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## Factors Associated with Exclusive Breastfeeding in Hamadi Public Health Center, Jayapura City

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### Abstract

**Background:** The target of exclusive breastfeeding in Indonesia is 80%, but in reality the agreed target has not been achieved. Papua Province data for 2014-2015 shows that the success of exclusive breastfeeding for babies aged 2 months is only 64%. This percentage decreases markedly in infants aged 2 to 3 months to 45% and in infants aged 4 to 5 months only reaches 14%. The success of exclusive breastfeeding of 15,983 babies aged 6 months, only 3,302 of them were breastfed, about 20.6% of them were exclusively breastfed. **Objective:** To analyze the factors associated with exclusive breastfeeding for infants in the working area of the Hamadi Public Health Center, Jayapura City. **Methods:** This type of research is quantitative analytic with a cross-sectional approach. This research was conducted in September 2020 - January 2021. The total population was 412 people and a sample of 100 people using simple random sampling technique. The data was obtained using a questionnaire, and analyzed using chi square and binary logistic regression with a significant level of 5%. **Results:** Factors related to the exclusive breastfeeding are attitude (p-value = 0.009, RP = 3.563, 95% CI = 1.336-9.502), family support (p-value = 0.005, RP = 3.467, 95% CI = 1.429-8.408) and health personnel support (p-value = 0.001, RP = 4.206, 95% CI = 1.764-10.025), while the factors that are not associated with exclusive breastfeeding, namely knowledge (p-value = 0.050, RP = 2.563, 95% CI = 0.986-6.662), age (p-value = 0.157), education (p-value = 0.186), and occupation (p-value = 0.571).

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The most dominant risk factor is attitude, where mothers with positive attitudes have a 2.864 times greater chance of giving exclusive breastfeeding compared to mothers who have negative attitudes.

**Keywords:** Breastfeeding; exclusive; infants; risk factors; public health center.

## **1. Introduction**

Breast milk (ASI) is food that is needed by babies, because the content contained in breast milk is able to meet and adjust the baby's needs. Exclusive breastfeeding for 6 months is highly recommended to be given to babies. The success of exclusive breastfeeding is only given breast milk without giving any additional food for the full 6 months. Breast milk is able to adjust to the baby's needs, because in breast milk there are antibodies as the body's defense from disease attacks. Breast milk also contains the right levels of protein, fat, sugar and calcium that the baby needs. According to the results of research conducted by Febrianti in 2017, it shows that exclusive breastfeeding is significantly related to personal social development in children aged 3-5 years (p-value 0.06 RR 1.7 95% CI 0.98-2.85). Children who are not exclusively breastfed have a 1.7 times risk of experiencing abnormal social personal development compared to children who are exclusively breastfed [1]. According to the results of research conducted by Sandewi in 2018, it shows that there is a significant relationship between exclusive breastfeeding and the development and growth of babies. Development can take place with exclusive breastfeeding such as gross motor skills, fine motor skills, speaking and language skills as well as social and social skills where these skills indicate behavior that moves the large muscles of the arms, legs and torso, for example lifting the head and sitting [2]. According to the World Health Organization (WHO), the international target rate for exclusive breastfeeding is at least 50% [3]. Although the benefits of breast milk are so great, not many mothers are willing to provide exclusive breastfeeding for 6 months as recommended by the World Health Organization (WHO). According to WHO, exclusive breastfeeding is the success of breastfeeding alone in infants aged 0 to 6 months without additional fluids or other foods. The benefits of breastfeeding are good for babies, mothers, families and the State [4]. The success target of exclusive breastfeeding in Indonesia is 80%, but in reality the targets that have been agreed upon have not been able to be achieved. Basic Health Research Data (Riskesdas) 2015 shows that the success coverage of exclusive breastfeeding in Indonesia has only reached 42% [5]. Riskesdas 2010, the success rate of exclusive breastfeeding for 0-5 months babies is 27.2%, until now there are still many obstacles [6]. The success of exclusive breastfeeding for babies in the 2015 Riskesdas data was higher than that of the 2013 Riskesdas even though the achievement was below the target. Results of the Household Health Survey [7], only 27.1% of infants received exclusive breastfeeding for 6 months. While the success of breastfeeding for 0-1 month babies was 50.8%, between 23 months of age 48.9% and at 7-9 months of age 4.5% [7]. Data in the Papua Provincial Health Office for 2014-2015 shows the success of exclusive breastfeeding for babies aged 2 months is only 64%. This percentage decreases markedly in infants aged 2 to 3 months to 45% and in infants aged 4 to 5 months only reaches 14%. The success of exclusive breastfeeding of 15,983 babies aged 6 months, only 3,302 of them were breastfed, around 20.6% of them were exclusively breastfed [8]. According to data from the Jayapura City Health Department in 2015, the target achieved was 57.09%. To overcome this problem, the government has created programs that can support the use of exclusive breastfeeding, among others by providing health education about the importance of the success of exclusive breastfeeding in the community [9]. Data obtained from Hamadi Health Center in 2019 shows that babies aged

