

THE RELATIONSHIP OF NUTRITIONAL STATUS AND BREAST MILK PRODUCTION IN POSTPARTUM MOTHERS AT KARUNIA KASIH HOSPITAL YEAR 2023

Septi Ika Ratnasari *, Wiwin Widyastuti

Sekolah Tinggi Ilmu Kesehatan Abdi Nusantara

Jl. Swadaya No.7, RT.001/RW.014, Jatibening, Kec. Pd. Gede, Kota Bks, Jawa Barat 17412, Indonesia

Email: septian.ika89@gmail.com

Abstract

Background: Nutritional status is a condition of the body caused by a balance between nutritional intake and needs. Breast milk (ASI) is the best nutrition and has been proven to be beneficial for the baby's life. The mother's nutritional status during lactation affecting the success of breastfeeding, malnutrition mothers are at risk of not being able to breastfeed successfully compared to well-nutrition mothers. This will negatively affect the mother's ability to produce breast milk. This situation can indicate nutritional adequacy when entering the lactation phase. Poor nutritional status of the mother and insufficient consumption of nutrients will cause the mother to become thin and unproductive in producing breast milk. **Research Objective:** To determine the relationship between nutritional status, parity and number of children with breast milk production in postpartum mothers. **Research Method:** This research used a cross sectional approach design with a sample of 1088 people. Data techniques include univariate analysis using frequency distribution and bivariate analysis using statistical calculations from the SPSS program. **Research Results:** The results of this study show that there is a relationship between nutritional status and breast milk production in postpartum mothers, which is $(0.006) < \alpha (0.050)$, indicating that nutritional status influences breast milk production, there is a relationship between parity and breast milk production in postpartum mothers with $(0.020) < \alpha (0.050)$ indicates that parity influences breast milk production, and there is a relationship between the number of children and breast milk production, namely $(0.030) < \alpha (0.050)$ indicates that the number of children influences breast milk production in postpartum mothers. **Conclusions and Suggestions:** there is a relationship between nutritional status, parity and number of children with breast milk production in postpartum mothers. It is recommended, to pay more attention about nutrition starting from pregnancy, so that nutrition will also be fulfilled when breastfeeding.

Keywords: Breast Milk Production, Nutritional Status, Parity, Number of Children

Introduction

Nutritional status is a condition of the body caused by a balance between nutritional intake and needs. Breast milk (ASI) is the best nutrition and has been proven to be beneficial for the baby's life. The mother's nutritional status during lactation affecting the success of breastfeeding, malnutrition mothers are at risk of not being able to breastfeed successfully compared to well-nutrition mothers. This will negatively affect the mother's ability to produce breast milk. This situation can indicate nutritional adequacy when entering the lactation phase (Salamah et al, 2020).

The World Health Organization (WHO) recommends that in order to reduce infant morbidity and mortality rates, babies should only be breastfed with breast milk for at least 6 months, and breast-feeding should be continued until the baby is 2 years old so that breastfeeding can be initiated within the first

hour of life. WHO has a target for 2025, one of them is increasing exclusive breastfeeding in the first 6 months. Currently, exclusive breastfeeding is given globally, namely around 44% of babies aged 0-6 months worldwide are exclusive breastfed during the periode 2015-2020, while the target is 63.8% until 2025

Exclusive breastfeeding achievements in Asia shows figures that are not much different, as a comparison, coverage of exclusive breastfeeding in Central Africa is 31.5%, Latin America and the Caribbean 39.0%, East Asia 50.0%, South Asia 81.3%. overall less than 63.8% of babies under 6 months of age are given exclusive breast milk (WHO, 2018)

National data for 2020 states that 67% of all breastfeeding mothers experience problems with breast milk production.

According to 2021 Basic Health Research (RISKESDAS) data, 52.5 percent – or only half of the 2.3 million babies aged less than six months – are exclusively breastfed in Indonesia, or a decrease of 12 percent from the figure in 2019. Breastfeeding initiation rate Early childhood development (IMD) also fell from 58.2 percent in 2019 to 48.6 percent in 2021. The target for IMD in Indonesia in 2022 is 50%, so there has been a decline in the past 3 years.

