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Key Factors Influence the Expenditure of Breast Milk in Post-Sectio Cesareana Mothers at Regional Hospital Batam, Indonesia

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ABSTRACT

Aim and objective of this research is to establish the relating and contributory factors to the formation of breast milk among post-caesarean section (SC) mothers at Embung Fatimah Regional Hospital Batam City. Breastfeeding is known to offer lots of health benefits to the baby, and the mother as well; unfortunately, many post-SC mothers face difficulties in lactation. Sequential exploratory design was used: quantitative data was collected from 54 post-SC mothers, qualitative data from post-SC mothers, midwives and health staff. Some of the factors that were examined in the study included frequency of feedings, breast care, rooming-in, maternal diet, birth weight, feeding techniques employed and the gestational period. Altogether, quantitative findings pointed towards the association of independent variables with smooth breast milk production as follows: regularly frequency of breastfeeding (p = 0. 000), proper care of the breasts (p = 0. 002), rooming in (p = 0. 002), adequate diet of the mothers (p = 0. 000), mothers' gestational age /full term/b (p = 0. Other observable variables such as mode of feeding which includes the combined nursing care and birth weight do not significantly predict each other. Most dominant factors considered by the logistic regression analysis were maternal nutrition and the frequency of breastfeeding. The qualitative results that supported the significance of educating women on how to breast feed, proper care of the breast and the value of family support on breastfeeding results. There was also an indication that mothers who were closely monitored by midwives and other health care givers experienced less problems in their milk flow. These results emphasise the need to enhance the provisions of breastfeeding education, healthcare and nutrition; especially for post-SC mothers to ease successful breastfeeding and improve the health of both mother and child.

Keywords**:** *Breast Milk Production, Post-Caesarean, Breastfeeding Frequency, Maternal Nutrition, Breast Care*

INTRODUCTION

Child bearing is a blessing that comes with a lot of joy especially for the mother who is nursing a new born baby. According to the mother, there is relationship developed during the process of breastfeeding. Happiness of a mother becomes perfect when breastfeeding knows that the mother has given the best child in her life. There are many kids across the world who are sick with diseases that they wouldn't need to get sick if they were being breastfed. Breastfeeding also has short-term and long-term benefits to both the mother and the child, in that they are protected from a range of both the acute and chronic conditions (Infant, 2019). As stated by the World Health Organisation (WHO), it is un-surpassed way of feeding that provides infant with the right nutrients for proper growth and development. Breast milk comprises antibodies that protects neonates from many diseases, and mother's milk (ASI) is the best feed for neonates. In case exclusive breastfeeding is implemented worldwide, it may help reduce the child

mortality by 13 percent at least for the children below 5 years. According to WHO, improvement of the practices of breastfeeding, it is possible to minimize the high rate of mortality among children aged below 5 years (WHO, 2016). From the perspective of the Indonesian Ministry of Health (Republic of Indonesia), you can prevent 823000 child deaths and 20000 maternal deaths if a child is breastfed optimally. This means that failure to breast feed can impact on the low level of intelligence which leads to losses economically. Not only that, but it is also protective of babies' immunity levels (Santoso et al., 2023). WHO suggested that every baby should be exclusively breast fed for the first six months of life. But some mothers don't practice exclusive breastfeeding because of the reason, their milk did not come out or just little that it cannot feed the baby.

The UN 2030 Agenda for Sustainable Development includes the SDGs that have the target of at least 12 neonatal deaths per 100 000 live births and infant and child deaths of at least 25 per 100 000 births by the year 2030. The mortality rate in Indonesia in 2022 was 21 per 100,000 births while the declining trend was not so steep. One of which was approximated at contributing to this was the proper compliance with exclusive breastfeeding (W. R Harwati, 2020). Data from Global Breastfeeding Scorecard obtained from All the 194 countries included in the study conducted by the World Health Organisation (WHO) showed that only 40 percent of infants are exclusively breastfed with only 23 countries having exclusive breastfeeding rates above 60 percent. Although the World Health Organisation aims for at least 50% exclusive lactation by 2025, the realities of the current poor practises of breastfeeding differs significantly especially in developing countries. But still the overall participation of exclusive lactation participants across the globe are considerably low than the estimated projections (WHO, 2020). Exclusive breastfeeding rates remain low in the Asian continent; East Asia, by 30%; South Asia 47%; and developing countries at 46% are all on the Asian continent. In particular, exclusive breastfeeding is given to less than forty percent of children under the age of six months (Sabriana et al., 2022). The percentage of EBF is still below 35 % in some countries in SEA hence the WHO target of 50% is still far from being achieved. Among three countries in ASEAN region namely the State of Philippines, Vietnam and Myanmar, the percent of exclusive breastfeeding were 34%, 27% and 24% respectively (Sabriana et al., 2022).

The exclusive breastfeeding rate amongst Acehnese women, in the province of Aceh, on the island of Sumatra is 48 percent. 17 percent with the highest rate in West Sumatra the 68 percent the lowest. In Riau 29% with the highest rate at 11% and the lowest rate at 35. 0. 01% the data used in this context is from the Ministry of Health of the Republic of Indonesia. In some of the provinces in Java for instance the West Java the rate of the Birth control is relatively high at 90. It reaches 79% while in East Java it is 77. 51%. East Kalimantan has a prevalence of 70. 02 % while the North Sulawesi has a prevalence of only 60. 45%, while North of Maluku 60. 05%. The least prevalence of the species is recorded in Gorontalo province and the prevalence rate here is 30. 71%. In general, the national target of 40% has been accomplished in terms of exclusive lactation. (Beyer et al., 2006). The overall trend in North Sumatra Province in exclusive breastfeeding of infants has inclined from 2015 to 2020 with some fluctuation and in 2021 a drastic drop of 16 %. 09% from the previous year but if it is to be in a situation where it has the biggest achievement of the year 2008 by a margin of 10%. The national plan aims to 40% target achieved on 2019 and the 45. 31% achievement. Provinces, from 33 regencie s/ cities, 16 show achievement rate of 40 percent and above. These are Asahan 96. 61%, Labuhanbatu Selatan 89. 41%, Phakpak Bharat 75. 11%, Padang Sidempuan 72. 05%, Coal 67. 77%, Tebing Tinggi 62. 44% Si- malungun 61. 86 %, Langkat 58. 93%, Humbang Hasundutan 53. 52 South Tapanuli: 45. 97%, South Nias: 45. 90%, Serdang Bedagai: 48. 57%, Deli Serdang: 43. 93%, Padang Lawas: 42. 73%, and Mandailing Christmas: 40 Meter Ram. 28%. Padang Lawas Utara having the score of only 9. 30% and North Nias having a score of 7. 86% for the

year 2020 are the two districts which have achieved less than 10%. The results of this investigation were obtained in a district in which the enrolment was 47. There was improvement in the coverage of EBF from 25% in 2012 to 29% in 2018 among the sampled women. But if we look at what has been accomplished in the process of exclusive breastfeeding over the past seven years.

