021. This is related to where there are mothers who are admitted to hospital but p milk ejection is still not smooth . According to the researcher's assumption, emotional actors are able to affect the production of breast milk (ASI). Feelings of fear, anxiety, anxiety, severe pain due to SC surgery will affect the oxytocin reflex, which ultimately suppresses milk production. The secretory activity of the mammary glands is constantly changing by the psychological/mental influence experienced by the mother. In addition, researchers saw that even though the baby was hospitalized, the baby was not sucked into the mother plus the baby was given formula milk, causing the frequency of breastfeeding the baby to be irregular which would cause no stimulation to release breast milk.

The theory according to Roesli (2008) where the mother's feelings can inhibit the release of breast milk. Likewise, babies should be breastfed immediately, but because babies have been given formula milk, even though they are hospitalized, physical and psychological factors are disturbed so that the frequency of breastfeeding is lower so that the oxytocin and prolactin reflexes are reduced to trigger the process of breastfeeding being inhibited.

The results showed that the regression coefficient for the outpatient variable was negative, indicating that by assuming the absence of other independent variables, if hospitalization increased, there was no effect on the fluency of breast milk production. This shows that there is no effect of hospitalization on the smooth flow of breast milk, which will increase (Roesli, 2000)

The Effect of Mother's Food on Mother's Milk Expenditure Post

The results of the cross tabulation between maternal food and the smooth flow of breast milk above show the results of the analysis of the relationship between maternal food and the smooth flow of breast milk at the Sidikalang Regional General Hospital in 2021, obtained 21 people (38.9%) out of 54 mothers whose mother's diet was bad with breastfeeding. not smooth as many as 20 people (37.0%) and smooth breastfeeding only 1 person (1.9%). Meanwhile, among mothers with good maternal food, 33 people (61.1%) had non-smooth breastfeeding, there were 5 (9.3%) and 28 people (51.8%).

The results of statistical tests using the chi-square test showed that the value of p (sig) = 0.000 is smaller than 0.05; then the hypothesis is accepted (H_0 is rejected and H_a is accepted) and it can be concluded that there is a relationship between maternal food and breastfeeding expenditure at the Sidikalang Regional General Hospital in 2021. The results of the Logistic Regression test above are obtained that the mother's food has a sig value. 0.002 B=4,093

The results of this study are in line with Radharisnawati (2017) which entitled the relationship between meeting the nutritional needs of mothers and the smooth running of breast milk (ASI) in breastfeeding mothers at the Bahu Health Center in Manado City. Based on the results of statistical tests using Chi-Square, obtained p value = 0.003. This p value is smaller than 0.05, which indicates that there is a relationship between the fulfillment of maternal nutritional needs and the smoothness of breast milk for breastfeeding mothers at the Bahu Health Center in Manado City.

According to Proverawati & Asfuah (2009), the state of malnutrition, namely the level of mother's weight both during pregnancy and breastfeeding can affect the volume of breast milk. Breast milk production in malnourished mothers becomes less in number compared to mothers whose nutrition is fulfilled (Atikah & Hadijono, 2009).

The results of the study are in line with this study conducted by Ningrum (2016) entitled the relationship between energy and protein adequacy with breast milk production in breastfeeding mothers in Bawen Village, Bawen District. 2016 and there is a relationship between the level of protein adequacy with milk production in breastfeeding mothers in Bawen Village, Bawen District in 2016.

The lack of smooth breast milk (ASI) and the unmet nutritional needs of mothers are triggered by an imbalance of food consumed by mothers with breast milk (ASI) produced because the nutritional needs of breastfeeding mothers must be more than usual because mothers need nutrition for two people, namely for the mother and the mother. the baby. So that breastfeeding mothers must pay attention and increase their nutritional needs because with balanced nutrition will support the smooth production of breast milk (Ningrum, 1967).

Based on the research findings, the food eaten by breastfeeding mothers must meet the elements of food quality and quantity. Talking about the quality of food related to the food eaten, it must be varied, namely in every meal it must have a composition of carbohydrates, animal/vegetable protein, vegetables and fruits and nuts (cereal) by paying attention to the quantity according to the needs of nursing mothers and usually foods that are suitable for breastfeeding mothers. eaten more than non-breastfeeding mothers. Not only the fulfillment of food after childbirth or breastfeeding but must pay attention to the fulfillment of food during pregnancy, related to these conditions there is literature which states that the calorie needs during breastfeeding are not fully obtained from the food consumed but the use of fat reserves during pregnancy.

According to the Indonesian Ministry of Health (2018), during breastfeeding, the total daily calorie requirement is 2,400 kcal which is obtained from the number of servings of food at each meal (3 times a day), namely 6 portions of rice (1 portion of 100 grams of rice), 3.5 portions of vegetables (1 100 grams of vegetables), 5 portions of fruit (1 portion of 50-190 grams of fruit), 1 egg (1 piece of 55 grams), 3 portions of meat/fish (1 35gram portion of meat/fish), tempeh/tofu 3.5 servings (1 serving of 50 grams), and 1 serving of milk (1 serving of 13 grams), plus 6 servings of oil (1 portion of 5 grams), 2 servings of sugar (1 serving of 13 grams).