Based on data from the Central Statistics Agency (BPS), which shows that the percentage of exclusive breastfeeding nationally has continued to increase in the last 4 years, 2019-2022. The latest data shows that the percentage of exclusive breastfeeding in the country reached 72.04% of the population of babies aged 0-6 months in 2022. This figure has increased by 0.65% compared to the previous year (year-on-year/yoy) which was 71.58%. (BPS, 2022), while the government targets achieving exclusive breastfeeding at 80%.

Data in West Java for breastfeeding mothers whose breast milk production is not smooth is 58%, and in West Java the presentation of exclusive breastfeeding is 76.46% in 2021, rising to 77.00% in 2022.

Breast milk contains colostrum which is rich of antibodies because it contains protein for the body's resistance and is useful for killing germs in high quantities so that exclusive breastfeeding can reduce the risk of infant death.

The target of achieving exclusive breastfeeding has not yet been achieved optimally due to several things, including disruption or irregularity in breast milk production, among a number of factors that influence breast milk production, namely nutritional status and parity, because the lack of breast milk production can lead to lack of self-confidence in providing breast milk.

Factors that can affecting the smooth production of breast milk are nutritional status and parity (Rahmawati&halitus, 2021). Based on the phenomenon of nutritional status which can influence the smooth production of breast milk, nutritional status at the time of birth is determined based on health and nutritional status at the time of conception, the nutritional status of the mother affecting the nutritional status of the fetus and birth weight. The nutritional status of breastfeeding mothers plays an important role in the quantity and quality of breast milk, breastfeeding mothers need adequate nutrition, breastfeeding mothers with good nutritional status will produce more optimal breast milk production compared to mothers with poor nutritional status.

Based on the results of research (Rahmawati et al, 2021), almost half (48.4%), namely 15 mothers, had nutritional status, KEK and their breast milk did not come out.

This research is in line with research (Manggabarani et al., 2018) that breastfeeding mothers who have poor nutritional status experience 47.4% of breast milk production that is not smooth. Based on theory, mothers who have good nutrition will be able to produce breast milk so that the breast milk can come out smoothly because of adequate nutritional needs. Smooth breast milk is able to meet the nutritional needs of the baby so that the baby's nutrition will be met.

Poor nutritional status of the mother and insufficient consumption of nutrients will cause the mother to become thin and unproductive in producing breast milk, which can have an impact on the

baby's health (Lamani et al, 2021). The mother's nutritional status during the post-partum period is very influential, because during the post-partum period the energy metabolism process will increase, because during this period there is a physiological and metabolic adjustment process so that post-partum mothers need adequate nutrition for the development of mammary tissue as a place for lactation production.

The parity of a woman who has had three or more children and has another pregnancy, her health condition will begin to decline, be wary of the possibility that with more children the mother's womb will become weaker and breast milk production will be less because the hormone prolactin is greatly reduced (Rahmawati & Saidah, 2021) a term that related to parity, namely primipara is a woman who has given birth to a live baby for the first time, multipara is a woman who has given birth to a baby several times up to 5 times and grandemultipara is a woman who has given birth to a live or dead baby 6 times or more (Bobak, 2004).

Based on research conducted (Santi Deliani, et al, 2021), it was found that from 31 respondents, 11 respondents (35.5%) were primiparas and breast milk production was not smooth.

Mothers who give birth more than once or are multiparas produce much more breast milk than mothers who give birth for the first time or primiparas. The number of births a mother has experienced can provide experience in providing breast milk to babies. The greater the parity of the mother, the more it will influence the mother's experience in providing breast milk and knowing how to increase breast milk production. Mothers who have given birth for the first time or are primiparous will often have problems in giving breast milk to their babies (Rahmawati & Halimatus, 2021).