6-12 months from January to December 2019 were 412 babies and exclusive breastfeeding coverage was 33 babies (8.1%) [10]. Based on the results of a preliminary survey conducted by researchers at Hamadi Public Health Center, Jayapura city of 15 mothers who had babies over 6 months old, 80% of the data were obtained who did not provide exclusive breastfeeding for 6 months with the mother fearing not enough milk, breast pain, blisters and swelling. , babies do not want to suck, breast milk is not smooth and the milk does not come out, while 20% of mothers provide exclusive breastfeeding for 6 months without complementary feeding (MP ASI). With the above background, the researchers are interested in conducting research with the title "Factors Related to Exclusive Breastfeeding for Babies at Hamadi Health Center, Jayapura City, 2020."

## **2. Materials and Methods**

This study used a quantitative analytic method with a cross-sectional approach, in which the researcher only made observations and measurements of variables at one particular moment. The variables examined in this study include the dependent variable and the independent variable. The dependent variable in this study was exclusive breastfeeding, while the independent variables included age, education, knowledge, attitudes, occupation, family support, and support from health workers. This research was conducted at Hamadi Health Center, Jayapura City, in December 2020 - January 2021. The population in this study were all mothers who had children aged 6-12 months at Hamadi Health Center, Jayapura city, totaling 412 people. The sample was 100 respondents. The sampling technique used in this study was the simple random sampling technique, namely the sampling was carried out by taking simple random respondents such as social gathering draws, determining respondents according to inclusion and exclusion criteria. Data collection techniques using a questionnaire, then processed using the chi-square statistical test and multiple logistic regression, with a significance level of 5%.

## **3. Result and Discussion**

### **3.1. Univariate Analysis**

The univariate is used to classify each variable of the sample. This study only shows the frequency and percentage of each variable. This can be found in Table 1:

Based on Table 1, this study involved 100 respondents, with a known exclusive breastfeeding of 49.0%. Most of the responden with a young age of 71.0%. The education of mother belong to high is 65.0%. Most mothers do not work at 64.0%. Mother's knowledge is good at 75.0%. Most of the mothers have a positive attitude towards exclusive breastfeeding, amounting to 74.0%. Most of the mothers received support from their families (66.0%) and health workers (61.0%).

**Table 1:** Distribution of respondents based on age, education, occupation, knowledge, attitude, family support, and health worker support on exclusive breastfeeding at Hamadi Public Health Center, Jayapura City.

No	Variable	Frequency (n)	Percentage (%)
1	Exclusive breastfeeding		
	Non Exclusive	51	51.0
	Exclusive	49	49.0
2	Age		
	Old ( $\geq 35$ years old)	29	29.0
	Young ( $< 35$ years old)	71	71.0
3	Education		
	Loww	35	35.0
	High	65	65.0
4	Occupation		
	Not Work	64	64.0
	Work	36	36.0
5	Knowledge		
	Lack	25	25.0
	Good	75	75.0
6	Attitude		
	Negative	26	26.0
	Positive	74	74.0
7	Family support		
	Less	34	34.0
	Good	66	66.0
8	Health worker support		
	Less	39	39.0
	Good	61	61.0
Total		261	100.0

Source: Primary Data, 2021

### 3.2. Bivariate Analysis

Bivariate analysis was performed to determine the relationship between independent and dependent variables, i.e. age, education, occupation, knowledge, attitude, family support, and healthcare support. In order to assess the association between the risk factors and the exclusive breastfeeding, the chi-square test was used at a significant level of 5%. The results of the bivariate analysis are shown in the Table 2:

**Table 2:** Summary of the results of the analysis of the relationship between age, education, occupation, knowledge, attitude, family support, and health worker support with exclusive breastfeeding at Hamadi Public Health Center, Jayapura City.

Variables	Exclusive breastfeeding						P-value	RP	CI (95%)	
	Non exclusive		Exclusive		Total				Lower	Upper
	n	%	n	%	n	%				
<b>Age</b>										
Old ( $\geq 35$ )	18	62.1	11	37.9	29	100	0.157	1.884	0.779	4.558
Young ( $< 35$ )	33	46.5	38	53.5	71	100				
<b>Education</b>										
Low	21	60.0	14	40.0	35	100	0.186	1.750	0.760	4.028
High	30	46.2	35	53.8	65	100				
<b>Occupation</b>										
Work	17	47.2	19	52.8	36	100	0.571	0.789	0.348	1.789
Not work	34	53.1	30	46.9	64	100				
<b>Knowledge</b>										
Lack	17	68.0	8	32.0	25	100	0.050	2.563	0.986	6.662
Good	34	45.3	41	54.7	75	100				
<b>Attitude</b>										
Negative	19	73.1	7	26.9	26	100	0.009	3.563	1.336	9.502
Positive	32	43.2	42	56.8	74	100				
<b>Family support</b>										
Less	24	70.6	10	29.4	34	100	0.005	3.467	1.429	8.408
Good	27	35.5	39	64.5	76	100				
<b>Health worker support</b>										
Less	28	71.8	11	28.2	39	100	0.001	4.206	1.764	10.025
Good	23	37.7	38	62.3	61	100				

