

## Factors Related to Utilization House Waiting for Birth in the Work Area North Gunungsitoli Puskesmas in 2021



Matna Sihani Gulo<sup>1</sup>, Sony Priajaya Warouw<sup>2</sup>, Rosetty Sipayung<sup>3</sup>

<sup>1</sup>Masters Program in Public Health Sciences, Sari Mutiara University Indonesia (USMI)

<sup>2</sup>Sari Mutiara University of Indonesia (USMI)

<sup>3</sup>Sari Mutiara University of Indonesia (USMI)

**ABSTRACT:** The Birth Waiting House is one of the local government programs that aims to reduce maternal mortality. However, in reality, there are still many people who do not take advantage of this facility. This study aims to analyze the factors related to the utilization of the Birth Waiting Home by mothers giving birth in the working area of the North Gunungsitoli Public Health Center in 2021. The type of research is an explanatory survey with a cross sectional approach. The data collection tool uses a questionnaire. The data analysis method used was chi square and multiple logistic regression at the 95% confidence level. The results showed that only 21.25% of the respondents used the birth waiting house. The results of the bivariate analysis showed that there was a significant relationship between family support and the use of waiting homes for births by mothers with a p value of 0.000 ( $<0.005$ ). Variables Parity, knowledge, attitude, mileage, health insurance and maternal health conditions are not related to the use of the waiting house by the mother. While the results of the multivariate analysis showed that there were three variables that were significantly related to the use of the birth waiting house by maternity mothers, namely the parity variable, family support and health insurance. And the most dominant variable is parity with a p value of 0.013 and an Exp (B) value of 10.405. It is hoped that every puskesmas should promote the "SIGA" husband/family program through counseling,

**KEYWORDS:** Utilization, Birth Waiting House, Maternity, family

### PRELIMINARY

Maternal mortality is still a crucial problem in the world. In 2017, the Maternal Mortality Rate (MMR) in the world was 295,000 people. Some countries have a fairly high MMR, such as Sub-Saharan Africa with 196,000, South Asia with 58,000, and Southeast Asia with 16,000. In Southeast Asia, Myanmar ranks the highest in the number of MMR with 250 people, followed by Laos with 185 people and Indonesia with 177 people per 100,000 live births. Although in the period 2010 to 2017, the Maternal Mortality Rate (MMR) in Indonesia has decreased, but this figure is still far from the 2030 SDGS target of 70 maternal deaths per 100,000 live births.(WHO, 2019).

Based on the Indonesia Health Profile Book 2020 published by the Ministry of Health of the Republic of Indonesia, it is known that the number of Maternal Mortality Rates (MMR) in Indonesia in 2020 was 4,627 people from 4,740,342 live births. This number increased 9.67% from the previous year as many as 4,197 people from 4,772,961 live births. Meanwhile, the maternal mortality rate (MMR) in North Sumatra Province in 2020 was 187 people out of 299,198 live births. This number decreased by 4.26% from the previous year as many as 202 people from 302,555 live births(Ministry of Health RI, 2020).

Based on the Gunungsitoli City Health Office Profile Book in 2020, it is known that the number of Maternal Mortality Rates (MMR) in 2020 is 4 people out of 1,745 live births. While the stillbirth rate is 23 people out of 1,745 live births. This means that there are 13 stillbirths per 1000 live births. The Infant Mortality Rate (IMR) is still above the 2030 SDG target of 12 infant deaths per 1000 live births. Gunungsitoli Idanoi District ranks first as the contributor to the highest Infant Mortality Rate (IMR), namely 10 stillbirths out of 431 live births and followed by North Gunungsitoli sub-district with 5 stillbirths out of 247 live births.(Gunungsitoli City Health Office, 2020).

The condition of the Maternal Mortality Rate (MMR) in Indonesia which is still high has prompted the government to issue a Special Allocation Fund policy for the health sector in 2016, which includes the Jampersal fund policy. One of the objectives of the Jampersal fund is to provide a budget for the operational activities of the Birth Waiting Home Program (RTK), which is the government's strategy in facilitating access for pregnant women to obtain health services in overcoming problems of pregnant women, maternity and postpartum as an effort to reduce the Maternal Mortality Rate (MMR). in Indonesia.