METHODS

This study's method is mixed sequential explanatory design. Mixed research is a research approach that involve the use of both quantitative and qualitative research. Quantitative research phase is one of the methods that is used to evaluate specific theories concerning variables by comparing the results they obtained. These variables are often measured by research instruments so that numerical data may be analysed by formal statistical processes. Data from cross-sectional study was used to conduct descriptive research. Therefore, the aim of this quantitative study was to examine the possible impact of the mother's age, education, the method of feeding, breast care, and the joint care, the mother's nutrition, the birth weight, the feeding method, gestational age, the expenditure of breast milk on post-SC mothers. The study conducted at the Public Relations Room of embung Fatimah regional hospital, in Riau Island, Indonesia. The reason why the location of this study is selected is because there are still many mothers found not breastfeeding at the onset of feeding the baby. As it is seen, the study time was conducted in December to January 2024. The participants for the study were postpartum women who birth in an SC in Embung Fatimah Regional Hospital, Batu Aji District, Batam City. The Post SC mother population in the inpatient room embung fatimah regional hospital Batam City is 120 persons. KEY INFORMATION: 3 mothers selected by purposive sampling from those that give birth in a SC at Embung Fatimah Regional Hospital Batam City. Supporting Information: In this scene 3 are supporting the husband or family, 1 doctor as DPJP mother, 1 doctor as DPJP baby, 1 as the head of the room, the midwife staff, 3 midwives refer. What about large population is concerned the average number of inpatients of Post SC patients in Embung Fatimah Regional Hospital in Batu Aji District, Batam City, Riau Islands, 120 people per month. To find out more dominant factors affect this study using the Binary Regression Test (Logistics Regression) Survey results are analyzed using the Chi-Square test and to find out the most dominant factor for the implementation of ANC is analyzed by logistics regression tests.

RESULTS & DISCUSSION

Table 1. Factors Affecting the Expenditure of Breast Milk in Post Sectio Caesarea Mothers at Embung Fatimah Hospital, Batu Aji District, Batam, Riau Islands

Factors	Smooth Expenditure ASI (N, %)	P-Value
Frequency of Breastfeeding		
Not Regular	4 (7.4)	
Regular	25 (46.3)	0.000
Breast Care		
Not Done Well	3 (5.5)	
Done Well	26 (48.2)	0.002
Rooming In		
Not Done	0 (0.0)	
Done	29 (53.7)	0.002
Mother's Food		
Poor	1 (1.9)	
Good	28 (51.8)	0.000
Low Birth Weight		
<2500 grams	0 (0.0)	

>2500 grams	29 (53.7)	0.000
Breastfeeding Techniques		
Poor	1 (1.8)	
Better	28 (51.9)	0.000
Gestational Age		
Premature <37 weeks	0 (0.0)	
Mature 37-40 weeks	28 (51.9)	0.000
Postdate >40 weeks	1 (1.9)	

Statistical Analysis

Chi-Square Test: Test of the relationship between the expenditure of breast milk and categorical variables namely, breastfeeding frequency, breast care, rooming in, mother's food, birth weight, breastfeeding techniques and gestational age is done with the help of chi-square. Frequency of Breastfeeding and Milk Expenditure: P value of the chi-square test indicated the association was highly significant which was equal to 0. 05 at 0. 000. This goes a long way in showing that regular bromatine breastfeeding enhances the likely hood of having smooth milks expenditure. Breast Care and Milk Expenditure: The hypothesis was proven where the result of the chi-square test showed it to be significant at (p = 0. 002). It is therefore believed that those mothers who practice good breast care practices are likely to record a smooth trend in the expenditure on milk. Rooming In and Milk Expenditure: A statistically meaningful relationship was established (p = 0. 002). The implication which was that mothers who practiced rooming in had smooth milk expenditure was deduced from the results obtained during the research. Mother's Food and Milk Expenditure: As for the test results, there is a positive relationship between a scored result and the p = 0. 000, which means that consumption types of the mothers with good dietary intake have smooth expenditure on milk. Low Birth Weight and Milk Expenditure: Two variables were correlated where; the infant birth weight exceeded 2500 grams have mothers with smooth milk expenditure and the probability value is equal to 0. 000. Breastfeeding Techniques and Milk Expenditure: The chi-square test for dependency also proved to have dependence of two variables were dependent with a p = 0. 000, suggesting that successful techniques of breastfeeding are in a correlation with proper milk outlay. Gestational Age and Milk Expenditure: The test signified small P value of 0. 000, thus, establishing the fact of positive relationship between full-term pregnancy and smooth firm of milk expenditure.

Logistic Regression Analysis: This was used to test for the most influential predictors to breast milk expenditure. The logistic regression model included all the variables and found significant associations for: Breastfeeding Frequency: The findings have also indicated that regular breastfeeding frequency significantly improves the chances of 'smooth' milk expenditure with the B = 2. 311, p = 0. 030. Mother's Food (B = 4. 084, p = 0. 003): When a child is supplied with a proper diet then the chances of that child becoming unhealthy are minimized of smooth milk expenditure. And characteristics of Respondents Based on data obtained from the results of research with 54 respondents can be seen in the Frequency Distribution Table as follow:

Table 2. Factors that affect the expenditure of breast milk on mothers Post *Sectio Caesarea* in Embung Fatimah Hospital Batu Aji District Batam Riau Islands