Based on a preliminary study conducted at KARUNIA KASIH Hospital, data was obtained that cases of post-partum mothers experiencing irregular milk production in 2022 were 67% of cases out of 100% and in 2023 January – August there were 53% of post-partum mothers who gave birth.

Based on the data above and the researcher's observations, the researcher wants to know and is interested in this problem so that "The relationship between nutritional status and breast milk production in post partum mothers at KARUNIA KASIH Hospital in 2023".

Research Methods

The research method used in this research is descriptive quantitative. Descriptive quantitative is a type of research used to analyze data by describing the data that has been collected. The research design is analytical with a cross sectional approach where data relating to the independent variable or risk and the dependent variable or effect variable are collected at the same time. With a cross sectional approach, this research uses primary data to determine the relationship between diet and wound healing after caesarean section surgery at Karunia Kasih Hospital in 2023, by carrying out measurements and observations at the same time (one time) between the independent variable and the dependent variable (Notoadmodjo, 2018).

Researchers collected data on 02 December – 30 December 2023 at Karunia Kasih Hospital, Bekasi. The sample used was 108 respondents by conducting interviews and using questionnaires. The design used in this research is cross sectional. This data collection aims to determine the relationship between nutritional status and breast milk production in postpartum mothers.

Data analysis used in this research was carried out using the Statistical for Social Science (SPSS) application. Data processing was carried out after the medical records were collected, and the data was presented in table format with explanations, arranged and grouped according to the research objectives. With Univariate and Bivariate analysis tests

Results

Frequency Distribution of Respondents Based on Nutritional Status of Postpartum Mothers at Karunia Kasih Hospital, Bekasi

Nutritional status	Frequency	Percentage
Risky	37	34,3
No risk	71	65,7
Total	108	100.0

Based on the table above, it is known that 71 respondents (65.7%) had no nutritional status and those with nutritional status were at risk. 37 respondents (34.3%) so on average postpartum mothers have no risk nutritional status (Good).

Relationship between nutritional status and breast milk production among postpartum mothers at Karunia Kasih Hospital 2023

Breast milk production	Nutritional status				Total		P value	OR
	Risky		No risk		Jml	(%)		
	F	%	F	%				
Fluent	53	75,7	17	24,3	70	100	0,006	3,463
No Fluent	18	47,4	20	52,6	38	100		
Total	71	65,7	37	34,3	108	100		

Based on the table above, the results of the analysis, based on the table, data was obtained from 70 respondents with smooth breast milk production, 53 respondents (75.7%) had a nutritional status that was not at risk and 17 respondents (24.3%) had a nutritional status at risk. And 38 respondents experienced breast milk irregularities, 18 respondents (47.8%) with nutritional status not at risk and 20 respondents (52.6%) with nutritional status at risk.

Based on breast milk production, it was found that the proportion of smooth milk production was greater in mothers with a nutritional status that was not at risk (65.7%) compared to those with a nutritional status at risk (34.3%). The P value is 0.006 and a smaller p value $\leq \alpha 0.05$ means there is a significant relationship between nutritional status and breast milk production. Meanwhile, the OR value is 3.463, meaning that mothers who are not at risk will have a 3.4 times greater chance of producing breast milk smoothly.

Frequency Distribution of Respondents Based on Parity among Postpartum Mothers at Karunia Kasih Hospital, Bekasi

Paritas	Frequency	Percentage
Primipara	27	25,0%
Multipara	81	75,0%
Total	108	100.0

Based on the table above, it is known that there were 81 respondents with multiparous parity (75%) and 27 respondents with primiparous parity (25.0%), so that on average postpartum mothers were multiparous.