The targets for the use of the Birth Waiting House (RTK) are pregnant women with high risk and risk factors and pregnant women from difficult geographical and geographical locations. Geographically, the sub-district of North Gunungsitoli generally

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consists of lowlands, hills, some swamps, rice fields and mangrove forests. There are several roads in the village of North Gunungsitoli sub-district that are damaged, rocky, coupled with a fairly steep geographical location, making it difficult to reach by public transportation. There is even one hamlet that has to cross a suspension bridge to get to the public road. In addition, heavy rainfall can cause some road access in North Gunungsitoli District to be disrupted.

The results of the researcher's interview with the Head of Public Health at the Gunungsitoli City Health Office, this RTK program was launched in January 2018 simultaneously in all Puskesmas in the Gunungsitoli City area. Socialization has also been carried out, both by the Gunungsitoli City Health Office to every Puskesmas and the community. However, in reality, people are not enthusiastic about using RTK. This can be seen from the results of the recap of reports from data from the Health Service and all Puskesmas showing that in 2020 only 87 mothers who gave birth used RTK out of a total of 1724 mothers who gave birth in all health facilities in the Gunungsitoli City area. This means that only about 5.04% of maternity mothers use RTK in the entire Gunungsitoli city area. Meanwhile, in the North Gunungsitoli Health Center area in 2020, there were 52 mothers who gave birth using RTK out of a total of 254 mothers who gave birth. This means that only about 20.47% of maternity mothers take advantage of the birth waiting house.

Based on the background described above, it is necessary to conduct research related to the utilization of the Birth Waiting House. The author is interested in analyzing the factors that influence the use of the Birth Waiting House (RTK) by mothers giving birth in the working area of the UPTD Puskesmas Gunungsitoli Utara in 2021.

## **RESEARCH METHODS**

### **Research design**

This study is an explanatory survey research with a cross-sectional design which aims to explain the relationship between predisposing factors, enabling factors, and need factors with the use of waiting homes in the region. UPTD North Gunungsitoli Health Center in 2021.

### **Research Location and Time**

This research was conducted in the working area of UPTD Puskesmas Gunungsitoli Utara. This research starts in December 2021 – July 2022.

### **Population And Sample**

#### **Population**

The population is all mothers who gave birth in January to December 2021 as many as 248 people from 10 villages in the working area of UPTD Puskesmas Gunungsitoli Utara.

#### **Sample**

The sample in this study were mothers who had given birth, whether they used or did not use RTK in the working area of the North Gunungsitoli Health Center for the period 2021. Based on calculations using the Lameshow formula, the minimum number of samples needed in this study was 80 mothers who gave birth. To determine the number of samples in each village, using a proportional stratified random sampling technique, which is a sampling technique in which the proportion of each strata or region is determined in proportion to the total population in each strata or region.

#### **Data collection**

The data collection method uses a questionnaire measuring instrument with a nominal measuring scale that has been tested for validity and reliability on 30 respondents who have the same characteristics, namely mothers who have given birth in 2021 in the working area of UPTD Puskesmas Gunungsitoli Idanoi.

The validity of the questionnaire was tested using Product Moment Correlation and reliability testing was carried out using the Cronbach Alpha coefficient technique. Based on the results of the calculation, it can be concluded that the 55 question items in the research instrument are valid because all the results of the calculated  $r$  value  $> 0.361$  ( $r$  table). And Cronbach's alpha value for each dependent and independent variable is greater than 0.7 so that all research variable instruments can be declared reliable (consistent) to be used as research questionnaires.

### **Processing and data analysis**

Data processing was carried out using the Statistical Package for Social Science (SPSS) version 25 software. The processed data was then analyzed. Data analysis techniques in this study consisted of univariate analysis (frequency distribution), bivariate analysis (chi-square test) and multivariate analysis (multiple logistic regression test).

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## RESEARCH RESULT

### Univariate Analysis Results

#### Distribution of Respondents by Parity

**Table 1. Distribution of Respondents Based on Parity**

parity	Amount	Percent (%)
Primipara	27	33.8
Multipara	53	66.3
Total	80	100

Based on table 1, it is known that respondents with primipara (number of births 1) were 27 people (33.8%) and respondents with multipara (number of births 2) were 53 people (66.3%).