The Frequency of Breastfeeding	**Smooth Expenditure ASI**				**Total**		**P - Sig**
	- Current		**Current**				
	N	**%**	**N**	**%**	**N**	**%**	
The frequency of Breastfeeding							
is Not a Regular	18	33,3	4	7,4	22	40	
Regular	7	13,0	25	Of 46.3	32	59	0,000
Total of	25	of 46.3	29	Of 53.7	54	100,0	
Breast Care							
Done no good	13	24,1	3	5,5	16	29,6	
well Done	12	22,2	26	48,2	38	70,4	0,002
Total	25	of 46.3	29	of 53.7	54	100,0	
Rooming							
Not done	2	to 3.3	0	0	2	a 3.7	0.002 to
Do	23	42,6	29	Of 53.7	52	To 96.3	
Total of	25	of 46.3	29	Of 53.7	54	100	
Food Mom							
Bad	20	37,0	1	1,9	21	38,9	0,000
Good	5	9,3	28	Of 51.8	33	61,1	
a Total of	25	of 46.3	29	Of 53.7	54	Of 100	
Low Birth Weight							
<2500 grams	2	to 3.7	0	0	2	3,7	
>2500 grams	23	42,6	29	of 53.7	52	to 96.3	0,000
Total of	25	of 46.3	29	Of 53.7	54	100	
Breastfeeding Techniques							
Bad	16	29,6	1	1,8	17	31,5	
Better	9	of 16.7	28	Of 51.9	37	To 68.5	0,000
Total of	25	of 46.3	29	Of 53.7	54	100	
Gestational Age							
Prematur <37 mio	2	a 3.7	0	0,00	2	3,7	
Matur 37-40 mio	23	42,6	28	of 51.9	51	94,4	0,000
Postdate >40 weeks							
a Total of	25	of 46.3	29	of 53.7	54	100	

According to the Chi-square test results, the p-value of 0.003 is less than 0.05, indicating a correlation between the frequency and the expenditure of breast milk among post-SC mothers at Embung Fatimah District Hospital. The chi-square test results showed that the value of p-value was 0.002, which is less than 0.05. This indicates that there is a correlation between breast care and breast milk expenditure post-SC in Embung Fatimah District Hospital in Batu Aji, Batam

City. Batu Aji, Batam City.

Table 3. Factors that influence the expenditure of breast milk Post SC in Embung Fatimah Hospital Kec. Batu Aji Batam City in Embung Fatimah District Hospital. Batu Aji Batam City

Variable Name	*B*	*S. E.*	*Wald*	*Df*	*Sig.*	*Exp(B)*
Frequency Using	2,311	1,065	4,712	1	0,030	10,089
Payment Services	1,484	1,232	1,451	1	0,228	4,410
Treat Combined	-19,307	630206	0,000	1	1.000	0,000
Mother's Food	4,084	1,384	8,707	1	0,003	59,938
Birth Weight	16,210	40192	0,000	1	1,000	1,096
Baby Technique Use	1,930	1,621	1,419	1	0,234	6,892
Gestational Age	18,316	40192	0,000	1	1,000	9,010
Constant	-47,171	55284,957	0,000	1	0,999	0,000

The results of the logistic regression test indicate that all variables were analyzed. These variables consist of the frequency of breastfeeding (GIS 0.030), breast care (GIS 0.228), rawat join (GIS 1,000), mother foods (GIS 0.003), baby's birth weight (GIS 1,000), breastfeeding techniques (GIS 0.234), and gestational age (sig 1,000).

Qualitative Research Results

Results of the interview with the informant of the informant (mother Post Sectio Caesarea) on the frequency of breastfeeding

Table 4. Matrix of interviews with informants (mothers Post Sectio Caesarea) about the frequency of breastfeeding

Informant	Interview Results
Informant 1	Breast milk is beneficial for the baby as food and prevents the baby from contracting various diseases
Informant 2	The benefits of breast milk for babies are that the baby's immune system is getting stronger, the benefits for the mother are to reduce bleeding after giving birth. Benefits of breast milk so that children are not susceptible to disease

Informant 1 said that according to the mother the benefits are food and prevent the baby from contracting various diseases, the known frequency of breastfeeding is all the baby wants and if the baby has released itself indicates the baby has enough breast milk, after the baby has suckled more smoothly since the second day, informant 2 said the benefits of giving Asiialah the benefits of breast milk in addition to immunity for the baby are also useful for the mother to reduce bleeding. The frequency of regular feeding mothers 8-12 times a day and feed 7-10 minutes on one breast. Mercy is getting better every day. Informant 3 said the benefits of breast milk are the benefits of breast milk so that children are not susceptible to disease, he said that breast milk has not been smooth. And the frequency of breastfeeding is irregular and still interspersed with the provision of breast milk companion (PASI). And say breast milk has not been smooth.

Table 5. Matrix of interviews with informants (mothers Post Sectio Caesarea) about Breast Care

Informant	Interview Results
Informant 1	“Yes, I heard the time check to the midwife. The midwife told to do it at home if you want to take a shower, she said 2 times a day.
Informant 2	“ Yes, I've heard from the media and I find out how from friends. But I rarely do. Only if you remember. Because if you look at it, it's recommended... only ultrasound then examined tension explained the development of the womb and

	the baby then given vitamins only
Informant 3	“There never was, Ma'am..but I don't know if it ever was..I don't remember me..I don't think there is a mother.”

Breast care that Informant 1 said he knew Breast Care from midwives and did it at home and did when going to shower and when going to breastfeed while informant 2 stated he had read from the media and find out with his friend and did before bathing. Informant 3 said never heard of and ngak never did.

Table 6. Matrix of Interview result with informant (mother Post Sectio Caesarea) about Rawat join

Informant	**Interview Results**
Informant 1	“If since being treated me and the baby in one room but early I gave birth to him in my crib sampin, if the baby mennaggis given milk and put to sleep again in bed”
Informant 2	“Yes ma'am, I was treated in one room with my baby. My husband took care of my brother who was taking care of my baby. When I sleep, I put it back on the bed.”
Informant 3	“Since the birth of the baby in sampigka but in his bed. But if I don't have a car, I can't carry it.”

Based on the table above, from the results of the depth interview, it is known that the Informant 1 said that he cared for the baby in one room. Occasionally the mother carries while breastfeeding only.Informant 2 said he was treated with the mother and carried the mother while breastfeeding only, while informant 3 said the baby was born next to mom but in a different bed. Mom didn't hold her baby in her arms.