Relationship between Parity and Breast Milk Expenditure in Postpartum Mothers at Karunia Kasih Hospital 2023

Breast milk production	Paritas				Total		P value	OR
	Primipara		Multipara		Jml	(%)		
	F	%	F	%				
Fluent	12	17,1	58	82,9	70	100	0,020	0,317
No Fluent	15	39,5	23	60,5	38	100		
Total	27	25,0	81	75,0	108	100		

Based on the table above, the results of the analysis, based on the table, data was obtained from 70 respondents with smooth breast milk production, 58 respondents (82.9%) were multiparous and 12 respondents (17.1%) with primiparous parity and 38 respondents experienced breast milk irregularities, 23 respondents (60.5%) were multipara parity and 15 respondents (39.5%) were primipara. Statistical testing between parity and breast milk production showed that the proportion of smooth breast milk production was more common in multiparas (75.0%) compared to primiparas (25.0%). Regarding the relationship between parity and breast milk production in postpartum mothers, the p value was 0.02, which is smaller than the alpha value of 5% or 0.05 ($p < 0.05$). This shows that there is a significant relationship between parity and breast milk production in postpartum mothers. Meanwhile, the OR value is 0.317, meaning that multiparous mothers have a 0.3 times greater chance of producing breast milk smoothly.

Frequency Distribution of Respondents Based on Postpartum Mothers at Karunia Kasih Hospital, Bekasi

Number of children	Frequency	Percentage
Living child 1	51	47,2
Living Children >1	57	52,8
Total	108	100.0

Based on the table above, it is known that the number of respondents with 1 live child was 51 respondents (47.2%) and the number of live children was >1, 57 respondents (52.8%) so that on average postpartum mothers were mothers with >1 live child.

Relationship between number of children and breast milk production among postpartum mothers at Karunia Kasih Hospital 2023

Breast milk production	Number of children				Total		P value	OR
	Living child 1		Living Children >1		Jml	(%)		
	F	%	F	%				
Fluent	27	38,6	43	51,4	70	100	0,031	1,633
No Fluent	24	63,2	14	36,8	38	100		
Total	51	47,2	57	52,8	108	100		

Based on the table above, the results of the analysis, based on the table, data was obtained from 70 respondents with smooth breast milk production, 27 respondents (38.6%) had 1 (one) living child and 43 respondents (51.4%) had > 1 living child and 24 respondents experienced irregular breastfeeding. 24 respondents (47.2%) had 1 (one) living child and 14 respondents (36.8%) had >1 living child. Statistical testing between the number of children and breast milk output obtained the proportion of smooth breast milk expenditure 57 respondents (52.8%) and not fluent 51 respondents (47.2%).

The relationship between the number of children and breast milk production in postpartum mothers was found to have a p value of 0.03, which is smaller than the alpha value of 5% or 0.05 ($p < 0.05$). This shows that there is a significant relationship between the number of children and breast milk production in postpartum mothers. . Meanwhile, the OR value is 1.633, meaning that mothers with >1 living child will have a 1.6 times greater chance of producing breast milk smoothly.

Discussion

In this chapter the discussion explained is, the results of univariate analysis and the results of bivariate analysis of the independent variables on the dependent variable and the limitations of the research and analyzed in accordance with existing literature and the results of similar research that has been carried out.

Univariate Analysis Results

A. Nutritional Status

From the results of the univariate analysis, the majority of 71 respondents (65.7%) had a nutritional status that was not at risk, and 37 respondents (34.3%) had a nutritional status that was at risk. These results are in line with research conducted which showed that 35 respondents had a nutritional status that was not at risk, as many as 31 people (88.6%) (Lamani et al., 2021)

Based on theory, the weight of a mother who has a nutritional status below normal can be described as underweight or thin, and the weight of a mother who has a nutritional status above the normal limit can be said to be overweight or obese, a mother who has a nutritional status below the specified limit. will be very easily attacked by disease and infection, while body weight that exceeds a predetermined limit will be at higher risk of degenerative diseases (Lamani et al, 2021).