To improve the quality of breast milk production requires these foods that can affect the smooth flow of breast milk. However, based on the results of the study, the majority of mothers' food consumption was good, as seen from the mothers' answers, the majority of whom answered milk consumption, egg consumption, fish/meat, tempeh/year and nuts. The theory also states that foods to avoid during breastfeeding are only spicy, gassy foods not foods that contain vitamins and protein. Consumption of a variety of foods can meet the needs of nursing mothers

because each food does not have all the nutrients and to meet these needs it is important to consume a variety of foods.

How can breastfeeding be smooth if the food that the mother consumes is bad, the impact is that the body is unable to produce breast milk because there are no ingredients to be used in the production process. Plus foods that contain lots of high protein are foods that are able to replace or rejuvenate cells damaged during the labor process and the damage becomes more severe due to cesarean delivery (Wahyuningsih, 2018).

The logistic regression test showed that the regression coefficient of the mother's food variable was positive $B=4,093$ stating that by assuming the absence of other independent variables, if the mother's diet increased, then the smoothness of breast milk production would increase. This shows that the better the food the mother consumes, the smoother the milk production will increase.

Birth Weight on Mother's Breastfeeding Expenditure Post

Infant birth weight is a condition that describes a baby physically having a normal weight as measured by weighing at birth (Catur & Diati, 2015).

baby 's birth weight and the smooth release of breast milk at the Sidikalang Regional General Hospital (RSUD) in 2021 were obtained from 54 people, mothers who had babies with baby birth weight <2500 grams were 2 (3.7%) with 2 people (3.7%) non-smooth breastfeeding and no smooth breastfeeding. Meanwhile, mothers who have babies with birth weight > 2500 grams are 52 people (96.3%) with 23 people (42.6%) non-current breastfeeding and 29 (53.7%).

The results of statistical tests using the chi-square test show that the p value of 0.210 is greater than 0.05, which means that there is no relationship between birth weight and the smooth production of breast milk at the Sidikalang Regional General Hospital (RSUD) in 2021, so H_0 is rejected and H_a accepted.

Qualitatively about the baby's weight, informant 1 said that my baby's birth weight was 3800 grams, while informant 2 said that my baby's birth weight was 3500 grams . Meanwhile, informant 3 said that my baby's birth weight was 2800 grams.

The results of this study are in line with Enok 2010 concerning Factors Associated with Breast Milk Production in Post-C-section Mothers in the City and District of Tasik Malaya using descriptive analytic research methods with cross sectional approaches and non-probability sampling techniques, namely consutive sampling . Data analysis used bivariate analysis to find out the description or description of each variable studied, bivariate and multivariate analysis, namely multiple logistic regression tests with the results that there was no effect of birth weight (p value = 0.154) with breast milk production in mothers after cesarean section in the city area. and Tasik Malaya Regency.

Dindy (2016) with the research title Overview of Breastfeeding Babies with Post Sectio Caesarea at RSU Tangerang and private hospitals in Depok. From the results of the study, all babies born with low birth weight conditions experienced delays in breastfeeding. There are several reasons why babies are not given complementary milk other than breast milk because babies with low birth weight (LBW) are considered too weak to suckle directly from the mother's breast so assistance is needed when giving breast milk (Dindy et al., 2016).

Low birth weight (LBW) babies have a lower ability to suck breast milk than babies with normal birth weight (babies born more than 2500 g or 2.5 kg). Babies with low birth weight have the ability to suck breast milk, the frequency and duration of breastfeeding are lower than normal birth weight babies which will ultimately affect the stimulation of the hormones prolactin and oxytocin in producing breast milk (Dindy et al., 2016)

birth weight > 2500 grams is a baby's weight which is considered normal because in this condition the baby already has maturity to be able to suck optimally and usually babies are able to suckle quickly than babies born with low birth weight. body < 2500 grams. The baby's ability to suck the mother's nipples causes various hormonal processes in forming breast milk to be achieved optimally. The baby's ability is related to the frequency and duration of breastfeeding carried out by the baby. Infants weighing <2500 grams are immature in their ability to suckle the mother's nipples and usually the frequency and duration of breastfeeding is very fast and not optimal, so that the stimulus to stimulate milk production is reduced and not achieved at all.

The results also showed that birth weight <2500 grams as much as 100% of the production of breast milk was not smooth which was influenced by the frequency of irregular breastfeeding due to the mother being separated from the baby who was cared for separately from the mother. Based on the results of the study, babies with birth weight > 2500 grams were 96.3% with 42.6% of non-smooth breastfeeding. This is because the smooth production of breast milk is not only influenced by the baby's ability to suckle either at normal or abnormal birth weight. But it can also be influenced by factors of poor diet, irregular breastfeeding frequency and breast care that is not done properly.

The research data shows that the majority of babies are born with a weight of more than equal to 2500 grams, and most of them are 53.7% of breastfeeding smoothly. This is because babies born weighing more than 2500 grams, the majority are babies who have a gestational age of more than 37 weeks, in this condition the baby's organs are fully formed so that they have a strong sucking reflex because the baby's lungs are already mature and capable of adhesion and has a good suction effectiveness.