Table 7. Matrix of interviews with informants (mothers Post Sectio Caesarea) about maternal food

Informant	**Interview Results**
Informant 1	“If I eat nutritious food, surely the milk is also nutritious and smooth.When I was pregnant for the first time, I was given a lot of food to eat, wake up and meat soup, given a bit of salt, he said to make me thirsty quickly and I drank a lot and there was a lot of milk.”
Informant 2	“Good food when breastfeeding. the milk must be good too. Because what the mother eats is also the milk content in the baby's drink. You need to eat vegetables, such as carrots, to wake up and feel good.”
Informant 3	“The important thing is to eat vegetables and fish with rice every day..if you can drink milk, it must be good. Especially if when my first child my mother cooked vegetables wake up given coconut milk and chicken meat that is Suir suir said let my breast milk a lot. According to my obstetrician, I was required to consume a greater quantity of food than I had consumed prior to becoming pregnant due to the presence of additional infants that required nourishment. Additionally, the time check during my pregnancy advised that I purchase breast-feeding milk and consume it twice daily. Additionally, I was provided with bread and green bean porridge in the class of pregnant women, as well as breast milk for breastfeeding mothers.”
Informant 4	“I as a housewife”

Based on the results of the depth interview, it is known that the informant's job status is known to

Informant 1 as a housewife while helping you to sell penyet chicken. Informant 2 as a housewife and help husband somay sales at home. Informant 3, informant 4.

Table 8. Matrix of interviews with informants about antenatal care (ANC)

Informant	Interview Results
Informant 1	“Alhamdulilah... nice attitude midwife good service like,, yaa in In general, the health service was organized in this manner. Please pause. Good, friendly, suave, and simple to comprehend, with a smile, despite the occasional frown. Certainly, the examination was, if not if, as I recall it. I am aware that it has been a long time since I last forgot (informant chuckles). The sound of a child's heartbeat krok continues to be the same as the tension, weight, and height. I do not know the name of it. I am unaware of its name. that's how you remember it.”

Based on the results of the interview from the results of the depth interview, It is known that about the mother's diet, it is known that Informant 1 said he knew nutritious foods and consumed so that breast milk was smooth. Also contains the necessary protein. Of the types of food YAG so-called Mother nutrition food breastfeeding mothers are met only the habit of foods that contain high salt is a bad eating habit because it can be bad for the health of mothers and mothers never consume breast milk launcher supplements and informants 2 said mothers know and good food consumption containing staple foods, vegetables, side dishes (such as fish, eggs, meat) and fruits plus milk. But the mother no consumption of supplements facilitate breast milk only blood-boosting tablets from the doctor. While informant 3 said to know if the mother's food is good then breast milk will be smooth but so far the food consumed is far from the quality and quantity of food needed by the mother of incomplete maternal consumption. Sometimes mothers only consume carbohydrate types such as gomak noodles that do not have side dishes and vegetables. Drinking blood-boosting vitamins is not routine.

Table 9. Matrix of Interview results with Matrix of Interview results with informant (mother Post Sectio Caesarea) about baby's birth weight.

Informant	Interview Results
Informant 1	"My baby weighs 3800 grams”
Informant 2	“My baby weighs 3500 grams.”
Informant 3	"My baby weighs 2800 grams”

According to the table above, the depth interview results indicate that Informant 1 reported the weight of my infant at birth as 3800 grams, while Informant 2 reported it as 3500 grams. Informant 3 reported that My Baby's birth weight was 2800 grams.

Table 10. Matrix of interviews with informants (mothers Post Sectio Caesarea) about breastfeeding techniques.

Informant	Interview Results
Informant 1	“As far as I know, the breastfeeding position can be sitting and sleeping position. The important thing to note in the baby's nose should not be closed.. to be able to breathe. After I was admitted to the hospital I was trained how to breastfeed properly.

Informant 2	“The position I have done so far is still a sitting position with the baby's new pillow placed on the pillow. But I'm more comfortable with a backrest. I did not dare to the lying position. Because this is my first experience. After I was admitted to the hospital I received instruction on the correct way to breastfeed. Additionally, they are accompanied on a daily basis. It is crucial that the infant is carried parallel to the mother's body to ensure that the baby is comfortable breastfeeding and that the white milk and the black part around the nipple are absorbed by the baby.
Informant 3	“My experience in the first child breastfeeding position it can be sitting and sleeping position. But when I had my first baby, I was terrified to breastfeed. It's not going to hurt, mom. According to the midwife, why Yes, ma'am?”

According to the table above, the results of the depth interview indicate that breastfeeding techniques are as follows: From the perspective of the first informant, the mother might be sitting or sleeping with her baby and the latter should not have his/her nose clipped. Also, the mother said that she got adequate post-birth breastfeeding teachings after being admitted in the hospital. And every day, informant 2 and the mother provided breast feeding position that was in line with the mother’s body. This was so as to check on the comfort of the baby while milking and checking on the black portions around the nipple entry to see that they were being sucked by the baby. From the interview conducted with Informant 3, she said that she breastfed her first child both while sleeping and lying down, expressing that the first born had developed blisters on the nipple due to wrong positioning when feeding the baby. Discussion From the findings of the relationship between the hour of breastfeeding and withdrawal of breast milk in the Embung Fatimah hospital, 22 mothers (40. 7%) practiced irregular breastfeeding, 18 mothers (33. 3%) experienced an abrupt withdrawal of breast milk which was not easy and 4 (7. The findings of the cross-tabulation test of frequency of breastfeeding and smooth withdrawal of breast milk was disclosed. Out of 32 subjects with reduced breast milk supply but who exclusively breast feed, 59,3% of them have their breast milk supply not smooth whereas 13. 0% freely produce only 7 individuals and 46. 3%, freely produce 25 individuals with smooth breast milk production. H0 is rejected and Ha is accepted hence the hypothesis is accepted the statistical analysis of the study used a chi-square test to establish the value pf sig which is equal to 0. 000 is smaller to 0. 05. Thus, it can be concluded that there is a positive relationship between the rate of breastfeeding and the cost of breast milk in Embung Fatimah hospital being incurred.