#### Distribution of Respondents Based on Knowledge

**Table 2. Distribution of Respondents Based on Knowledge**

Knowledge	Amount	Percent (%)
Not good	8	10
Well	72	90
Total	80	100

Based on table 2, it is known that respondents with poor knowledge are 8 people (10%) while respondents with good knowledge are 72 people (90%).

#### Distribution of Respondents Based on Attitude

**Table 3. Distribution of Respondents Based on Attitudes**

Attitude	Amount	Percent (%)
Negative	7	8.75
Positive	73	91.25
Total	80	100

Based on table 3, it is known that the respondents with a negative attitude were 7 people (8.75%) while the respondents with a positive attitude were 72 people (91.25%).

#### Distribution of Respondents Based on Family Support

**Table 4. Distribution of Respondents Based on Family Support**

Family support	Amount	Percent (%)
Not good	44	55
Well	36	45
Total	80	100

CongestedTable 4 shows that respondents with poor family support are 44 people (55%) while respondents with good family support are 36 people (45%).

#### Distribution of Respondents Based on Mileage

**Table 5. Distribution of Respondents Based on Mileage**

Mileage	Amount	Percent (%)
Close (< 5 km )	43	53.8
Far ( 5 km )	37	46.3
Total	80	100

Based on table 5, it is known that respondents with short distances are 43 people (53.8%) while respondents with long distances are 37 people (46.3%).

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### Distribution of Respondents Based on Health Insurance

**Table 6. Distribution of Respondents Based on Health Insurance**

Health insurance	Amount	Percent (%)
Do not have	20	25
Have	60	75
Total	80	100

In table 6 it is known that the respondents who do not have a health insurance card are 20 people (25%) while the respondents who have a health insurance card are 60 people (75%).

### Distribution of Respondents Based on Maternal Health Conditions

**Table 7. Distribution of Respondents Based on Maternal Health Conditions**

Mother's Health Condition	Amount	Percent (%)
Not healthy	5	6.25
Healthy	75	93.75
Total	80	100

Based on table 7, it is known that respondents with unhealthy conditions are 5 people (6.25%) while respondents with healthy conditions are 75 people (93.75%).

### Distribution of Respondents Based on the Utilization of the Birth Waiting House

**Table 8. Distribution of Respondents Based on the Utilization of RTK**

Utilization of RTK	Amount	Percent (%)
Not Utilizing	63	78.75
Utilise	17	21.25
Total	80	100

Based on table 8, it is known that 63 respondents (78.75%) did not use the birth waiting house, while 17 respondents (21.25%) used RTK.

### Bivariate Analysis Results

#### The Relationship of Parity with the Use of the Birth Waiting House

**Table 9. Relationship of Parity with Utilization of Birth Waiting House**

parity	Utilization of the Birth Waiting House						P Value
	Not taking advantage of		Utilise		Total		
	n	%	n	%	n	%	
Primipara	25	92.6	2	7.4	27	100	0.061
Multipara	38	71.7	15	28.3	53	100	
Total	63	78.8	17	21.3	80	100	

*\*0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.74. Computed only for a 2x2 table.*

In table 9 it is known that the results of the chi square test using the continuity correction formula, obtained a p value of 0.061 ( $p > 0.05$ ) so that  $H_0$  is accepted and  $H_a$  is rejected. This shows that there is no significant relationship between parity and the utilization of the birth waiting house (RTK) by women giving birth in the working area of the North Gunungsitoli Health Center in 2021.

#### Relationship between Knowledge and Utilization of Waiting for Birth

**Table 10. The Relationship of Knowledge with the Utilization of the Home Waiting for Birth**

Knowledge	Utilization of the Birth Waiting House						P Value
	Not Utilizing		Utilise		Total		
	n	%	n	%	n	%	
Not good	8	100	0	0.0	8	100	0.192
Well	55	76.4	17	23.6	72	100	
Total	63	78.8	17	21.3	80	100	

*\*1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.70. Computed only for a 2x2 table.*

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Table 10 shows that there is 1 cell whose actual frequency value is 0 (zero), the minimum expected frequency value is 1.70 and there is 1 cell whose expected frequency value is less than 5 so to determine the p value value using the Fisher's exact test formula. From the test results obtained p value of 0.192 ( $p > 0.05$ ) so that  $H_0$  is accepted and  $H_a$  is rejected. This shows that there is no significant relationship between knowledge and the use of birth waiting homes by mothers in the working area of the North Gunungsitoli Health Center in 2021.