Source: Primary Data, 2021

**3.2.1. The Relationship between Age and the Exclusive breastfeeding**

From table 2 it can be seen that the analysis of the relationship between maternal age and exclusive breastfeeding shows that respondents who are younger (<35 years) do not provide exclusive breastfeeding as much as 46.5%, while older respondents (> 35 years) who do not provide exclusive breastfeeding as much as 62.1%. The statistical test results of the relationship between maternal age and exclusive breastfeeding obtained a p value of 0.157, which means there is no relationship between age and exclusive breastfeeding.

**3.2.2. The Relationship between Education and the Exclusive breastfeeding**

From table 2 it can be seen that the analysis of the relationship between maternal education and exclusive breastfeeding shows that more highly educated respondents did not provide exclusive breastfeeding as much as 46.2%, while those with low education did not provide exclusive breastfeeding as much as 60.0%. The statistical test results of the relationship between maternal education and exclusive breastfeeding obtained p value 0.186, which means there is no significant relationship between knowledge and the success of exclusive breastfeeding.

### ***3.2.3. The Relationship between Occupation and the Exclusive breastfeeding***

From table 2, it can be seen that the analysis of the relationship between maternal occupation and exclusive breastfeeding shows that more respondents who do not work do not provide exclusive breastfeeding as much as 53.1%, while working respondents who do not provide exclusive breastfeeding are 47.2%. The statistical test results of the relationship between maternal occupation and exclusive breastfeeding obtained a p value of 0.571, which means that there is no significant relationship between work and exclusive breastfeeding.

### ***3.2.4. The Relationship between Knowledge and the Exclusive breastfeeding***

From table 2, it can be seen that the analysis of the relationship between maternal knowledge and exclusive breastfeeding shows that more knowledgeable respondents who do not provide exclusive breastfeeding are 45.3%, while those with less knowledge who do not provide exclusive breastfeeding are 68.0%. The statistical test results of the relationship between maternal knowledge and exclusive breastfeeding obtained a p-value of 0.050, which means that there is a significant relationship between knowledge and the success of exclusive breastfeeding with a value of  $RP = 2.563$ , which means that mothers with good knowledge have a 2.563 times greater chance of giving exclusive breastfeeding than with a less knowledgeable mother. Although, the 95%CI of RP shows is no significant.

### ***3.2.5. The Relationship between Attitude and the Exclusive breastfeeding***

From table 2, it can be seen that the analysis of the relationship between maternal attitudes and exclusive breastfeeding shows that respondents who have a positive attitude towards breastfeeding and do not provide exclusive breastfeeding are 43.2%, while respondents who have negative attitudes and do not provide exclusive breastfeeding are 73.1%. The statistical test results of the relationship between maternal attitudes and exclusive breastfeeding obtained a p-value of 0.009, which means that there is a significant relationship between attitude and exclusive breastfeeding with a value of  $RP = 3.563$ , which means that mothers who have a positive attitude towards exclusive breastfeeding have a 3.563 times greater chance for succeeded in giving exclusive breastfeeding compared to mothers who had negative attitudes.

### ***3.2.6. The Relationship between Family support and the Exclusive breastfeeding***

From table 2, it can be seen that the analysis of the relationship between family support and exclusive breastfeeding shows that respondents who received good support from the family and did not provide exclusive breastfeeding were 35.5%, while respondents who did not receive support from their family and did not provide exclusive breastfeeding 70.6%. The statistical test results of the relationship between family support and exclusive breastfeeding obtained a p-value of 0.005, which means that there is a significant relationship between family support and exclusive breastfeeding with a value of  $RP = 3.467$ , which means that mothers who have support from family have a 3.467 times greater chance of succeeding provide exclusive breastfeeding compared to mothers who have less support from the family.

### ***3.2.7. The Relationship between Health worker support and the Exclusive breastfeeding***

From table 2, it can be seen that the analysis of the relationship between health personnel support and exclusive breastfeeding shows that respondents who received less support from health workers and did not provide exclusive breastfeeding were 71.8%, while respondents who received good support from health workers and did not provide Exclusive breastfeeding as much as 37.7%. The statistical test results of the relationship between support from health workers and exclusive breastfeeding obtained a p-value of 0.001, which means that there is a significant relationship between support from health workers and exclusive breastfeeding with a value of  $RP = 4.206$ , which means that mothers who have support from health workers have a chance of 4.206 times more. more successful in giving exclusive breastfeeding compared to mothers who have less support from health personnel.