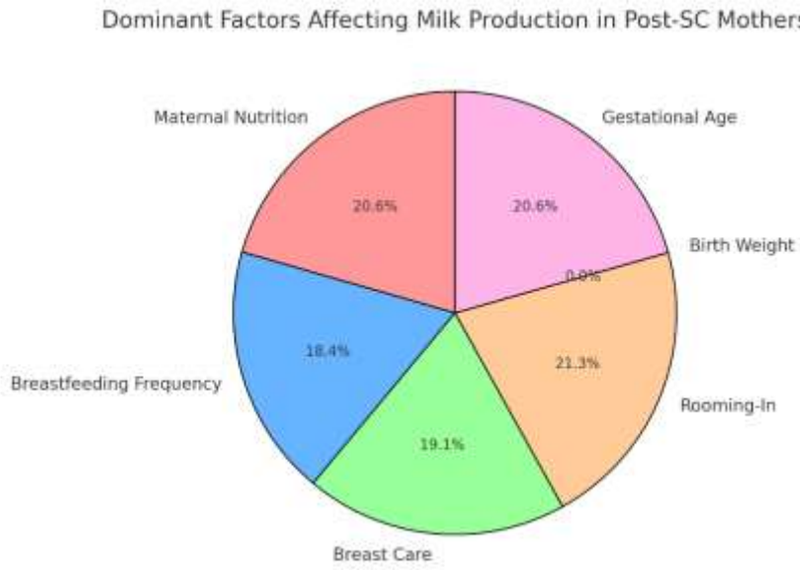
The validity of the test for the low ACL participants using logistic regression test showed the GIS with a value of 0. 046< 0. 05 with a value of B = 2. 157 pointing to the fact that the frequency of lactation has a positive and significant effect on the smooth expenditure of breast milk thus HA is accepted while HA is rejected. According to the researchers, the assumption for this is that it is related to the soreness of the surgical site and the mom’s post-SC continuing recovery. The mother is also in the period of taking in during this puerperium which is taken 1-2 days after giving birth. The mother is also in the period of taking in which starts from day one to the second day after delivery. In this phase, the mother is mostly unassertive and lays much emphasis on food and other body needs. This creates a situation which forces the mother to focus only on herself. Also, he does not pay respect to the surroundings and focuses on the environs especially the infant. In addition to early initiation of formula feeding, infants are likely to take a sweetened formula milk and they don’t need to struggle to suckle. Mothers get worried when delivering their babies with the SC process because subsequent breastfeeding causes pain since the wound is likely to open up due to movement. Breast care was cross tabulated with breast milk producers and the following findings were got; 0 Table 4. 5: Cross tabulation of breast care with breast milk producers Mothers who do not take involve in breast care 54 24. 1% Have breast milk production that is not smooth

13 5. 5% Have breast milk production that is smooth 3 This summed up to 16 people; that is 29. 6% of the population interviewed. However, 12 mothers (22.2%), who practice breast care adequately, have irregular breast milk expenditure and 26 respondents (48. 2%), have a breast milk expenditure which is unstable. In the outcomes of the chi-square tests, the p value appeared to be 0. Percentage of <002 is less than 0. 05 pointing towards the fact that there is the provision of breast care being directly proportional to the constant use of breast milk at Embung Fatimah Hospital. Therefore, Ha can be accepted while Ho can be rejected or vice versa depending on the rules used in the analysis. However, the result of the test using the logistic regression showed that the value of GIS to be 0. 228< 0. 05 with value of B = 1. 484; hence it can be concluded that there was a positive and significant effect of breast care on the seamless expenditure of breast milk (Ho was rejected; Ha was accepted). The goal of breast care is to wash the breasts at the end of pregnancy to ensure that there are no blockages that would hinder the flow of milk when the baby is born and to ensure that the baby does not feed on formula milk before the mother's breast is able to produce milk. To avoid such conditions as bumping, infections in addition to pains associated with the formation of milk barrier, this treatment has to be continuing immediately after the delivery. According to the findings, the regression coefficient of breast care variables is positive hence meaning that if the value of the treatment is increased, then the smooth production of breast milk will equally be increased, given that other independent variables are not into consideration. That way, it is revealed that the quality of milking will increase as the care of breast will enhance. The regression coefficient for the combined nursing is negative; consequently, increase in the combined nursing does not influence the uniformity of breast milk's production while controlling for other independent variables. Combined nursling does not interfere with the rhythmic page pattern of the smooth expenditure of breast milk (41). On the basis of their assumption, the researchers expect that rawat gabung does not affect expenditure on breast milk in post-SC mothers. This is due to the fact that the process of rawat gabung is performed, however, the child is not breastfed as often as maybe or whenever it desires to. This can be attributed to the fact that mothers are most times concerned with movement and discomfort arising from post-SC. When mothers are living together it is highly likely that they will use formula milk. This is also related to the knowledge of those moms who are still in the process of delivering, that the purpose of rooming in is to watch a healthy infant which gives pride feeling and a signed assurance of the health of the newborn baby. This is why the food consumed by the mother for two consecutive days does not have the balance of the mother's milk (ASI) required for the baby because the nutritive value of the mother's milk (ASI) has not been fulfilled. This is so because women nursing their babies need extra supplies of foods, as they directly feed two lives – their own and that of their infant. That is why the moms breast feeding their children should pay more attention and improve their diet because it will aid in the preparation of breast milk (62). According to MOH RI (2018) the daily calorie requirement is 2400 Kcal during the period of breastfeeding the calories allotment for each meal is based on the number of servings which is three meals a day. This includes six servings of rice (1 serving of rice is equivalent to 100 grams), vegetables, and fruit. 3. Five servings of vegetables (1 serving per 100 grams), five servings of fruit (1 serving per 50-190 grams), one egg (1 item per 55 grams), three servings of meat or fish (1 serving per 35 grams), and tempeh or tofu 3.5 servings (1 serving of 50 grams), 1 serving of milk (1 serving of 13 grams), 6 servings of oil (1 portion of 5 grams), and 2 servings of sugar (1 serving of 13 grams) (36). These nutrients are necessary to enhance the quality of breast milk production by influencing the smooth expenditure of breast milk. However, the majority of mothers' food consumption was determined by the responses of mothers who reported the highest consumption of milk, eggs, fish/meat, tempeh/year, and legumes. The theory also posits that foods that should be avoided during lactation are exclusively spicy and fizzy, rather than those that contain vitamins and protein. The requirements of nursing mothers can be met through the consumption of a variety of foods, as each food does not contain all the necessary nutrients. Therefore, it is crucial to consume a variety of foods in order to satisfy these needs. The birth weight of an infant is a metric that

indicates that the baby is physically healthy and has a normal weight at birth (12). The cross-tabulation test results in Embung Fatimah District Hospital between the baby's birth weight and the seamless expenditure of breast milk. Batu Aji Batam city collected data from 54 individuals. Of the 54 mothers, 2 (3.7%) had infants with birth weights less than 2500 grams, and 2 (3.7%) had breast milk production that was not smooth. On the other hand, 52 mothers (96.3%) had infants with birth weights exceeding 2500 grams, while 23 mothers (42.6%) had non-smooth production and 29 mothers (53.7%) had smooth ASI production. The chi-square test results indicated that the p-value value of 0.210 is greater than 0.05, indicating that there is no correlation between the seamless production of breast milk and birth weight in Embung Fatimah District Hospital. Ha declined to accept the offer, and Ho accepted it, as Batu Aji is located in Batam City. Informant 1 reported that My Baby's birth weight was 3800 grams, while Informant 2 reported that My Baby's birth weight was 3500 grams. Informant 3 reported that My Baby's birth weight was 2800 grams.