### Relationship between Attitude and Utilization of Waiting for Birth

**Table 11. Relationship between Attitudes and Utilization of RTK**

Attitude	Utilization of RTK						P Value
	Not Utilizing		Utilise		Total		
	n	%	n	%	n	%	
Negative	7	100	0	0.0	7	100	0.335
Positive	56	76.7	17	23.3	73	100	
Total	63	78.8	17	21.3	80	100	

*\*1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.49. Computed only for a 2x2 table.*

Table 11 shows that there is 1 cell whose actual frequency value is 0 (zero), the minimum expected frequency value is 1.49 and there is 1 cell whose expected frequency value is less than 5 so to determine the p value value using the Fisher's exact test formula. From the test results obtained p value of 0.335 ( $p > 0.05$ ) so that  $H_0$  is accepted and  $H_a$  is rejected. This shows that there is no significant relationship between attitudes and the use of birth waiting homes by mothers in the working area of the North Gunungsitoli Health Center in 2021.

### Relationship between Family Support and Utilization of Waiting for Birth

**Table 12. Relationship between Family Support and Utilization of Waiting for Birth**

Family support	Utilization of RTK						P Value
	Not Utilizing		Utilise		Total		
	n	%	n	%	n	%	
Not good	44	100	0	0.0	44	100	0.000
Well	19	52.8	17	47.2	36	100	
Total	63	78.8	17	21.3	80	100	

*\*0 cells 0(.0%) have expected count less than 5. The minimum expected count is 7.65. Computed only for a 2x2 table.*

Based on table 12, it is known that there is 1 cell whose frequency value is actually 0 (zero), so to determine the p value, the fisher's exact test must be used. From the test results obtained p value = 0.000 ( $p < 0.05$ ) so that  $H_0$  is rejected and  $H_a$  is accepted. This shows that there is a significant relationship between family support and the use of birth waiting homes by mothers in the working area of the North Gunungsitoli Health Center in 2021.

### The Relationship between Mileage and Utilization of a Birth Waiting House

**Table 13. Relationship between Mileage and Utilization of Birth Waiting House**

Mileage	Utilization of RTK						P Value
	Not Utilizing		Utilise		Total		
	n	%	n	%	n	%	
Close	31	72.1	12	27.9	43	100	0.195
Far	32	86.5	5	13.5	37	100	
Total	63	78.8	17	21.3	80	100	

*\*0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.86. Computed only for a 2x2 table.*

In table 13 it is known that the results of the chi square test using the continuity correction formula, obtained a value of  $p = 0.195$  ( $p > 0.05$ ) so that  $H_0$  is accepted and  $H_a$  is rejected. This shows that there is no significant relationship between the distance

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traveled and the use of the birth waiting house by mothers in the working area of the North Gunungsitoli Public Health Center in 2021.

### The Relationship between Health Insurance and the Use of Waiting Homes for Birth

**Table 14. The Relationship between Health Insurance and Utilization of Home Waiting for Birth**

Health insurance	Utilization of the Birth Waiting House						P Value
	Not Utilizing		Utilise		Total		
	n	%	n	%	n	%	
Not Have	19	95.0	1	5.0	20	100	0.057
Have	44	73.3	16	26.7	60	100	
Total	63	78.8	17	21.3	80	100	

*\*1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.25.  
Computed only for a 2x2 table.*

Table 14 shows that there is 1 cell whose expected frequency value is less than 5 with a minimum expected frequency value of 4.25, so to determine the p value using the fisher's exact test formula. From the test results obtained p value of 0.057 ( $p > 0.05$ ) so that  $H_0$  is accepted and  $H_a$  is rejected. This shows that there is no significant relationship between health insurance and the use of birth waiting homes by mothers in the working area of the North Gunungsitoli Health Center in 2021.