### **3.3. Multivariate Analysis**

Multivariate analysis used in this study was multiple logistic regressions. This analysis is a mathematical model used to study the relationship between two or several independent variables and one dichotomous dependent variable. This analysis was intended to determine the most dominant risk factors for the exclusive breastfeeding at Hamadi Public Health Center, Jayapura City. The results of multivariate analysis can be found in Table 3.

**Table 3:** The result of Multiple Logistic Regression Analysis with Backward LR Method (last model) between Independent Variables on Exclusive breastfeeding at Hamadi Public Health Center, Jayapura City.

<b>Variable</b>	<b>p</b>	<b>OR</b>	<b>95%CI</b>	
Attitude	0.032	2.864	1.093	7.502
Family support	0.021	1.776	1.639	4.932
Health worker support	0.016	2.347	1.811	6.796

*Source: Primary Data, 2021*

The results of the multivariate analysis of this modeling showed that the significant variables were attitude, family support and health worker support. It can be explained from the results of the final multivariate modeling that has the greatest  $RP$  value is the attitude variable with a value of  $RP = 2.864$ , which means that mothers who have a positive attitude towards the success of exclusive breastfeeding have a 2.864 times greater chance of successfully giving exclusive breastfeeding better than mothers who have negative attitudes towards the success of exclusive breastfeeding after controlling for variables of family support and support of health workers. Thus it can be concluded that the most dominant variable related to the success of exclusive breastfeeding is the attitude variable.

## **4. Discussion**

In discussing the results of this study, the researcher describes the explanation of the relationship between variables. Although it cannot explain the causal relationship, by doing multivariate analysis it is hoped that it can provide a fairly good analysis of the determinants of exclusive breastfeeding at Hamadi Public Health Center, Jayapura City.

#### ***4.1. The Relationship between Age and the Exclusive breastfeeding***

The results showed that there is no significant relationship between age and exclusive breastfeeding or it can be said that there is no significant difference in the proportion of success exclusive breastfeeding between young mothers and older mothers. Thus the results of this study can be interpreted that the mother's age does not affect the behavior of exclusive breastfeeding. The results of this study are in line with research conducted by Zakiyah (2012), which states that the age of the respondent with the success of exclusive breastfeeding does not have a significant relationship [11]. The meaninglessness of the age factor in this study is possible because the level of knowledge of respondents about exclusive breastfeeding and its benefits for children's health and development is still low. According to the assumptions of the researchers, young mothers do not provide exclusive breastfeeding for a full 6 months due to the lack of knowledge of mothers about exclusive breastfeeding as much as 56.7%, lack of support from health workers about exclusive breastfeeding as much as 57.8% and lack of family support as much as 24.0 %. From the results of interviews conducted by researchers with older mothers who did not provide exclusive breastfeeding for the full 6 months because mothers were lazy to provide exclusive breastfeeding with a long time and frequency that was too frequent and mothers preferred to choose to sell on the market. Age affects a person's perceptive power and mindset. The older he gets, the more his perceptive power and mindset will develop, so that the knowledge he gets will get better. At middle age, individuals will play a more active role in society and social life and make more preparations for the success of adjusting to old age, besides that, middle-aged people will spend more time reading. Intellectual ability, problem solving, and verbal ability reported almost no decline at this age [12].

#### ***4.2. The Relationship between Education and the Exclusive breastfeeding***

The results of this study indicate that there is no significant relationship between knowledge and the success of exclusive breastfeeding. Thus the results of this study can be interpreted that the level of mother's education does not affect the behavior of exclusive breastfeeding. A mother who is highly educated does not necessarily have exclusive breastfeeding behavior. The results of this study are in line with Hakim's (2012) research, which states that there is no relationship between education and exclusive breastfeeding behavior [13]. These results can be interpreted that the level of mother's education does not affect the behavior of exclusive breastfeeding. The behavior of exclusive breastfeeding can be influenced by other factors such as cultural values, attitudes, and the ability to practice these behaviors. According to the researcher's assumption, more highly educated mothers do not provide exclusive breastfeeding than mothers with low education. Because mothers with higher education are more likely to work 7-8 hours outside the home, besides that mothers who work are more likely to give birth by way of Caesarean section (SC), some mother's babies also experience problems so that the baby is in a separate room from the mother, the milk does not come out, the nipples drown, the baby is not strong enough to breastfeed, he is afraid of large breasts, so the mother chooses to give sufor. Meanwhile, mothers with low education do not provide exclusive breastfeeding due to lack of knowledge, lack of support from their families and lack of support from health workers.