The Effect of Breastfeeding Techniques on Breast Milk Production

Breastfeeding technique is a method of giving breast milk by a mother to her baby, in order to meet the nutritional needs of the baby. Correct Breastfeeding Technique is how to give breast milk to the baby with the attachment and position of the mother and baby correctly. According to Rinata (2016) the correct breastfeeding technique is how to give breast milk to the baby with the attachment and position of the mother and baby correctly. To achieve successful breastfeeding requires knowledge of the correct breastfeeding techniques (Rinata et al., 2016)

The results of the cross tabulation of breastfeeding techniques on the smooth release of breast milk at the Sidikalang Regional General Hospital (RSUD) in 2021 were obtained from 54 people, mothers with poor breastfeeding techniques were 17 (31.5%) with non-smooth milk expulsion as many as 16 people (29.6 %) and 1 person (1.8%). Meanwhile, mothers who had good breastfeeding techniques were 37 (68.5%) with non-smooth milk expulsion as many as 9 people (16.7%) and smooth breastfeeding as many as 28 people (68.5%).

The results of statistical tests using the chi-square test show that the p value of 0.000 is smaller than 0.05 which means that there is a relationship between breastfeeding technique and the smooth flow of breast milk at the Sidikalang Regional General Hospital (RSUD) in 2021, so H_a is accepted and H_o is rejected. Meanwhile, the results of the logistic regression test showed a sig value of 0.207 < 0.05 with a value of $B = 1.990$, meaning that there was a positive and significant relationship between breastfeeding technique and the smooth expulsion of breast milk (H_a was accepted and H_o was rejected).

Qualitatively regarding breastfeeding techniques, it is known that Informant 1 said that the mother's breastfeeding position is sitting and sleeping, and also pay attention to the baby's nose not to be closed, the mother also said that after I was hospitalized I was also trained on how to breastfeed properly. And every day, accompanied by informant 2, he said that he was in a breastfeeding position carried parallel to the mother's body so that the baby was comfortable breastfeeding and the nipple and the black part around the nipple were sucked by the baby.

Informant 3 said that she breastfed in a sleeping and lying position and the experience of her first child having blisters on the nipples due to incorrect breastfeeding techniques.

The research conducted by Purnama and Sulastrri (2016) with the research title "Increasing Knowledge of Breastfeeding Techniques for Post Sectio Caesarea Patients at Assalam Gemolong Hospital". The design of qualitative research is descriptive method or with a case study approach, namely the scientific method with the nature of data collection, analyzing data and taking conclusions from existing data. The results showed that the results of the above objectives after 3x24 hours of action can be concluded that the patient already knows about breastfeeding techniques or breastfeeding is good and correct through the health education provided and there is satisfaction while breastfeeding the baby (Purnama & Sulastrri, 2016)

This study is in line with Rinata (2016) entitled Breastfeeding Techniques, Attachment, and Effectiveness of Sucking-Studies on breastfeeding mothers in Sidoarjo Hospital using a cross-sectional analytic design using interview and observation primary data. Sampling technique is random sampling. The results show that there is a significant relationship between attachment and breastfeeding techniques for breastfeeding mothers in Sidoarjo Hospital (Rinata et al., 2016)

Based on the results of observations, the majority of post-SC mothers with breastfeeding techniques with good position and attachment have smooth milk output. This is because doctors, midwives in hospitals actively provide information starting from how to hold the baby, put the baby on the breast, stimulate the baby's mouth to open. and how to remove the breast when finished breastfeeding and teach the mother to breastfeed with the correct technique. However, officers should also provide information and training to mothers for a good breastfeeding position, so that the success of the breastfeeding process can be achieved. In addition, it was also found that post-SC mothers whose breastfeeding techniques were lacking and breastfeeding was not smooth due to the mother's lack of experience in breastfeeding practice considering that some breastfed babies were first children and some mothers did not find out about information about breastfeeding and how to breastfeed properly and correctly. unable to apply in daily life about breastfeeding with the correct technique.

According to Soetjningsih, to get the correct breastfeeding technique, guidance in breastfeeding is needed. Especially from doctors, midwives/nurses and people who have a big influence in their lives such as husbands and close relatives and information about breastfeeding techniques from various sources.

The logistic regression test showed that the regression coefficient for the mother's food variable was positive $B=1.990$ which stated that by assuming the absence of other independent variables, if breastfeeding techniques increased, the smooth flow of breast milk would increase. This shows that the better the breastfeeding technique, the smooth flow of breast milk will increase.

Effect of Gestational Age on Mother's Milk Expenditure PostSC

Gestational age is a limitation of the term pregnancy process and is related to the complete and mature growth and development of the newborn. The period at the end of term pregnancy affects the condition of the child's birth weight and the maturity of the baby's suction power. The theory shows that gestational age plays an important role in the production of breast milk related to the baby's weight which greatly influences gestational age (Sasmita, 2018)

Based on the results of the cross tabulation of gestational age on the smooth release of breast milk at the Sidikalang Regional General Hospital in 2021, it was obtained from 54 mothers who gave birth with premature gestational age <37 weeks as many as 2 people (3.7%) with non-smooth milk expulsion as many as 2 people (3.7 %) and there is no smooth milk production. And mothers who gave birth with a gestational age of 37-40 weeks were 51 people

(94.4%) with 23 people (42.6%) non-fluent breast milk and 28 (51.9%). Meanwhile, only 1 person (1.9%) with gestational age >40 weeks had smooth breastfeeding.