### The Relationship of Maternal Health Conditions with Utilization of Waiting Homes for Birth

**Table 15. The Relationship of Maternal Health Conditions with the Utilization of the Birth Waiting House**

Health condition Mother	Utilization of the Birth Waiting House						P Value
	Not Utilizing		Utilise		Total		
	n	%	n	%	n	%	
Not healthy	4	80.0	1	20.0	5	100	1,000
Healthy	59	78.9	16	21.3	75	100	
Total	63	78.8	17	21.3	80	100	

*\*2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.06.  
Computed only for a 2x2 table.*

Table 14 shows that there are 2 cells whose expected frequency value is less than 5 with a minimum expected frequency value of 1.06, so to determine the p value using the fisher's exact test formula. From the test results obtained a p value of 1,000 ( $p > 0.05$ ) so that  $H_0$  is accepted and  $H_a$  is rejected. This shows that there is no significant relationship between maternal health conditions and the utilization of the birth waiting house (RTK) by mothers who give birth in the working area of the North Gunungsitoli Health Center in 2021.

### Multivariate Analysis

In this study, the variables that meet the requirements to be included in multiple logistic regression are parity, knowledge, attitudes, family support, mileage and health insurance because they have a p value  $< 0.25$ . This multiple logistic regression analysis went through 5 stages of selection.

The results of the final stage of multiple logistic regression analysis are as follows:

**Table 16. Results of Final Stage Multiple Logistics Regression Analysis**

Variable	B	P Value	Exp (B)
parity	2,342	0.013	10,405
Family support	21.389	0.997	1946844210,
Health insurance	2,517	0.037	913
Constant	-51,450	0.996	12,389 0.000

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Based on table 16, it shows that the parity variable has a significant and significant effect on the utilization of the birth waiting house with a value of  $p = 0.013$  ( $p < 0.05$ ) with an Exp (B) value of 10.405. Likewise, the health insurance variable which has a significant and significant effect on the utilization of the waiting house for births with a  $p$  value = 0.037 with an Exp (B) value of 12.389. Meanwhile, the family support variable which has a  $p$  value of 0.997 ( $p > 0.05$ ) but still survives in the regression modeling until the final stage because it has the highest Exp (B) value, which is 1946844210,913. The three variables that were entered into the modeling until the final stage showed that the independent variable had a significant or significant effect on the dependent variable.

To see the strongest candidate that affects the utilization of the birth waiting house (RTK) refers to the variable that has the smallest  $p$  value, namely the parity variable with a  $p$  value of 0.013 and an Exp (B) value of 10.405. The value of Exp (B) shows that respondents with multipara parity have a tendency of 10,405 times to take advantage of the birth waiting house in the working area of the North Gunungsitoli Health Center in 2021.

## DISCUSSION

### The Relationship between Parity and Utilization of RTK

The results of the chi-square test showed that there was no significant relationship between parity and the utilization of the birth waiting house (RTK) by mothers in the working area of the North Gunungsitoli Public Health Center in 2021 with a  $p$  value of 0.061 ( $p > 0.05$ ). However, in the multivariate analysis using multiple logistic regression analysis, the results showed that the parity variable had a significant and significant relationship to the use of RTK with a  $p$  value of 0.013 ( $p > 0.05$ ) and was the most dominant variable influencing respondents in utilizing RTK with a value of Exp (B) is 10,405.

The results of this study are in line with research (Harahap et al., 2018) about the factors related to the utilization of the waiting house for births in the Binjai Serangan Public Health Center, Asahan Regency, namely the parity variable which most dominantly influences the utilization of RTK with an Exp (B) value of 9.331 (CI: 95% 3.429-25.393). Likewise with the results of other studies by (Tongun et al., 2019) stated that primiparas had a 2.95% risk of using birth waiting homes compared to multiparous mothers.

Parity is the number of deliveries that have been experienced by the mother, both live and stillborn, with a fetus weighing up to 500 g and at birth more than 20 weeks old. (Rinata & Andayani, 2018). This study shows that there is a relationship between parity and the use of RTK in the working area of the North Gunungsitoli Health Center in 2021. From this study, it is known that of the 17 respondents who used the RTK, there were 15 respondents with multiparity parity. According to the researcher's assumption, respondents with multipara parity are more dominant in using RTK because the majority of respondents have given birth more than once so it can be said that they have more experience in undergoing the delivery process. This affects the respondent's perception that the use of RTK before giving birth is also important to help prevent problems that might occur when giving birth.