#### ***4.3. The Relationship between Occupation and the Exclusive breastfeeding***

The result of this study shows that there is no significant relationship between work and exclusive breastfeeding or it can be said that there is no significant difference in the proportion of exclusive breastfeeding between mothers who do not work and mothers who work. Thus the results of this study can be interpreted that the mother's job does not affect the behavior of exclusive breastfeeding. The results of research conducted by Ahmad Atabik (2012), which states that there is no relationship between maternal occupation and the behavior of exclusive breastfeeding in Pamotan Village, the Pamotan Public Health Center in 2012 [14]. The results of the p-value analysis of 0.706 indicate that the significant level is too large, so that the two variables are not related. According to the researcher's assumption that mothers who do not work and do not give exclusive breastfeeding more than the working mothers who do not provide exclusive breastfeeding. Mothers who do not work and who do not provide exclusive breastfeeding say that mothers are lazy to give exclusive breastfeeding to their babies, because mothers feel tired and tired after doing household activities, mothers who do work sell in the market, so mothers prefer to give MP ASI or supportive, besides it is also a lack of knowledge about the benefits of breastfeeding and ignorance of breastfeeding because it is easier to provide MP ASI. Meanwhile, working mothers who do not provide exclusive breastfeeding for a full 6 months, it is possible for mothers to be busy working, so that they do not have time to provide exclusive breastfeeding and pump breast milk while at work, besides that the mother's knowledge is low about the benefits of exclusive breastfeeding for working mothers..

#### ***4.4. The Relationship between Knowledge and the Exclusive breastfeeding***

The results showed that there was a significant relationship between knowledge and exclusive breastfeeding or it could be said that there was a significant difference in the proportion of exclusive breastfeeding between well-informed mothers and those with less knowledge. Thus the results of this study can be interpreted that knowledge affects behavior towards exclusive breastfeeding. A mother who is well-informed certainly has the behavior to exclusively breastfeed. With a value of  $RP = 2.563$ , which means that mothers with good knowledge have a 2.563 times greater chance of giving exclusive breastfeeding compared to mothers with less knowledge. The results of this study are in line with the results of research by Septiani (2017), which states that 70.4% of respondents have good knowledge. The results of the bivariate analysis stated that there was a significant relationship between knowledge and exclusive breastfeeding ( $p$  value = 0.000) with an OR of 10.3 (95% CI 3.94-27.14), so it could be explained that mothers with good knowledge were 10.3 times more likely to be exclusively breastfed than mothers who are lack knowled [15]. Siregar (2019) in his research found that knowledge was related to exclusive breastfeeding ( $p = 0.000 < 0.05$ ) [16]. According to the researcher's assumption, there are more well-informed mothers who do not provide exclusive breastfeeding than mothers with less knowledge who do not provide exclusive breastfeeding. Mothers who are well-informed do not provide exclusive breastfeeding because the mother works to earn a living outside the home, besides that the mother also experiences problems / complications in the delivery process and some of the mother's babies also experience problems so that the baby is in a separate room from the mother, the mother also says she is afraid of blistered nipples, afraid of swollen breasts, afraid of changing breast shape, so the mother chooses to give MP ASI. This is added to the tradition of the community in the working area of the Hamadi Public Health Center which does not provide exclusive breastfeeding (babies are fed papeda). Meanwhile, mothers who are less knowledgeable do not provide exclusive breastfeeding due to lack of knowledge about the benefits of

breastfeeding, mothers are lazy to give breast milk because it is too frequent so that it is troublesome, besides that, there is no support from the family and from health workers.

#### ***4.5. The Relationship between Attitude and the Exclusive breastfeeding***

The results of this study indicate that there is a significant relationship between attitudes with exclusive breastfeeding or it can be said that there is a significant difference in the proportion of exclusive breastfeeding between mothers who have positive attitudes and mothers who have negative attitudes. Thus the results of this study can be interpreted that attitude affects the behavior of exclusive breastfeeding. A mother who has a positive attitude certainly has the behavior to successfully breastfeed exclusively. With a value of  $RP = 3.563$ , which means that mothers who have a positive attitude have a 3.563 times greater chance of giving exclusive breastfeeding compared to mothers who have a negative attitude. The results of this study are in line with the results of research by Septiani (2017), which states that exclusive breastfeeding is more in the group of respondents who have positive attitudes (72.1%) than those who have negative attitudes (40.7%). The statistical test results obtained  $p$  value = 0.001, so it can be concluded that there is a significant relationship between attitude and exclusive breastfeeding. The results of the analysis also show an OR value of 3.7, meaning that respondents who have a positive attitude towards breastfeeding have a 3.7 times greater chance of giving exclusive breastfeeding compared to respondents who have a negative attitude towards breastfeeding [15]. According to the researcher's assumption, mothers who have positive attitudes and who do not give exclusive breastfeeding is more than the mothers who have negative attitudes and who do not give exclusive breastfeeding. Mothers who have a positive attitude do not give breast milk because mothers who work for a long time outside the house, the milk does not come out, the nipples are flat and drown, when the milk is pumped the milk production is getting less, the baby is fussy, the baby is not strong enough to suckle, so mother chooses to give supportive and MP ASI. Meanwhile, mothers who have a negative attitude and do not provide exclusive breastfeeding are due to lack of knowledge, do not care about the benefits of breastfeeding, are lazy to breastfeed for a long time and frequency, and there is no support from the family.