The results of statistical tests using the chi-square test show that the p value of 0.201 is greater than 0.05, which means that there is no relationship between gestational age and the smooth flow of breast milk at the Sidikalang Regional General Hospital (RSUD) in 2021, so H_a is rejected and H_o is accepted. Meanwhile, the results of the logistic regression test showed a value of $\text{sig } 1,000 > 0.05$ with a value of $B = 18.316$, meaning that there was a positive and significant relationship between gestational age and the smooth expulsion of breast milk (H_a was accepted and H_o was rejected).

Qualitatively regarding breastfeeding techniques, it is known that Informant 1 said that the mother's breastfeeding position is sitting and sleeping, and also pay attention to the baby's nose not to be closed, the mother also said that after I was hospitalized I was also trained on how to breastfeed properly. And every day, accompanied by informant 2, he said that he was in a breastfeeding position carried parallel to the mother's body so that the baby was comfortable breastfeeding and the nipple and the black part around the nipple were sucked by the baby. Informant 3 said that she breastfed in a sleeping and lying position and the experience of her first child having blisters on the nipples due to incorrect breastfeeding techniques.

Research conducted by Purnama E and Sulastri (2016) with the research title "Increasing Knowledge of Breastfeeding Techniques for Post Sectio Caesarea Patients at Assalam Gemolong General Hospital". The research design is qualitative descriptive method or with a case study approach, namely the scientific method with the nature of collecting data, analyzing data and drawing conclusions from existing data. The results showed that the results of the above objectives after 3x24 hours of action can be concluded that the patient already knows about breastfeeding techniques or breastfeeding that is good and correct through the health education provided and there is satisfaction while breastfeeding the baby (Sari & Rahayu, 2017)

Babies born prematurely or babies born before term have not been able to suckle effectively. This is because babies born prematurely (premature gestational age less than 37 weeks) are very weak and unable to suckle effectively so that milk production is lower than babies born not premature. Weak sucking ability in premature babies can be caused by low body weight and imperfect functioning of the baby's organs. As a result, when the stimulation of suckling is reduced, milk production is also automatically reduced (Hastuti et al., 2017).

According to the findings of the researchers, the majority of mothers who gave birth post SC with a gestational age of 37-40 weeks were 94.4% with a smooth milk expulsion of 51.9%. This is because the end of term pregnancy affects the condition of the child's birth weight and suction power maturity. baby. The theory shows that gestational age plays an important role in the production of breast milk related to the baby's weight which greatly influences gestational age. While babies born at premature gestational age <37 weeks, post-SC mother's milk production is not smooth, the possibility of large premature babies has not optimal baby weight, so that the baby's suction power is not yet perfect. As a result, the baby's suction power is not maximal, causing no stimulation of prolactin to prepare breast milk, so that over time the production of breast milk decreases or stops. On the other hand, at gestational age >37 weeks with non-fluent milk production.

This is because giving formula milk to post-SC babies waiting for the mother to recover from the pain due to SC so that it affects the baby's ability to suck the nipple, because babies who have received formula milk and conditions where babies don't need hard efforts to suck milk, so that after breastfeeding has out the baby becomes unwilling to suck from the mother's breast. This condition occurs in babies weighing > 2500 grams who already have maturity in the ability to suck on the nipples, but because formula feeding makes babies experience nipple confusion,

so that they become lazy to breastfeed and affect the occurrence of the prolactin reflex and flow reflex, thus affecting the breast milk production .

The logistic regression test showed that the regression coefficient of the mother's food variable was positive $B=18,316$, stating that by assuming the absence of other independent variables, if gestational age increased, the flow of breast milk would increase. This shows that the longer the gestational age, the smooth flow of breast milk will increase.

Effect of SPEOS Method on Post SC . Breastfeeding Expenditure

The SPEOS method is an Endorphin, Oxytocin and Suggestive Massage Stimulation method, namely Massage by combining it with several massages to facilitate breast milk. The SPEOS method is to stimulate the release of the hormone oxytocin through oxytocin massage, provide a sense of comfort and foster confidence in mothers that breast milk will come out and mothers can exclusively breastfeed with endorphin and suggestive massage (Nugraheni & Heryati, 2017).

Based on the results of the study, the average milk production before the SPEOS method was carried out was 4.89 with a standard deviation of 1.850. After using the SPEOS method, the average milk output was 6.70 with a standard deviation of 1.789. It can be seen that the mean difference between before and after the SPEOS method is 1,815 with a standard deviation of 1,100. The results of the statistical test showed that the value of $p = 0.000$ is smaller than 0.005, so it can be concluded that there is a difference in the smooth flow of breast milk before and after the SPEOS method so that H_a is accepted and H_0 is rejected .

Qualitatively about the SPEOS method, informant 1 did not understand that he had never heard of the SPEOS method. Informant 2 said he did not understand but he had heard of oxytocin massage. Informant 3 has also never heard of the SPEOS technique . However, the informants were willing to use the SPEOS technique so that their breast milk was smooth.

The results of the research conducted by Sari 2017 thesis with the title The Effect of the Speos Method on Breast Milk Production in Post-Sesarean Mothers at the Tidar Regional General Hospital, Magelang City in 2017. Quantitative descriptive research with a quasi-experimental design (quasi-experimental). This research design uses a pre-test-post-test control group design. Based on the results of the study, it showed that there were 4 respondents from 19 respondents (21.1%) that breast milk production was very low, while after the SPEOS method it could be seen that 100% of the groups that received intervention in breast milk production were in the sufficient category. P value is 0.000, this means $p < 0.005$ which indicates that there is a significant difference in breast milk production before and after the SPEOS method was used in the intervention group.