### Relationship between Knowledge and Utilization of RTK

Knowledge is the result of human sensing or the result of someone knowing about objects through their senses (Furi, Lili Tiara., 2014). From the results of the chi-square test, the value of  $p = 0.192$  ( $p > 0.05$ ), means that there is no significant relationship between knowledge and the utilization of the birth waiting house (RTK) by women giving birth in the North Gunungsitoli Public Health Center in 2021.

The results of this study are in line with research (Ulumia, 2020) which states that there is no relationship between knowledge and the use of RTK in the work area of the Tenganan Health Center in 2019 with a  $p$  value of 0.591. Researchers say that the lack of socialization causes pregnant women to have very limited knowledge, so they do not know about RTK. However, this study is not in line with the research conducted by (Harahap et al., 2018) which states that knowledge has a significant effect on the use of RTK with a  $p$  value of 0.000. The researcher stated that a pregnant woman who has knowledge about the importance of using the Birth Waiting Home (RTK) will tend to use RTK before giving birth.

In the results of this study, it is known that the average respondent has good knowledge about RTK but does not necessarily influence respondents to use RTK. Therefore, the researcher assumes that there are other factors that are more likely to use RTK by maternity mothers in the working area of the North Gunungsitoli Health Center in 2021 besides the knowledge factor.

### Relationship between Attitude and Utilization of RTK

Based on the results of statistical analysis using the chi-square test, the value of  $p = 0.335$  ( $p > 0.05$ ) means that there is no significant relationship between attitudes and the use of waiting homes for births by mothers in the area of North Gunungsitoli Public Health Center in 2021. The results of this study This is in line with the results of research (Zufrizal, 2021) which states that there is no relationship between attitudes and the use of RTK by mothers in Langkat Regency with a  $p$ -value of 1,000. Likewise with the results of research (Dari, 2018) which states that there is no relationship between attitudes and the use of RTK by mothers giving birth at the East Aceh District Health Center in 2018 with a  $P$  value of 0.973.

From the results of the study, 91.25% of respondents had a positive response to the birth waiting house (RTK). However, in reality, this positive attitude does not necessarily make the birthing mother want to take advantage of the birth waiting house (RTK). This can be seen from the absence of a relationship between attitudes about RTK and the use of RTK in the working area of the

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North Gunungsitoli Public Health Center in 2021. Therefore, the researcher assumes that there are other factors besides attitude factors that are more likely to be associated with the use of the waiting house for births by maternity mothers. in the working area of the North Gunungsitoli Health Center in 2021.

### **Relationship between Family Support and Utilization of RTK**

Based on the results of statistical analysis using the chi-square test, the value of  $p = 0.000$  ( $p < 0.05$ ), means that there is a significant relationship between family support and the use of RTK by mothers giving birth in the working area of the North Gunungsitoli Health Center.

The results of this study are in line with research (Dari, 2018) which states that the most dominant family support factor affects the use of birth waiting homes by maternity mothers at the East Aceh District Health Center in 2018. Respondents who have good companion support (husband/family) will have a tendency to 11,045 times to utilize the birth waiting house at the East Aceh District Health Center in 2018. Likewise with the results of research (Ulumia, 2020) which states that there is a relationship between family support and the use of the Birth Waiting House (RTK), where respondents with good family support 2, 6 times more likely to use RTK compared to respondents with less family support.