#### ***4.6. The Relationship between Family support and the Exclusive breastfeeding***

The results of this study indicate that there is a significant relationship between family support and exclusive breastfeeding or it can be said that there is a significant difference in the proportion of exclusive breastfeeding between mothers who receive support from their families and mothers who do not receive support from the family. These results can be interpreted that family support affects the behavior of exclusive breastfeeding. A mother who gets support certainly has better exclusive breastfeeding behavior. With a value of  $RP = 3.467$ , which means that mothers who have support from family have a 3.467 times greater chance of successfully giving exclusive breastfeeding compared to mothers who have less support from their family. This result is in line with the results of Purwanti's (2004) study, which stated that statistically there was a significant relationship between family support and exclusive breastfeeding [17]. The proportion of respondents who received family support was 96.8%, this condition shows that the amount of family support for the respondent affects exclusive breastfeeding, so it is evident that a person's behavior can be influenced by supporting factors such as support or encouragement provided by the family. The same finding was obtained by Zakiyah (2012), which stated that

there was a relationship between the variable family support and exclusive breastfeeding. This relationship has a p-value  $<0.05$  so that statistically the two variables are related. Respondents who receive greater support will give exclusive breastfeeding [11]. Siregar (2019) in his research found that the results of the chi-square test showed that husband's support was associated with exclusive breastfeeding ( $p = 0.000 <0.05$ ) [16]. According to the researcher's assumption, mothers who received good support from their families and did not provide exclusive breastfeeding are more than the mothers who received less support from their families. Mothers who receive support and do not give breast milk because the mother works, the mother gives birth by means of SC and the milk has not come out so the first 3 days the baby is given supportive, after the milk starts to come out the baby does not want or is lazy to suck on the nipple, when pumped the amount of breastmilk is getting less and less. In addition, mothers are afraid of nipple blisters and breasts change shape. Mothers who do not get support and do not give exclusive breastfeeding, because they feel overwhelmed and feel tired in taking care of their children and household chores, mothers are lazy to provide breastfeeding with a long time and frequency that is too frequent so that mothers prefer to give MP ASI and supportive.

#### ***4.7. The Relationship between Health worker support and the Exclusive breastfeeding***

The results of this study indicate that there is a significant relationship between the support of health workers and exclusive breastfeeding, or it can be said that there is a significant difference in the proportion of exclusive breastfeeding between mothers who receive support from health workers and mothers who do not receive support from health workers. These results may imply that the support of health workers affects the behavior of exclusive breastfeeding. A mother who gets support certainly has better exclusive breastfeeding behavior. With a value of  $RP = 4.202$ , which means that mothers who have support from health workers have a 4.202 times greater chance of successfully giving exclusive breastfeeding compared to mothers who lack support from health workers. The results of this study are in line with the results of research by Wawan & Dewi (2010), which states that there is a relationship between the variable support from health workers and exclusive breastfeeding with an  $OR = 6.8$ , which means that respondents who receive support from health workers have a 6 times chance of being successful in exclusive breastfeeding compared to those without the support of health workers [18]. The results of research conducted by Evy and Yusfina on factors related to the failure of exclusive breastfeeding in Nanga Kalis District in 2017 through an analytical survey with a cross-sectional study approach, showed that there was a significant relationship between support from health workers and the failure to provide exclusive breastfeeding in Nanga Kalis Subdistrict, Kapuas Hulu District in 2018 [19]. According to the assumption of researchers, mothers who received less support from health workers and did not provide exclusive breastfeeding are more than the mothers who received good support from health workers. Mothers who do not receive support and do not provide breast milk, because mothers do not know how to breastfeed properly so that breast milk runs smoothly, mothers do not know the benefits of giving breast milk, mothers do not know oxytocin massage to make breast milk smooth. In addition, mothers are lazy to seek information about breastfeeding from health workers, family, social media, mothers are also ignorant of the directions given by health workers, if there is a schedule for counseling mothers do not come and leaflets that are shared by mothers, they are lazy to read and understand them. Meanwhile, for mothers who receive support and do not give breast milk because the mother is working, breast milk is submerged / flat, the baby does not want to suck breast milk, breastfeeding is not smooth and the child is cared for by other people.