This research is reinforced by the theory expressed by Pillitry (2003) that oxytocin massage can stimulate the anterior and posterior pituitary to secrete the hormone oxytocin. Thus, frequent breastfeeding is good and important for emptying the breasts so that breast engorgement does not occur, but on the contrary accelerates the release of breast milk. By doing massage along the spine (vertebrae) to the fifth-sixth costae bone, it will stimulate the hormones prolactin and oxytocin, so that breast milk can automatically run more smoothly. In addition to facilitating breast milk, oxytocin massage provides comfort for postpartum mothers, reduces breast swelling, reduces milk blockage, stimulates the release of the hormone oxytocin, maintains milk production when mother and baby are sick (Idris, 2020)

Endorphins can reduce or relieve pain in mothers who will give birth. Endorphin massage was created which is a light touch massage technique that can normalize heart rate and blood pressure, as well as increase the relaxed condition in the post-Section Caesarea mother's body by triggering a feeling of comfort through the skin surface. This is also in accordance with the theory, oxytocin massage is done to stimulate the oxytocin reflex. Breastfeeding early in the

first hours of birth if it can't be done by the mother will cause the breastfeeding process to be delayed. Positive suggestions / affirmations are carried out to prepare breast milk to flow smoothly and meet the needs of the baby from the first day he was born in the world (Sari & Rahayu, 2017)

Qualitative Research

Informant I

The results of in-depth interviews about the factors that influence the release of breast milk in post-SC mothers from husbands, doctors, and midwives, it was found that. that they know the benefits and importance of breastfeeding. In which Informant 1 clearly stated "What I know is that breast milk is useful for babies as food and prevents babies from contracting various diseases." Mother also said "What I know is that breastfeeding is according to the baby's schedule, so if the baby releases itself, it means the baby is enough".

The mother's understanding is due to the information provided by the health worker/midwife where the informant conducts an examination during pregnancy. It is evident from the results of the informant's statement who said, "When I was pregnant, the midwife taught me how to care for breasts and other information about breastfeeding. And at the posyandu, they are given additional food and milk and iron vitamins are carried out in a group class for pregnant women every month. There, they were checked for HB, HIV, TT immunization and given a pink book. The midwife said it was a ping book, said the midwife, so read it at home as a guidebook." Mother also found out information and got additional food when checking in at the posyandu. Where the mother explained, "My midwife said I had to eat more from the portion I ate before I was pregnant because there was already an extra baby to be fed. And when I checked my pregnancy, I was advised to buy breastfeeding milk and drink it 2 times a day. In the class for pregnant women, I was also given additional food such as bread and green bean porridge and breast-feeding mothers were given milk."

This statement is in line with the statement of the Pediatrician who said that "Theoretically, lactogenesis occurs at 16 weeks of gestation. Milk also comes out along with the release of the placenta from the uterus. From the theory there is no effect of breast milk booster on milk production. The baby's sucking effect stimulates the brain to stimulate breast milk. The breastfeeding supplement that I've seen is domperidone for new mothers. And the katuk leaf is still controversial, but if it is consumed it is not a problem. But more importantly breast milk is prepared during pregnancy through nutrition and fluids; protein carbohydrates and fats. Because nutrition is the main ingredient to form breast milk. So nutrients and fluids that will help increase milk production.

The results of this study are in line with Radharisnawati (2017) with the title of the relationship between the fulfillment of maternal nutritional needs and the smoothness of breast milk (ASI) in breastfeeding mothers at the Bahu Health Center in Manado City. Based on the results of statistical tests using Chi-Square , p value = 0.003. This p value is smaller than 0.05, which indicates that there is a relationship between the fulfillment of maternal nutritional needs and the smoothness of breast milk for breastfeeding mothers at the Bahu Health Center in Manado City (Radharisnawati & Kundre, 2017)

The results of this study are in line with the quantitative results of multivariate data analysis. The results obtained are "The most dominant factor that affects the smooth flow of breast milk is the mother's food variable with a Sig value . 0.003 with a value of B = 4.084 and OR = 59.938".

Informant II

Based on the interview with informant 2, he said that breast milk is the main source of energy for babies and contains substances for the baby's immune system so that they are not susceptible to disease. He knows what the benefits and importance of breastfeeding are. Informant 2 clearly stated that the benefits of breastfeeding for babies are that the baby's immune system is getting stronger, the benefits for the mother are to reduce bleeding after giving birth. The frequency of breastfeeding mothers regularly 8-12 times a day and breastfeeding 7-10 minutes on one breast after the second day after SC surgery. The production of breast milk is getting smoother day by day. She also looks for information on breast care and breastfeeding information by reading from the media and finding out with her friends.

Based on the interview, the researcher asked whether the mother had an IMD in the hospital after surgery? Mother replied, "Mom, no, no. Nobody recommends it." This explains why breast milk on the first day of birth is not smooth, as explained by an OBGIN specialist when asked about the effect of SC on milk production that "From several studies, SC has a risk of slow milk production, especially for mothers who do not do IMD. So we modify it by doing IMD at 1 hour after giving birth at the longest." Ami J Hobbs et al's research conclusion statement that " We found that when controlling for socio-demographic and labor and delivery characteristics, planned c-section is associated with early breastfeeding cessation. Anticipatory guidance around breastfeeding could be provided to women considering a planned c-section. As well, additional supportive care could be made available to lactating women with emergency c-sections, within the first 24 hours post birth and throughout the early postpartum period".