In the results of bivariate analysis using chi square, it is known that family support is the only factor that has a significant relationship with the use of birth waiting homes by maternity mothers in the working area of the North Gunungsitoli Health Center in 2021. This is influenced by socio-cultural factors, where the majority of Nias ethnic families still adheres to the patrilineal kinship system, namely all decisions regarding matters relating to the family are decided by the head of the family. Likewise, in the selection of health service facilities, such as the use of the Birth Waiting House (RTK) by maternity mothers, in general it is more dominant based on the results of the husband's decision as the head of the family. This is evident from 17 respondents who use RTK, have good family support. Therefore,

### **The Relationship between Mileage and Utilization of RTK**

The distance from the house to the birth waiting house (RTK) is the length of the path between the respondent's house and the RTK. Based on the results of statistical analysis using the chi-square test, the value of  $P = 0.195$  ( $P > 0.05$ ), meaning that there is no relationship between family support and the use of RTK by maternity mothers in the working area of the North Gunungsitoli Public Health Center. The results of this study are in line with research (Zufrizal, 2021) which states that there is no relationship between mileage and the use of RTK. Likewise, the results of research (Ulumia, 2020) which stated that there was no relationship between mileage and the use of RTK by maternity mothers.

This research is not in line with research (Sukoco & Suparmi, 2017) states that there is a relationship between mileage and the use of RTK. From the research results, it is known that respondents who live 25 km away are 20 times more likely to use RTK than mothers who live more than 25 km away. Likewise research (Mardiyah et al., 2014) which shows that there is a significant relationship between accessibility and the use of antenatal health services by pregnant women in the working area of the Tempurejo Public Health Center, Jember Regency with a  $p$  value of 0.0001. Study (From, 2018) also stated that there was a significant relationship between accessibility and the use of the birth waiting house (RTK) with  $p$  value = 0.004.

In this study, the mileage factor did not have a relationship with the use of birth waiting homes by mothers in the working area of the North Gunungsitoli Health Center in 2021. This is not in line with the Ministry of Health's policy where pregnant women with difficulty accessing and having long distances to health facilities are expected to make more use of RTK, so as to minimize the risk in the event of complications during delivery. In accordance with the theory of health service utility which explains that a person's desire to use health services is also determined by supporting factors, one of which is the distance or accessibility of health services.

From the results of the interviews, the average respondent had no problem with mileage because most respondents already had transportation equipment such as motorbikes and public transportation. However, respondents prefer to give birth at the nearest midwife's practice or directly to health facilities such as health centers and hospitals without having to stay at the birth waiting house first.

### **The Relationship between Health Insurance and RTK Utilization**

The results of statistical analysis using the chi-square test showed a value of  $p = 0.057$  ( $p > 0.05$ ), meaning that there was no significant relationship between health insurance and the use of RTK by maternity mothers in the working area of the North Gunungsitoli Public Health Center in 2021. However, In multivariate analysis using multiple logistic regression analysis, the results showed that the parity variable had a significant and significant relationship to the utilization of RTK with a  $p$  value of 0.037 ( $p < 0.005$ ).

The results of this study are not in line with the research (Zufrizal, 2021) which states that there is no relationship between health insurance and the use of RTK with a  $p$  value of 0.590. However, the results of this study are in line with research (Masita et al., 2015) states that there is a significant relationship between access and ownership of health insurance with the utilization of health services with a  $p$  value of 0.002.



## Factors Related to Utilization House Waiting for Birth in the Work Area North Gunungsitoli Puskesmas in 2021

Health insurance affects the consumption of services significantly. The benefits of health insurance are that it frees participants from the difficulty of providing cash, health costs can be monitored, and health data is available. Ownership of family health insurance that can be used at the Puskesmas, for example: Askes, Jamkesmas and BPJS. Health insurance has a very important role in maintaining public health, especially when sick so that the community's needs for health services will be met and health financing is more secure. (Thabrany, 2014).

From the results of multivariate analysis, it is known that the health insurance variable has a significant and significant influence on the use of RTK in the working area of the Gunung Sitoli Utara Health Center in 2021. Therefore, the researcher assumes that the existence of a health insurance card also greatly influences the decision of respondents and their families to use health facilities. The facilities provided by the government include birth waiting house (RTK) facilities at the North Gunungsitoli Health Center 2021.

### Relationship between Maternal Health Conditions and Utilization of RTK

Based on the results of statistical analysis using the chi-square test, the value of  $P = 0.943$  ( $P > 0.05$ ), meaning that there is no relationship between maternal health conditions and the use of RTK by maternity mothers in the work area of the North Gunungsitoli Public Health Center in 2021.