Qualitatively, Informant 1 stated that the position of breastfeeding mothers should be in a sitting or sleeping position, and the baby's nose should not be closed. Additionally, the mother stated that she was trained in appropriate breastfeeding after being hospitalized. And every day, informant 2 and the mother conducted breastfeeding in a position that was parallel to the mother's body. This ensured that the baby was comfortable while milking and that the black portions around the nipple entry were sucked by the baby. Informant 3 reported that she breastfed in both a sleeping and lying position, and that the first infant had blisters on the nipples as a result of improper breastfeeding techniques. Gestational age is the limit of the term pregnancy process and is associated with the newborn's already mature and complete growth and development. The condition of the child's birth weight and the maturation of the baby's suction power are influenced by the expiration of a full-term pregnancy. According to theory, the weight of the infant has a significant impact on gestational age, which in turn affects the expenditure of breast milk (64). Based on the cross-tabulation results of gestational age on the seamless expenditure of breast milk in Embung Fatimah District Hospital. Batu Aji Batam was obtained from 54 mothers who gave birth to a premature gestational age of less than 37 weeks. Of these, 2 individuals (3.7%) had breast milk expenditure that was not uniform. Additionally, 51 mothers (94.4%) delivered at a mature gestational age of 37-40 weeks, with 23 individuals (42.6%) exhibiting non-smooth ASI production and 28 individuals (51.9%) exhibiting smooth ASI production. Only one individual (1.9%) had a smooth secretion of breast milk when the gestational age exceeded 40 weeks. The chi-square test results indicated that the p value of 0.201 is greater than 0.05, indicating that there is no correlation between gestational age and the uniform expenditure of breast milk in Embung Fatimah District Hospital. Ha declined to accept the offer, and Ho accepted it, as Batu Aji is located in Batam City. While the logistic regression test results indicated that the value of GIS 1,000 was greater than 0.05 with a value of B = 18.316, this indicates a positive and significant relationship between the gestational age and the uniform expenditure of breast milk (Ha accepted and Ho rejected). This is due to the fact that formula feeding to babies post-SC is delayed until the mother recovers from the pain caused by SC, which affects the baby's ability to suck the nipple. Babies who already receive formula milk and those who do not require hard efforts to suck milk are less inclined to suck from the mother's breast after the milk has been released. This condition manifests in infants weighing over 2500 grams who have already reached the age of maturity in their ability to suck nipple milk. However, the baby becomes apathetic to breastfeed due to the nipple confusion that results from formula feeding, which in turn affects the occurrence of the prolactin reflex and reflex flow, thereby affecting the expenditure of breast milk. The logistic regression test indicated that the regression coefficient of the maternal food variable is positive, with a value of B=18.316. This indicates that, in the absence of other independent variables, an increase in gestational age will result in an increase in the steady expenditure of breast milk. This demonstrates that the seamless expenditure of breast milk will increase as the gestational age becomes more sufficient.

Figure. Dominant Factors Affecting Milk Production in Post-SC Mothers



The key factors that influence the production of breast milk among post-cesarean section mothers. The analysis reveals that maternal nutrition (51.8%) is the most significant factor, followed closely by breastfeeding frequency (46.3%), emphasizing the need for proper maternal diet and regular breastfeeding schedules to stimulate milk production. Other factors, such as rooming-in (53.7%), where the baby stays in the same room as the mother, and breast care (48.2%), also play important roles in promoting successful lactation. Interestingly, factors such as birth weight (0.0%) were not found to have a significant correlation with milk production, while gestational age (51.9%) still showed some influence.

Discussion

Qualitative Analysis according to the chart above, the findings of in-depth interviews with husbands, doctors, and midwives regarding the factors that influence the expenditure of breast milk in post-SC mothers revealed that one individual comprehended the significance of breast milk as the primary source of energy for infants and as a source of immune substances that protect infants from disease. that they are aware of the significance and advantages of breast milk. It is evident that Informant 1 stated, "If what I know is that breast milk is useful for babies as food and prevents babies from contracting various diseases," and the mother stated, "What I know is that breastfeeding is according to the baby's schedule, well if the baby releases itself, the baby has had enough." The mother's comprehension is a result of the information provided by the health worker or midwife during the examination while pregnant. The informant's statement, which stated, "During old pregnancy, midwives have taught how to breast care and other information about breast milk," serves as evidence. Additional food, milk, and iron supplements are provided at the posyandu, and pregnant women participate in monthly group classes. They were administered a pink book and screened for HB, HIV, and TT immunizations. According to the midwife, it was a ping pong book. Mothers are also informed and receive additional food when they examine posyandu, as the midwife advised them to read it at home as a guidebook. The mother recounted, "My midwife advised me to consume a larger quantity of food than I had consumed prior to becoming pregnant, as there were already infants requiring nourishment in addition to myself." Additionally, the time check during my pregnancy advised that I purchase breast-feeding milk and consume it twice daily. In the class of pregnant women, I was also provided with supplementary sustenance, including bread and green bean porridge, as well as milk for nursing mothers. This assertion is consistent with the assertion of pediatricians, who assert that lactogenesis is theoretically initiated at 16 weeks of gestation. Breast milk is also expelled concurrently with the

placenta's exit from the uterus. According to the notion, booster breast milk does not influence breast milk expenditure. The brain is stimulated to produce breast milk by the baby's suckling. Domperidone is the breast milk stimulant supplement that I have encountered for mothers who have recently given birth. Additionally, katuk leaves continue to be a topic of controversy; however, their consumption did not pose any issues. However, it is more critically prepared during pregnancy through the consumption of nutrients and fluids, including proteins, carbohydrates, and fats. Breast milk is primarily composed of nutrients. To ensure that milk production is boosted by the presence of nutrients and fluids. In conclusion, according to the findings of this investigation, there is a relationship factor that affects the frequency of lactating milk expenditure. (sig 0.000<0.05). The production of milk is influenced by breast care. (sig 0.002<0.05). The expenditure of breast milk is not influenced by combined suckling. (sig 0.210<0.05). The expenditure of breast milk is influenced by the food that the mother consumes. (sig 0.000<0.05). Breast milk expenditure is not affected by birth weight. (sig 0.201 <0.05). Breast milk expenditure is influenced by lactation techniques.