In this situation, it is the health workers who should play a greater role. Midwives are health workers who can assist the implementation of IMD. However, midwives/health workers prefer to give formula milk on the grounds that many patients cannot express breast milk, wherein the midwife stated "The obstacle I saw from the mother was the pain experienced by the mother after the operation made the mother focus on recovery and choose formula milk to be given. for the baby, and breast milk has not yet come out, so we encourage families to give formula milk. "The role of health workers is very important in supporting government programs to increase the achievement of breastfeeding. So that health workers must actively support mothers to give breast milk at the beginning of birth by doing IMD.

E (2018) about the factors that influence the failure of Early Breastfeeding Initiation in post sectio caesarean mothers at the Binjai Army Hospital in 2018. The study used a qualitative descriptive method. Based on the results of interviews and observations, it was found that the mother's lack of knowledge about the importance of implementing IMD was due to the lack of information provided by health workers, husband's support, and motivation, both from the referring midwife during ANC visits and the role of the midwife on duty at the hospital who was supposed to facilitate mother did IMD. The rampant promotion of formula milk in the mass media, friends, direct offers to mothers, has caused a mother's mindset to think that formula milk is as good as breast milk (Ginting, 2019).

Informant III

Based on the results of in-depth interviews about the factors that influence breastfeeding in post-SC mothers from husbands, doctors and midwives, Informant 3 said that they knew what the benefits and information were about breastfeeding. Where clearly the mother said "What I know is that breast milk is beneficial for babies as food and prevents babies from contracting various diseases".

The researcher's findings on the second informant were when the mother said that the mother-in-law was old who took care of the mother because her husband was busy taking care of the baby's BPJS administration. To which the mother said "But sometimes she goes to take care of

my baby's administration and BPJS card, so I'm just being looked after by my in-laws here and even then I'm old.

Husband and family support apparently affects the mother's behavior to give breast milk. The weak husband's support was clearly seen when the researcher asked whether the husband wanted the mother to breastfeed the baby. Researchers also analyzed the answers of the three husbands. Informant I's husband answered "Yes. I want my wife to breastfeed my baby." Informant II's husband also answered "I really want and support my baby to be healthy because of the benefits". Likewise, the husband of Informant III answered "Yes. I want my baby to be breastfed".

But the researcher saw that the husband also gave formula milk to the baby and the researcher asked again why the husband chose to delay breastfeeding for the baby and preferred formula milk to which the husband of Informant I replied "My wife has just had surgery so I don't think she can breastfeed and can't sit up. comfortable and still in pain so while my baby is giving formula milk. The nurse said to buy the formula first and wait for the milk to come out. Informant II's husband answered, "The problems are, among others. After the operation my mother is still sore. Also pain and secondly the level of fear and stress of the mother which makes the breast milk not come out as well as doesn't seem relaxed or not moving freely..making breast milk not given, while the husband of Informant III replied "Because the mother has just had surgery, the breast milk has not come out, the baby has not been given.. .and given formula milk for fear of starvation"

This is the same as the answer of another informant, Mrs. Post Sectio Caesaria , who said that because many people closest to her suggested formula milk, she also used formula milk and preferred formula milk because she thought that formula milk contained the same good as breast milk. who have tried formula and their children are smarter and fatter. However, this assumption is wrong. So that mothers who are less informed about breastfeeding will be less confident to breastfeed due to the wrong support from the closest people.

A mother during breastfeeding also needs to get the support of a calm and harmonious atmosphere from her husband in addition to the extended family and environment for the smooth breastfeeding of the baby. The husband plays a very important role in the success of the breastfeeding process, the husband must be number one for his wife and actively participate in caring for the little one. Husband's support for breastfeeding mothers has been supported by a number of studies that show a higher success rate of breastfeeding in mothers who get support from their partners. Meanwhile, breastfeeding mothers who do not get support from their husbands have less success in breastfeeding.

A harmonious relationship with the wife during breastfeeding is able to increase the work of the hormone oxytocin and stimulate the release of endorphins which accelerate the release of breast milk. This hormone affects muscle contractions in the milk ducts so that the breasts are able to expel milk. Husband's support, for example, giving SPEOS massage to his wife lovingly or helping to take care of the little one and accompanying the mother while breastfeeding the little one, it increases the smooth flow of breast milk.

However, this is far from the reality that was obtained by the researcher. The results of interviews with husbands support none of the husbands who knew about the SPEOS method, instead giving babies formula milk as an alternative before breastfeeding was smooth.

Another factor that slows the release of breast milk at birth is physical and psychological. The results of an interview with a Pediatrician said, "The effect of Sectio on breast milk production can be seen from two sides, namely psychological and physical: Physically we can see the mother feeling pain, fatigue, Psychologically the mother is worried about the surgical wound. Both of these factors greatly affect the production of breast milk. So from what I see, the milk

output in post SC is on average on the third day. There are also co-morbidities of pre-eclampsia, maternal age.”