#### **4.8. The Dominant factors that related to the Exclusive breastfeeding**

From the overall analysis process that has been carried out, it can be concluded that from the results of the Multiple Logistic Regression statistical test, it is found that the most dominant variable related to the success of exclusive breastfeeding is the attitude variable with a value of  $RP = 2.864$ , meaning that mothers who have a positive attitude about exclusive breastfeeding have a 2.864 times greater chance to successfully provide exclusive breastfeeding better than mothers who have a negative attitude towards exclusive breastfeeding after controlling for variables of family support and support from health workers. Thus it can be concluded that the most dominant variable related to the success of exclusive breastfeeding is the attitude variable. According to the assumptions of researchers, a positive attitude has a big influence on the success of exclusive breastfeeding, because with a positive attitude that encourages mothers to provide exclusive breastfeeding for 6 months without any additional food. Exclusive breastfeeding for 6 months has benefits for the baby, mother, family, community and country. In addition to breast milk which is the most perfect baby food, breast milk contains immunoglobulins, is practical, cheap, and clean. breastfeeding will help mother and baby to form a loving bond. Inner contact will be established between mother and baby after delivery when the mother breastfeeds her baby for the first time. The baby will cry less or fuss and grow faster if he stays with the mother and is breastfed as soon as possible after delivery. Research conducted by Kusumaningsih and Yani (2018) on the factors associated with the failure of exclusive breastfeeding at the Bayuasin Purworejo Public Health Center, Loana District, Purwarejo Regency, found a relationship between maternal attitudes and the failure of exclusive breastfeeding [20]. Breastfeeding is the best method of feeding for babies, especially babies less than 6 months old. Breast milk contains various nutrients and fluids needed to meet the nutritional needs of babies in the first 6 months after birth. That is the importance of exclusive breastfeeding for 6 months, but at Hamadi Health Center it is still below the target set by the government.

#### **5. Conclusion**

On the basis of the findings of the data analysis and the hypothesis testing, it can be concluded as follows:

1. There is no significant relationship between age and the exclusive breastfeeding at Hamadi Public Health Center, Jayapura City ( $p = 0.157 > 0.05$ , and  $RP = 1.884$  (95%CI: 0.779-4.558));
2. There is no significant relationship between education and the exclusive breastfeeding at Hamadi Public Health Center, Jayapura City ( $p = 0.186 > 0.05$ , and  $RP = 1.750$  (95%CI: 0.760-4.028));
3. There is no significant relationship between occupation and the exclusive breastfeeding at Hamadi Public Health Center, Jayapura City ( $p = 0.571 > 0.05$ , and  $RP = 0.789$ ; (95%CI: 0.348-1.789));
4. There is no significant relationship between knowledge and the exclusive breastfeeding at Hamadi Public Health Center, Jayapura City ( $p = 0.050 \geq 0.05$ , and  $RP = 2.563$ ; (95%CI: 0.986-6.662));
5. There is a significant relationship between attitude and the exclusive breastfeeding at Hamadi Public Health Center, Jayapura City ( $p = 0.009 < 0.05$ , and  $RP = 3.563$ ; (95%CI: 1.336-9.502)). Mothers who have a good attitude has a chance to give an exclusive breastfeeding 3.563 times greater than those mothers who has a negative attitude;
6. There is a significant relationship between family support and the exclusive breastfeeding at Hamadi

Public Health Center, Jayapura City (( $p = 0.005 < 0.05$ , and  $RP = 3.467$ ; (95%CI: 1.429-8.408)). Mothers who get a good family support has a chance to give an exclusive breastfeeding 3.467 times greater than those mothers who get less family support;

7. There is a significant relationship between health worker support and the exclusive breastfeeding at Hamadi Public Health Center, Jayapura City (( $p = 0.001 < 0.05$ , and  $RP = 4.2.06$ ; (95%CI: 1.764-10.025)). Mothers who get a good support from health worker has a chance to give an exclusive breastfeeding 4.206 times greater than those mothers who get less support from health worker;
8. The most dominant risk factors for exclusive breastfeeding at Hamadi Public Health Center, Jayapura City is attitude toward breastfeeding ( $p = 0.032 < 0.05$ ;  $OR = 2.864$ ; 95%CI: 1.093 – 7.502).

## **6. Suggestion**

1. For the Jayapura Health Department, It is hoped that it will facilitate the training of breastfeeding counselors as providers of information about breastfeeding, so that it is hoped that all health centers or health facilities at the village level have breastfeeding counselors, and make policies so that all health centers or health facilities have a breastfeeding clinic;
2. For MCH program managers at the Public Health Centers. It is hoped that health workers will remind mothers to provide exclusive breastfeeding, so that mothers can increase their knowledge by means of counseling (mothers and counselors) in a planned, directed and sustainable manner, so that mothers can have a positive attitude towards exclusive breastfeeding;
3. For Further Researchers. It is hoped that further analysis of the factors that affect the quality and quantity of breast milk can be carried out on the success of exclusive breastfeeding;
4. For Breastfeeding Mothers. It is hoped that breastfeeding mothers will put more effort into finding information about exclusive breastfeeding. The success of exclusive breastfeeding provides many benefits for mothers, babies, families and the country.