This study is not in line with research (Zufrizal, 2021) which states that there is a significant relationship between maternal health conditions and the use of RTK. Likewise with research (Dari, 2018) which states that there is a significant relationship between perceptions of pregnancy conditions and the use of RTK by mothers giving birth at the East Aceh District Health Center in 2018.

According to Andersen, individual assessment of health is an individual's perspective in observing disease symptoms, levels of pain and concerns about health which makes it very important and requires individuals to seek better health services or influence someone in utilizing health services. (Andersen et al., 2001).

Based on the results of this study, it was found that there was no relationship between maternal health conditions and the use of RTK. The results showed that there were 75 respondents in healthy condition and 5 other respondents in unhealthy condition. And of the 17 respondents who used RTK, there was only 1 unhealthy respondent who used RTK. From the results of the interview, it was found that respondents who were not healthy preferred to go directly to Gunungsitoli Hospital to give birth rather than having to stay at the RTK Puskesmas first.

### The Most Dominant Factors Related to the Utilization of RTK

From the results of multivariate analysis using multiple logistic regression, it is known that there are only three variables that enter the final stage of modeling, namely parity, family support and health insurance. The three variables that entered the final stage of modeling indicate that these variables have a significant and significant effect on the utilization of the birth waiting house (RTK) in the working area of the UPTD Puskesmas Gunungsitoli Utara in 2021.

The dominant variable that affects respondents in the use of RTK refers to the variable that has the smallest p value, namely the parity variable with a p value of 0.013 and an Exp (B) value of 10.405. This Exp (B) value shows that respondents with multipara parity have a tendency of 10,405 times to take advantage of the birth waiting house in the working area of the UPTD Puskesmas Gunungsitoli Utara in 2021.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusion

Based on the results of research on factors related to the utilization of the Birth Waiting House (RTK) in the working area of the UPTD Puskesmas Gunungsitoli Utara in 2021, the following results were obtained:

1. From the bivariate analysis, it was found that there was only one variable that had a significant relationship with the use of RTK, namely the family support variable. While the other six variables, namely parity, knowledge, attitude, mileage, health insurance and maternal health conditions did not have a significant relationship with the utilization of the birth waiting house (RTK) in the working area of the UPTD Puskesmas Gunungsitoli Utara in 2021.
2. From the multivariate analysis, it was found that the variables parity, family support and health insurance had a significant and significant relationship with the utilization of the birth waiting house (RTK) in the working area of the UPTD Puskesmas Gunungsitoli Utara in 2021.
3. The most dominant variable related to the utilization of the birth waiting house (RTK) in the UPTD work area of the North Gunung Sitoli Health Center in 2021 is the parity variable.

### Recommendation

Based on the results of this study provide several recommendations as follows:

1. It is hoped that every puskesmas should promote the husband/family program "SIAGA" through counseling, approaches to

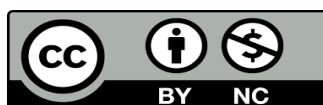
## Factors Related to Utilization House Waiting for Birth in the Work Area North Gunungsitoli Puskesmas in 2021

husbands/families assisted by local community leaders/religious leaders with the aim of increasing the role of the family in supporting maternity mothers to take advantage of the birth waiting house.

2. It is expected that the Gunungsitoli City Health Office and Puskesmas should carry out preventive work programs such as outreach to the community, distribution of brochures/leaflets about birth waiting homes, installation of banners at puskesmas, geuchik offices/government offices, notification via regional radio to convey information about birth waiting houses. .
3. It is hoped that every puskesmas should provide education, advice, and advice when pregnant women to routinely carry out ANC checks, as well as to encourage pregnant women to take advantage of the birth waiting house (RTK) before and after delivery.
4. It is hoped that the Gunungsitoli City Health Office and the puskesmas should build a permanent waiting house building so that mothers are more comfortable, add facilities in the birth waiting house such as a special room for companions (husband/family), and add the function of the waiting house not only as a place to wait for the birth process, but also as a place to wait for the delivery process. can be used as a place for the implementation of pregnancy exercise programs and counseling about pregnancy.
5. It is hoped that further researchers will conduct qualitative research to dig deeper into the factors that influence the use of the birth waiting house (RTK) by maternity mothers.

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