And the statement of the informant's husband who said "The obstacles include. After the operation, the mother is still sore.. also in pain and the second is the level of fear and stress of the mother which makes breast milk not come out as well as does not seem relaxed or not moving freely.. making breast milk not given”

These findings are in line with the research conducted by Pratiwi et al. 2019 with the title The relationship between surgical wound pain, maternal anxiety and baby sucking with breast milk production at post cesarean section at Abdul Wahab Sjahranie Hospital. It was found that there was a significant relationship between surgical wound pain and milk production. in post cesarean section with p value 0.000, which means p value < 0.05. There is a significant relationship between maternal anxiety and milk production at post-cesarean section with p value 0.000, which means p value <0.05. There is a relationship between baby's suction and milk production in post-cesarean section with p value 0.028, which means p value < 0.05. (28)

Based on the conditions seen by the researcher that the mother who had just had surgery seemed in pain and anxious about her surgical wound, it was hoped that health workers would be able to overcome this pain and anxiety problem by providing appropriate pain management to reduce mother's pain and anxiety so that the mother could breastfeed her baby. Families and husbands are given health education on this issue so that families can know and support mothers to breastfeed.

Supporting Informants

Based on interviews with OBGYN Specialists, he said that he always promotes breastfeeding by educating mothers who have elective CS at 36 weeks of gestation. And in emergency patients, education is given 1 hour post SC. The informant also said that breastfeeding should be issued by educating mothers on how to massage their breasts, good and balanced food, and educating mothers so that they do not panic even though they have not yet come out. Emptying more breast milk (supply on demand).

If the baby is not cooperative in breastfeeding, breast milk can be expressed, teaching the mother breastfeeding techniques. Our husbands educate so that their husbands support mothers in breastfeeding. The most important thing is the position when giving breast milk so that the baby can be full. Obstacles to breastfeeding that are seen are disturbing pain. If it hurts, the position we expect to breastfeed must be disturbed. And on the first day it was still tilted left and right so the mother was awkward in breastfeeding if she didn't sit down. So that the milk will take about 2-3 days to come out for those who post SC. The informant had also read about the SPEOS method and he recommended it because it was able to expedite the expulsion of breast milk.

Based on an interview with a Pediatrician, the informant always promoted breastfeeding by convincing the mother and family that breastfeeding was beneficial for the baby and for the mother, as well as bonding for the mother and baby. Breast milk is also beneficial for families from an economic point of view, practical because it does not bother preparing breast milk. Second. Promoting breastfeeding by teaching mothers breastfeeding techniques and attachments to prevent sore nipples from interfering with the lactation process. Third, with IMD, Rooming In, so breast milk can be stimulated out by the mother seeing and hearing the baby beside her.

Obstacles in breastfeeding that are seen are there are 2 factors, namely psychological and physical. Physical factors are disturbing pain. If it hurts, the position we expect to breastfeed must be disturbed. Psychologically, the mother is worried about the surgical wound. Family support who is worried and not sure about the mother's condition. The solution is to tell them

that breastfeeding can help mothers recover faster. Another obstacle is that the baby requires intensive care so that the baby cannot breastfeed. The solution, which is expressed breast milk and given to the baby, is very helpful for the baby's antibodies.

The informant has also read about the SPEOS method that I read that was found to increase milk production and ultimately affect the baby's weight gain. Performed in the first hour and the sixth hour of birth and every day for up to 4 weeks.

Based on an interview with the person in charge of the midwifery room, he said that he always promoted breastfeeding by encouraging roommates to encourage and encourage post sc mothers to breastfeed . Mothers also know how to stimulate milk production. The obstacles to breastfeeding seen so far are that post sc mothers feel the pain experienced by mothers after surgery, which makes mothers focus on self-recovery and choose formula milk to give to their babies, and so there is no milk production so that families give formula milk as a substitute. options until breastfeeding is smooth again.

From the results of interviews with midwives who work in the midwifery room, she understands the benefits of breastfeeding. However , he confirmed that giving formula milk at the beginning of birth is still recommended considering the condition of the mother who is still in pain and worried about the surgical wound and the mobilization of the mother who is still awkward to breastfeed . Midwives also teach correct breastfeeding techniques and breast care so that breast milk comes out quickly and provide education about maternal food so that milk production is abundant.

From interviews with midwives , the referrer said that when doing posyandu the midwife always promoted the benefits and importance of breastfeeding and had a class program for pregnant women in collaboration with village government officials which was held once a month. In the mother's class, midwives and health workers provide education about breast care, lactation information and things that need to be prepared for childbirth

Conclusion

Based on the results of the research and discussion with the title Analysis of Factors Affecting Breastmilk Expenditure in Post Sectio Caesarea Mothers at the Sidikalang Regional General Hospital in 2021, as described above, it can be concluded that there is a positive and significant effect between the frequency of breastfeeding and the production of breast milk. (sig 0.000<0.05), breast care (sig 0.002<0.05), maternal food (sig 0.000<0.05), breastfeeding techniques (sig 0.000<0.05) , SPEOS method (sig 0.000<0, 05). There was no positive and significant effect between hospitalization (sig 0.210 <0.05), birth weight and breastfeeding expenditure. (sig 0.201 <0.05) , gestational age with milk expulsion. (sig 0.201<0.05).