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## **References**

- [1]. Febriyanti H. Faktor-faktor Yang Berhubungan dengan Pemberian ASI Eksklusif pada Tenaga Kesehatan Yang Memiliki Bayi di Wilayah Kabupaten Pringsewu Tahun 2017. *Jurnal Kebidanan*, Vol. 3 No. 1 Januari 2018, hal. 38-47. 2018.
- [2]. Sandewi, S. Hubungan Pemberian Asi Eksklusif Dengan Pertumbuhan Dan Perkembangan Pada Bayi Usia 7-12 Bulan Di Wilayah Kerja Puskesmas Poasia Tahun 2018. Kendari:Politeknik Kesehatan Kendar. 2018.
- [3]. WHO. Global Nutrition Targets 2025: Breastfeeding policy brief. Geneva. 2014.
- [4]. Martalia. Asuhan Kebidanan Nifas dan Menyusui. Yogyakarta : Pustaka Pelajar. 2012.

- [5]. Kemenkes RI. Riset Kesehatan Dasar Tahun 2015. Jakarta. 2015.
- [6]. Kemenkes RI. Riset Kesehatan Dasar Tahun 2013. Jakarta. 2013.
- [7]. Kemenkes RI. Survey Kesehatan Rumah Tangga Tahun 2012. Jakarta. 2012.
- [8]. Dinkes Provinsi Papua. Profil Kesehatan Provinsi Papua Tahun 2019. Jayapura. 2020.
- [9]. Dinkes Kota Jayapura. Profil Kesehatan Kota Jayapura Tahun 2019. Jayapura. 2020.
- [10]. Puskesmas Hamadi. Profil Kesehatan Puskesmas Hamadi Tahun 2019. Jayapura. 2020.
- [11]. Zakiyah. Faktor-Faktor Yang Berhubungan Dengan Pemberian ASI Eksklusif Di Kelurahan Semanan Kecamatan Kalideres Jakarta Barat Tahun 2012. Skripsi. Fakultas Kesehatan Masyarakat. Universitas Indonesia. 2012.
- [12]. Setijaningsih, T., & Matiningsih, W. Pengaruh Program Parenting terhadap Pengetahuan dan Sikap Orang Tua dalam Pemenuhan Kebutuhan dasar Anak Usia Dini. *Jurnal Ners dan Kebidanan (Journal of Ners and Midwifery)*, 1(2), 129-134. 2014.
- [13]. Hakim, R. Faktor-Faktor Yang Berhubungan Dengan Pemberian ASI Eksklusif Pada Bayi 0-6 Bulan Di Wilayah Kerja Puskesmas Nabire Kota Kabupaten Nabire Tahun 2012. Skripsi. Fakultas Kesehatan Masyarakat. Universitas Indonesia. 2012.
- [14]. Atabik, A. Faktor Ibu Yang Berhubungan Dengan Praktik Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Pamotan. Skripsi. Jurusan Ilmu Kesehatan Masyarakat. Fakultas Ilmu Keolahragaan. Universitas Negeri Semarang. 2013.
- [15]. Septiani H, Budi A, Karbito. Faktor-Faktor yang Berhubungan dengan Pemberian ASI Eksklusif oleh Ibu Menyusui yang Bekerja Sebagai Tenaga Kesehatan. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*. Vol.2(2), pp 159-174. 2017.
- [16]. Siregar, T.H.W. Faktor Yang Berhubungan Dengan Pemberian ASI Eksklusif Di Desa Ujung Batu Iii Kecamatan Hutaraja Tinggi Kabupaten Padang Lawas Provinsi Sumatera Utara Tahun 2019. Program Studi D4 Kebidanan Fakultas Farmasi Dan Kesehatan Institut Kesehatan Helvetia Medan. 2020.
- [17]. Purwanti, H.S. Konsep Penerapan ASI Eksklusif Buku Saku Bidan. Jakarta: EGC. 2004.
- [18]. Wawan & Dewi. Pengetahuan, Sikap dan Perilaku Manusia. Yogyakarta : Mitra Nuha Medika. 2011.
- [19]. Evy H, Yuspina A. Faktor-Faktor Yang Berhubungan Dengan Kegagalan Pemberian ASI Eksklusif di Kecamatan Nanga Kalis Kabupaten Kapuas Hulu Tahun 2018. *Jumantik: Jurnal Mahasiswa dan Penelitian Kesehatan*. 2018.
- [20]. Kusumaningsih, T.P.; Yani, A. Faktor-Faktor Yang Berhubungan Dengan Kegagalan Pemberian ASI Eksklusif di Puskesmas Banyuasin Purworejo Kecamatan Loano Kabupaten Purworejo. *Jurnal Komunikasi Kesehatan*. Edisi-17. 2018.