(sig 0.000<0.05). There is no effect of gestational age on breast milk expenditure. (sig 0.201<0.05). Advice It is expected that with this study the problems or obstacles that affect the smooth expenditure of breast milk can be optimized so that no more breastfeeding problems and improve the achievement of breast milk and become a study material for other researchers to continue to innovate research on the issue of breast milk expenditure and modification of breast milk expenditure stimulation of breastfeeding mothers, especially Post SC mothers.

CONCLUSION

This study demonstrates that several factors significantly influence breast milk production in post-caesarean (SC) mothers. Among the key determinants are regular breastfeeding frequency, proper breast care, rooming-in practices, maternal nutrition, gestational age, and correct breastfeeding techniques. Notably, maternal nutrition and breastfeeding frequency were found to be the most dominant factors driving successful lactation. These findings highlight the importance of educating mothers on proper breastfeeding practices, ensuring sufficient nutritional intake, and providing consistent healthcare support to improve breastfeeding outcomes for post-SC mothers. The study underscores the need for a comprehensive approach to support post-caesarean mothers, including targeted interventions by healthcare providers to enhance maternal education, improve nutritional support, and promote effective breastfeeding techniques. Addressing these factors can improve breast milk production, leading to better health outcomes for both mothers and their infants. Continued research and healthcare initiatives focusing on these areas will be essential to overcoming breastfeeding challenges, particularly for mothers recovering from caesarean sections.

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Author Contributions

Jennie Novitasari: Conceptualized the study, conducted the literature review, and wrote the initial draft.

Thomson Nadapdap: Designed the methodology, performed the statistical analysis, and contributed to the interpretation of results.

Ramadhani Syafitri Nasution: Supervised the data collection, provided critical revisions, and

ensured the overall integrity of the research.

All authors reviewed and approved the final manuscript.

Conflict of Interest

The authors declare no conflict of interest.

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REFERENCES

Agho, K. E., Dibley, M. J., Odiase, J. I., & Ogbonmwan, S. M. (2011). Determinants of exclusive breastfeeding in Nigeria. *BMC Pregnancy and Childbirth*, *11*, 2. https://doi.org/10.1186/1471-2393-11-2

Allen, J., & Hector, D. (2005). Benefits of breastfeeding. *New South Wales Public Health Bulletin*, *16*(3-4), 42-46. https://doi.org/10.1071/NB05011

Angriani, R., & ZL, ES. (2018). Relationship of breastfeeding frequency with smoothness. *Breastfeeding Frequency Hub with the Smooth Production of Mother's Milk*, 2(1), 299-304.

Anuhgera, D. E., Panjaitan, E. F., Pardede, D. W., Pardede, D. W., Ritonga, N. J., & Damayanti, D. (2019). Discharge of colostrum with the provision of breast care and endorphin massage in post cesarean section mothers. *J Kespro Obstetric Researcher*, 2(1), 34-40.

Bartick, M. C., Schwarz, E. B., Green, B. D., Jegier, B. J., Reinhold, A. G., & Colaizy, T. T. (2017). Suboptimal breastfeeding in the United States: Maternal and pediatric health outcomes and costs. *Maternal & Child Nutrition*, *13*(1), e12366. https://doi.org/10.1111/mcn.12366

Bartick, M., & Reinhold, A. (2010). The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. *Pediatrics*, *125*(5), e1048-e1056. https://doi.org/10.1542/peds.2009-1616

Beyer, M., Lenz, R., & Kuhn, K. A. (2006). Health information systems. *IT - Information Technology*, 48, 6-11.

Breastfeeding E., & Infant F. (2019). Exclusive breastfeeding for infant growth and development in Medan. *Journal Name*, 2(3), 104-109.

Britton, C., McCormick, F. M., Renfrew, M. J., Wade, A., & King, S. E. (2007). Support for breastfeeding mothers. *Cochrane Database of Systematic Reviews*, *1*, CD001141. https://doi.org/10.1002/14651858.CD001141.pub3

Diati, O. C. A. (2015). Relationship of birth weight with the onset of lactation in postpartum mothers at Rs Pku Muhammadiyah I Yogyakarta. *STIKes Aisyiyah Yogyakarta*.

Edmond, K. M., Zandoh, C., Quigley, M. A., Amenga-Etego, S., Owusu-Agyei, S., & Kirkwood, B. R. (2006). Delayed breastfeeding initiation increases risk of neonatal mortality. *Pediatrics*, *117*(3), e380-e386. https://doi.org/10.1542/peds.2005-1496

Eidelman, A. I., Schanler, R. J., Johnston, M., Landers, S., Noble, L., Szucs, K., ... & Lawrence, R. A. (2012). Breastfeeding and the use of human milk. *Pediatrics*, *129*(3), e827-e841. https://doi.org/10.1542/peds.2011-3552

Enggar et al. (2022). The use of contraceptives and the frequency of breastfeeding in the working area Sangurara Puskesmas Palu. *J Sound Health Researcher Forikes*, 13, 234-238.

Grummer-Strawn, L. M., & Rollins, N. (2015). Summarising the health effects of breastfeeding. *Acta Paediatrica*, *104*(S467), 1-2. https://doi.org/10.1111/apa.13136

Hanson, L. A., & Korotkova, M. (2002). The role of breastfeeding in prevention of neonatal infection. *Seminars in Neonatology*, *7*(4), 275-281. https://doi.org/10.1053/siny.2002.0129

Horta, B. L., & Victora, C. G. (2013). Long-term effects of breastfeeding: a systematic review. *World Health Organization*. https://apps.who.int/iris/handle/10665/79198

Horta, B. L., Bahl, R., Martines, J. C., & Victora, C. G. (2007). Evidence on the long-term effects of breastfeeding: Systematic reviews and meta-analyses. *World Health Organization*. https://apps.who.int/iris/handle/10665/43623

Ip, S., Chung, M., Raman, G., Chew, P., Magula, N., DeVine, D., ... & Lau, J. (2007). Breastfeeding and maternal and infant health outcomes in developed countries. *Evidence Report/Technology Assessment No. 153 (Prepared by Tufts-New England Medical Center Evidence-based Practice Center, under Contract No. 290-02-0022). AHRQ Publication No. 07-E007*. Rockville, MD: Agency for Healthcare Research and Quality. https://www.ncbi.nlm.nih.gov/books/NBK38337/