Nutritional status really needs to be paid attention to in postpartum mothers. Mothers who have good nutritional status will produce more breast milk than mothers who have poor nutritional status or are obese. Mothers who have poor nutritional status will experience problems in breastfeeding because their breasts have difficulty producing breast milk, as well as mothers who are obese. Obese mothers will experience problems in breastfeeding because there is too much fat in the body so it is difficult for the milk to come out (Maqfiro & Tyas, 2018).

Based on the phenomenon that nutritional status can result in and be a factor that can influence the smooth flow of breast milk, nutritional status at the time of birth is determined based on health and nutritional status at the time of conception and also based on social and economic conditions during pregnancy, physical health level, food intake and ever contracting an infectious disease. , nutritional status will also affect the nutritional status of the fetus and birth weight (Santi&halimatus, 2021).

According to researchers' assumptions, the number of mothers who have normal nutritional status at the research site shows that they understand the importance of nutritional status in postpartum mothers. Having good nutritional status will prevent nutritional status problems from arising, because nutritional status will also influence the smooth flow of breast milk. This is because the flow of breast milk is greatly influenced by the mother's nutritional status. The higher the problem with the mother's nutritional status, the more breast milk will not come out smoothly.

B. Parity

From the results of the univariate analysis, 81 respondents (75.0%) were multiparous and 27 respondents (25.0%) were primiparous. The results of this study are in line with research conducted by showing multiparous mothers as many as (53%) (Widiastuti & Jati, 2020)

Appropriate parity will have a good impact on the mother, but multiple parity will also disturb the mother, multiparous parity has experience from previous lactation, this makes the mother better prepared to breastfeed when she has another baby so that breastfeeding becomes more effective, previous lactation experience relieves anxiety in providing breast milk to the baby. Primiparous mothers have no previous experience of lactation so this can cause stress. The stress experienced by primiparous mothers can increase levels of the hormone cortisol in the blood. This increase in the hormone cortisol will cause a decrease in levels of the hormone oxytocin which results in the flow of breast milk not flowing smoothly (Sutama et al, 2020).

Multiparous parity is good parity during breastfeeding. This is because the child has had previous experience of breastfeeding and the mother has gone through the post-partum period so that the mother's feelings of anxiety during breastfeeding cause hormones to help her breast milk production not be disrupted, but there are still other factors that make multiparous mothers' breast milk production not run smoothly. Mothers with primiparous parity often experience anxiety during pregnancy and breastfeeding because for primiparous mothers, this is the first time they have gone through this process. Anxiety in primiparous mothers will influence hormones that influence breast milk production, (Peny ariyani, 2021)

According to researchers' assumptions, postpartum mothers with multiparous parity, apart from being experienced, they also prepare mature physical and psychological needs to facilitate the release of breast milk. Primiparous mothers who lack experience often feel anxious after giving birth which has an impact on

disruption of the oxytocin hormone which functions to produce breast milk, however, breast milk production at parity is caused by many other factors such as maternal knowledge and maternal age.

C. Number of Children

From the results of the univariate analysis, it was found that 38 (47.2%) respondents had 1 living child and 70 respondents (52.8%) for >1 living child, this result was in line with research based on the number of children, it was found that subjects who had 2 children in first place with the highest number, namely 21 people with a percentage of 44.7%. There were 14 mothers who had >2 children (29.8%) and there were 12 mothers with at least 1 child (25.5%) (Viviene et al, 2020).

However, this is inversely proportional to research. Based on the number of children, a woman who has had three children and has another pregnancy, her health condition will begin to decline, often experiencing anemia (anemia), bleeding through the birth canal and the baby being breech or transverse. With the number of children >4, you need to be aware of the possibility of prolonged labor, because the more children the mother's uterus, the weaker the mother's womb will be and the production of breast milk will be less because the prolactin hormone decreases a lot (Santi&Halimatus, 2021)

The more children there are, the greater the experience as a mother will be in producing breast milk and On the other hand, mothers with 1 child more often experience problems with breast milk production (Viviene et al, 2020)

According to researchers' assumptions, mothers with a number of children > 1 will have more experience than before so they will be calmer so that breast milk production will be smoother compared to those with a new number of children 1. However, there are also mothers with a number of children > 1 whose health condition will start to weaken so that it can affect The production of breast milk and also the hormone prolactin in the mother's body decreases so that the ability to produce breast milk also decreases.