Suggestion

It is recommended for health workers at Sidikalang Hospital to continue to promote breastfeeding by doing IMD and encouraging mothers in breastfeeding and training mothers in breastfeeding techniques, SPEOS techniques. As well as supporting government programs related to breastfeeding and educating mothers to increase breast milk production and not relying on formula milk for newborns. It is hoped that pregnant women, breastfeeding mothers, especially Post SC mothers can increase knowledge and education on breastfeeding during antenatal care in the third trimester and Post SC perform IMD and how to stimulate milk production by asking the midwife or nearest health worker.

References

Angriani. R., Sudaryati E, & Lubis Z. (2017). The Relationship between Breastfeeding Frequency and Smooth Breast Milk Production in Post Partum Mothers in the Work

Area of Peusangan Selatan Health Center, Bireuen Regency, Aceh Province, *J Muara Sains, Medical Technology, and Health Sciences*. 2(1):299–304.

- Atikah Proverawati S. A., Hadijono R. S. (2009). PP POGI. Textbook of Nutrition for Midwifery. March. 2009. 1-28 p.
- Diati, O. C. A. (2015). *Hubungan Berat Badan Lahir dengan Onset Laktasi pada Ibu Postpartum di RS PKU Muhammadiyah I Yogyakarta* (Doctoral dissertation, STIKES'Aisyiyah Yogyakarta).
- Dindy C, Study P, Nursing I, Medicine F, Science AND, Islam U, (2016). *Overview of breastfeeding in infants with post sectio caesarea mothers in Tangerang Regency General Hospital and Private Hospital in Depok 2016*. (Thesis: Stikes Kepanjeng)
- Evayanti A. (2019). Good Breastfeeding Techniques in Reducing the Incidence of Creaked NIPPLE. *J SMART Midwifery* 5(2), 37.
- Fatonah U. (2017). *The Effectiveness Between Oxytocin Massage and Breastcare Against Breast Milk Smoothness in Post SC Mothers in the Bougenvil Room, RSUD Dr. Sudirman*. Kebumen: Stikes Muhammadiyah Gombang
- Ginting, E. P. (2019). Factors influencing the failure of early breastfeeding initiation in post sectio caesaria mothers at the Binjai Army Hospital
- Goddess A. D. C. (2014). Factors Affecting Smooth Milk Production. *Journal of Aisyiyah Med.* 4
- Hastuti P, Wijayanti IT, Bakti A, Pati U, Bakti A, Pati U. (2017). The effect of nutrition fulfillment and anxiety level on breast milk expenditure in Rembang village. II(2).
- Idris, F. P. (2020). The Effect of Oxytocin Massage by Husband on Mother's Response to Breastfeeding in Gowa Regency, South Sulawesi. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 54(4), 206-213.
- Mukarramah S. (2021). Effect of Breast Care on Smooth Milk Production in Postpartum Mothers at KASSI-KASSI Health Center, Makassar. *Makassar Health Polytechnic Nursing Media*. 12(1),11.
- Isnana, F., Nurhidayah, I., & Hendrawati, S. (2018). The Differences in Production of Breastmilk in Postpartum Mother with Low Birth Neonates Who Received Oxytocine Massage in Bandung. *Advanced Science Letters*, 24(9), 6922-6925.
- Ningrum, E. F. (1967). The Relationship between Energy and Protein Adequacy Levels with Breast Milk Production in Breastfeeding Mothers in Bawen Village, Bawen District, 2016. *Angew Chemie Int Ed* 6(11), 951–952. 1967;13(April):15–38.
- Nugraheni D. E., & Heryati K. (2017). Speos method (endorphin, oxytocin and suggestive massage stimulation) can increase milk production and increase baby's weight. *J Health*. 8(1),1–7.
- Purnama, E., & Sulastri, S. K. (2016). *Peningkatan Pengetahuan Teknik Menyusui Pasien Post Sectio Caesarea Di Rsu Assalam Gemolong* (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Radharisnawati, N. K., Kundre, R., & Pondaag, L. (2017). Hubungan pemenuhan kebutuhan gizi ibu dengan kelancaran air susu ibu (asi) pada ibu menyusui di puskesmas bahu kota manado. *Jurnal Keperawatan*, 5(1).
- Rinata, E., Rusdyati, T., & Sari, P. A. (2016). Teknik Menyusui Posisi, Perlekatan Dan Keefektifan Menghisap-Studi Pada Ibu Menyusui Di Rsud Sidoarjo. In *Prosiding Seminar Nasional & Internasional* (Vol. 1, No. 1).

- Roesli, U. (2000). *Mengenal ASI eksklusif*. Niaga Swadaya.
- Sari D. P., & Rahayu H. E.(2017). *The Effect of the Speos Method on Breast Milk Production in Post-C-section Mothers at the Tidar Regional General Hospital, Magelang City in 2017*. 183–90.
- Sudargo T, Kusmayanti NA, Aristasari T, Meliawati Z, Nurhayati S. (2019). *Exclusive breastfeeding as the perfect food for babies*. Gadjah Mada University Press.
- Sugiyono D. (2013). Educational research methods with quantitative, qualitative and R&D approaches.
- Susanthi, N. N. T. (2021). The Effect of Joint Hospitalization with Breast Milk Production in Post Sectio Caesarea Mothers. *J Priority Nursing*. 4(2):85–92.