Ip, S., Chung, M., Raman, G., Chew, P., Magula, N., DeVine, D., ... & Trikalinos, T. A. (2007). Breastfeeding and maternal and infant health outcomes in developed countries. *Evidence Report/Technology Assessment No. 153 (Prepared by Tufts-New England Medical Center Evidence-based Practice Center, under Contract No. 290-02-0022). AHRQ Publication No. 07-E007*. Rockville, MD: Agency for Healthcare Research and Quality. https://www.ncbi.nlm.nih.gov/books/NBK38337/

Jones, G., Steketee, R. W., Black, R. E., Bhutta, Z. A., & Morris, S. S. (2003). How many child deaths can we prevent this year? *The Lancet, 362*(9377), 65-71. https://doi.org/10.1016/S0140-6736(03)13811-1

Kramer, M. S., & Kakuma, R. (2012). Optimal duration of exclusive breastfeeding. *Cochrane Database of Systematic Reviews, 8*, CD003517. https://doi.org/10.1002/14651858.CD003517.pub2

Kustriyani, M., & Mariyati, M. (2021). Empowerment of health cadres to increase milk production in nursing mothers. *Journal Cares About Masy*, 2(4), 273-278.

Labbok, M. H. (2012). Global baby-friendly hospital initiative monitoring data: update and discussion. *Breastfeeding Medicine, 7*(4), 210-222. https://doi.org/10.1089/bfm.2012.0066

Lauer, J. A., Betrán, A. P., Barros, A. J. D., & de Onís, M. (2006). Deaths and years of life lost due to suboptimal breast-feeding among children in the developing world: a global ecological risk assessment. *Public Health Nutrition, 9*(6), 673-685. https://doi.org/10.1079/PHN2005891

Limbong, M., & Desriani, D. (2023). Primipara's knowledge of breastfeeding techniques. *Jurnal Ilmiah Kesehatan Sandi Husada*, 12(1), 91-96.

McFadden, A., Gavine, A., Renfrew, M. J., Wade, A., Buchanan, P., Taylor, J. L., ... & MacGillivray, S. (2017). Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database of Systematic Reviews, 2*, CD001141. https://doi.org/10.1002/14651858.CD001141.pub5

Mulazimah, M., Nurahmawati, D., Kholis, M. N., Noeraini, A. R., Junita, M. E., & Klau, A. S. (2023). Increased breast milk production of breastfeeding mothers through breast care at Puskesmas Perawatan Ngletih Kota Kediri. *Contributions of Researchers and Service to the Masy*, 3(2), 88-97.

PGRS guidelines. (Year). Guidelines PGRS (Hospital Nutrition Services). pp. 431-432.

Prakash, R., Nastiti, A. A., & Jihan, T. (2019). Analysis of factors related to the mother's behavior to increase breastmilk production. *Indian Journal of Public Health Research & Development*, 10(8), 2642-2647.

Radharisnavati, N. K., & Kundre, R. (2017). Nutritional relationship. *E-Journal of Nursing*, 5(1).

Renfrew, M. J., Pokhrel, S., Quigley, M., McCormick, F., Fox-Rushby, J., Dodds, R., ... & Williams, A. (2012). Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK. *UNICEF UK*. https://www.unicef.org.uk/wp-content/uploads/sites/2/2012/11/Preventing_disease_saving_resources.pdf

Retno, M. S. (2017). Nursing relationships combine with breast milk production in puerperal mothers. *Ilmiah Nursing*, 3(2).

Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., ... & Victora, C. G. (2016). Why invest, and what it will take to improve breastfeeding practices? *The Lancet*, *387*(10017), 491-504. https://doi.org/10.1016/S0140-6736(15)01044-2

Rollins, N. C., Nair, N., Horton, S., Krasevec, J., Frongillo, E. A., Lutter, C. K., ... & Black, R. E. (2016). Breastfeeding and child survival: a global perspective. *Epidemiology Review*, *38*(1), 277-294. https://doi.org/10.1093/epirev/mxv016

Sabriana, R., Riyandani, R., Wahyuni, R., & Akib, A. (2022). Relationship of knowledge and attitudes of mothers about exclusive breastfeeding. *Jurnal Ilmiah Kesehatan Sandi Husada*, 11, 201-207.

Sankar, M. J., Sinha, B., Chowdhury, R., Bhandari, N., Taneja, S., Martines, J., ... & Bahl, R. (2015). Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis. *Acta Paediatrica*, *104*(S467), 3-13. https://doi.org/10.1111/apa.13147

Santoso, H., Estuti, W., Anwar, M. C., Sulistiyono, P., & Rahayu, D. (2023). The incidence rate of exclusive breastfeeding failure in fishing communities during the Covid-19 pandemic. *AcTion Aceh Nutr J*, 8(1), 1.

Sari, D. P., & Rahayu, H. E. (2017). The effect of Speos method on breast milk production in post cesarean section mothers in Tidar General Hospital Magelang City. *Urecol*, 183-190.

Stuebe, A. M., & Schwarz, E. B. (2010). The risks and benefits of infant feeding practices for women and their children. *Journal of Perinatology*, *30*(3), 155-162. https://doi.org/10.1038/jp.2009.107

Victora, C. G., Bahl, R., Barros, A. J. D., França, G. V. A., Horton, S., Krasevec, J., ... & Rollins, N. C. (2016). Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *The Lancet*, *387*(10017), 475-490. https://doi.org/10.1016/S0140-6736(15)01024-7

Victora, C. G., Horta, B. L., de Mola, C. L., Quevedo, L., Pinheiro, R. T., Gigante, D. P., ... & Barros, F. C. (2015). Association between breastfeeding and intelligence, educational attainment, and income at 30 years of age: a prospective birth cohort study from Brazil. *The Lancet Global Health*, *3*(4), e199-e205. https://doi.org/10.1016/S2214-109X(15)70002-1

W., R., & Harwati, R. (2020). Relationship of education level with exclusive breastfeeding knowledge in pregnant women at Puskesmas Wonogiri II. *Jurnal Obstetrics*, 12(2), 186.

World Health Organization. (2016). WHO. *Journal Name*, (May), 31-48.

World Health Organization. (2020). Global breastfeeding scorecard, 2019. *Global Newborn Mortality*, (3), 1-4.