Bivariate Analysis Results

A. Relationship between nutritional status and breast milk production among postpartum mothers at Karunia Kasih Hospital

The results of the analysis, based on the table, showed data from 70 respondents with smooth breast milk production, 53 respondents (75.7%) had a nutritional status that was not at risk and 17 respondents (24.3%) had a nutritional status at risk. And 38 respondents experienced irregular breastfeeding, 18 respondents (47.8%) with nutritional status were not at risk and 20 respondents (52.6%) with nutritional status were at risk. mothers with nutritional status not at risk (65.7%) compared with nutritional status at risk (34.3%). Based on the Chi Square Test regarding the relationship between nutritional status and breast milk production in postpartum mothers, a p value of 0.006 was obtained, which is smaller than the alpha value of 5% or 0.05 ($p < 0.05$). This shows that there is a significant relationship between status and breast milk production in postpartum mothers.

This is in line with research results which showed that the majority of mothers had normal nutritional status, 32 respondents (80%) with smooth milk production and abnormal nutritional status, 8 respondents (20%) with non-smooth milk production, obtained a p value of 0.048 ($p < 0.05$) which means there is a significant relationship between maternal nutritional status and breast milk production. ((Bzikowska-Jura et al, 2018) The results of this study are in line with the results obtained by 26 respondents (60.5%) of mothers with poor nutritional status who experienced irregular milk production, while 17 respondents (39.5%) of mothers with good nutritional status) experienced smooth breast milk production. After carrying out the chi square test, the p value was 0.004 ($p < 0.05$), which means there is a significant relationship between nutritional status and the time of breast milk expression. (Ariyanti et al, 2021)

Nutritional status with smooth production of breast milk is caused by mothers who have good nutrition, the smooth production of breast milk is also good, so that breast milk production is also smooth. On the other hand, if the mother's nutritional condition experiences nutritional disorders, namely a lack of energy and calories, the mother will also experience problems with the smooth production of breast milk. This is because to produce breast milk, adequate nutrients or nutrients are needed for the mother (Rahmawati & Saidah, 2021).

The mother's poor nutritional status when breastfeeding has no direct effect on the quality of breast milk, except for the volume. Mothers with malnutrition problems are still able to produce breast milk, but if this malnutrition persists for a long time it can affect some of the nutrients contained in breast milk. The quantity of immune components in breast milk will decrease as the mother's nutritional status worsens. Energy intake of breastfeeding mothers of less than 1500 calories per day can cause a decrease in total fat (Manggabarani et al, 2018).

Based on research results and several theories which reveal that nutritional status during pregnancy will affect the volume of breast milk, this happens because during pregnancy the mother's body metabolism changes so that the mother's weight increases. Excess energy will be stored in the form of fat in the mother's body to produce breast milk. So the amount of breast milk depends on the amount of fat reserves accumulated during pregnancy.

B. The relationship between parity and breast milk production among postpartum mothers at Karunia Kasih Hospital, Bekasi

The results of the analysis, based on the table, obtained data from 70 respondents with smooth breast milk production, 58 respondents (82.9%) were multiparous and 12 respondents (17.1%) with primiparous parity and 38 respondents experienced breast milk irregularities, 23 respondents (60.5%) is multiparous parity and 15 respondents (39.5%) are primiparas. Statistical examination between parity and breast milk production shows that the proportion of smooth breast milk production occurs more frequently in multiparas (75.0%) compared to primiparas (25.0%).

Based on the Chi Square Test regarding the relationship between parity and breast milk production in postpartum mothers, a p value of 0.02 was obtained, which is smaller than the alpha value of 5% or 0.05 ($p < 0.05$). This shows that there is a significant relationship between parity and breast milk production in postpartum mothers.

This is in line with the research results which showed that primiparous respondents had 22 respondents (26.8%), 19 respondents (23.2%) had primiparous respondents (23.2%), multiparous respondents had 8 respondents (23.2%) who had non-smooth breast milk production (9.8%), multiparous respondents who experienced smooth breast milk production were 33 respondents (40.2%), the Chi-Square test results obtained $p\text{-value} = 0.001$, so it can be concluded that there is a significant relationship between the parity of breastfeeding mothers and breast milk production. (Romlah and Sari, 2019).

Based on research results and several theories that explain parity in relation to the direction of seeking information about mothers' knowledge in breastfeeding, the experience gained by mothers can expand a person's knowledge in breastfeeding. Parity is one of the factors that directly influences breast milk production. There are several things that cause parity to influence the smooth flow of breast milk production, such as education, culture, economic status and employment, this can influence the mother's success in providing breast milk. (Santi&Halimatus, 2021)

C. The relationship between the number of children and breast milk production among postpartum mothers at Karunia Kasih Hospital, Bekasi

The results of the analysis, based on the table, show data from 70 respondents with smooth breast milk production, 27 respondents (38.6%) have 1 (one) living child and 43 respondents (51.4%) have > 1 living child and 24 respondents experience 24 respondents (47.2%) had 1 (one) living child and 14 respondents (36.8%) had > 1 living child. Statistical analysis between the number of children and breast milk production showed that the proportion of breast milk production was smooth (52.8%) and not smooth (47.2%).

Based on the Chi Square Test regarding the relationship between number of children and breast milk production in postpartum mothers, a p value of 0.03 was obtained, which is greater than the alpha value of 5% or 0.05 ($p < 0.05$). This shows that there is a significant relationship between the number of children and breast milk production in postpartum mothers.

The greater the number of children, the greater the experience as a mother in producing breast milk and conversely, mothers with 1 child more often experience problems with breast milk production (Vivienne et al, 2020)

Based on research, mothers with a number of children >1 will have more experience than before so they will be calmer so that breast milk production will be smoother compared to the number of new children. The production of breast milk and also the hormone prolactin in the mother's body decreases so that the ability to produce breast milk also decreases.

Conclusions and Recommendations

Based on research and discussions that have been carried out on post PARTUM patients at Karunia Kasih Hospital Bekasi in 2023, the following results were obtained:

1. Based on the frequency distribution of nutritional status and breast milk production, there were 71 respondents (65.7%) who had a nutritional status that was not at risk, and 37 respondents (34.3%) had a nutritional status that was at risk. And there is a significant relationship between nutritional status and breast milk production in post partum mothers at Karunia Kasih Hospital Bekasi with a p value of 0.006 ($p < 0.05$).
2. Based on the frequency distribution of parity and breast milk production, 81 respondents (75.0%) were multiparous and 27 respondents (25.0%) were primiparous, and there was a significant relationship between parity and breast milk production in post partum mothers at Karunia Kasih Hospital. Bekasi with a p value of 0.02 ($p < 0.05$).
3. Based on the frequency distribution of the number of living children with breast milk production, it was found that the proportion of breast milk production was fluent in 57 respondents (52.8%) and not 51 respondents (47.2%), and there was a significant relationship between the number of living children and breast milk expenditure in post-natal mothers. partum at Karunia Kasih Hospital Bekasi with a p value of 0.03 ($p < 0.05$).

Suggestions

1. Researcher

It is hoped that this research can serve as inspiration, basic data and a reference for conducting further research. This research needs to be continued by carrying out closer analysis and increasing the number of variable factors to be studied, and for future researchers, suggestions are given for further research. The researcher hopes to be able to continue this research by comparing further research. And can discuss other factors that can influence breast milk production in postpartum mothers. Such as knowledge and maternal age with breast milk production in postpartum mothers.

2. For Health Workers

It is hoped that health workers can create education programs for postpartum mothers. Counseling that can be carried out includes the nutritional status of postpartum mothers so that they can gain weight or lose weight to gain weight without risk to postpartum mothers.

3. Hospital Institutions

It is hoped that this research can become a reference for hospitals so that they can continue to improve guidance and training for health workers in the form of seminars or additional education, in order to create excellent service that exceeds patient expectations.

4. Educational Institutions

Educational institutions are expected to collaborate with related agencies or health workers to provide health information or counseling regarding nutritional status on breast milk production.

References

- [1] Ariyanti, L. *dkk.* (2021) „Hubungan Pengetahuan, Status Gizi, Pola Makan dan Pantangan Makan dengan Pegeluaran Produksi ASI Pada Ibu Menyusui“, 7(3), pp. 441–452.
- [2] Bzikowska-Jura, A. *dkk.* (2018) „Maternal nutrition and body composition during breastfeeding: Association with human milk composition“, *Nutrients*, 10(10). doi: 10.3390/nu10101379.
- [3] Hastuti, P. and Wijayanti, I. T. (2017) „Analisis Deskriptif Faktor yang Mempengaruhi Pengeluaran ASI pada Ibu Nifas di Desa Sumber Kecamatan Sumber Kabupaten Rembang“, *Jurnal Universitas Muhammadiyah Magelang*, 6, pp. 223–232.
- [4] Humaira, P. and Indira, P. (2020) „Hubungan Status Gizi Dengan Waktu Pengeluaran Kolostrum Pada Ibu Nifas Di Pmb Nuraini, Skm Kecamatan Batee Kabupaten Pidie Tahun 2020“, *Journal of Healthcare Technology and Medicine*, 6(2), pp. 2615–109.
- [5] Lamani, S. Y. A. *dkk.* (2021) „Correlation between Nutrition Status and Timing of Colostrum Discharge on Postpartum Mother in Regional General Hospital of Makassar“, *Jurnal Gizi dan Keluarga*, 1(1), pp. 14–20.
- [6] Manggabarani, S. *dkk.* (2018) „Hubungan Status Gizi, Pola Makan, Pantangan Makanan dengan Kelancaran Produksi ASI Pada Ibu Menyusui di Kota Makassar“, *Jurnal Dunia Gizi*, 1(1), p. 1. doi: 10.33085/jdg.v1i1.2902.
- [7] Maqfiro, S. and Tyas, R. (2018) „Hubungan Status Gizi dan Frekuensi Menyusui Dengan Kelancaran ASI Pada Ibu Postpartum“, pp. 1–7.
- [8] Mcfadden, A. *dkk.* (2017) „Support for healthy breastfeeding mothers with healthy term babies“, *Cochrane Database of Systematic Reviews*, 2017(2).
- [9] Organization, W. H. (2020) „Children: Improving Survival and Well Being“, *World Health Organization*, p. 1. Available at: <https://www.who.int>.
- [10] Primadi, O. (2021) *Profil Kesehatan Indonesia 2020*, Kementerian Kesehatan RI. Edited by B. Hardhana, F. Sibuea, and W. Widiyanti. Jakarta: Kementerian Kesehatan RI.
- [11] Rahmawati, S. D. and Saidah, H. (2021) „Hubungan Antara Status Gizi Dan Paritas Dengan Kelancaran Produksi Asi Pada Ibu Post Partum Di Wilayah Kerja Puskesmas Cipanas Kabupaten Garut“, pp. 1–9.
- [12] Jurnal Pengabdian Kesehatan Masyarakat (Pengmaskemas) Vol. 1, No. 2, Desember 2021, Hal. 119-127 DOI: doi.org/10.5643/pengmaskemas.v1i2/5643 P-ISSN 2809-6428 | E-ISSN 2809-5251 120
- [13] Depkes RI.2020. *profil kesehatan Indonesia Tahun 2020*. Jakarta, Indonesia.
- [14] Depkes RI.2020. *profil kesehatan Provinsi Jawa Barat Tahun 2020*