

Relationship Of Mother's Knowledge Level With Immunization In Baby 0-12 Months At Mompangjae Puskesmas, Panyabungan Utara District, Mandailing Regency Year 2022

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ABSTRACT

Immunization is an effort to increase individual immunity to avoid certain diseases. Immunizations that must be given to infants are Hepatitis B, polio, BCG, DPT, measles. Complete basic immunization coverage in Indonesia in 2019 is 71.98%. The purpose of this study was to analyze the relationship between mother's level of knowledge and basic immunization for infants 0-12 months in the Mompang Jae Public Health Center, Panyabungan Utara District, Mandailing Natal Regency. This research is an analytic survey with a cross sectional approach. The sampling method in this study was to use a total sampling technique, that is, all the population was sampled as many as 35 people. The research instrument used primary data (questionnaire) consisting of 20 questions. The data processing technique starts from editing, coding and tabulating, then tested by Chi-Squer test. The results of this study indicate that immunization was given to 35 cases, the majority of which were moderately knowledgeable as many as 14 people (40.0%) and the minority of knowledge was less than 9 people (25.7%). The results of the Chi-Square test obtained p-value = 0.001 <0.05 then H_a is accepted and H_o is rejected which means there is a relationship between Mother's Knowledge Level and Immunization for Babies 0-12 Months in the Working Area of Mompang Jae Health Center, North Panyabungan District, Mandailing Natal Regency. 2022. As a suggestion to research sites, it is hoped that it can motivate cadres and health workers to be more active in providing counseling about the importance of immunization for infants to prevent disease.

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1. Introduction

The aim of immunization is to reduce morbidity, mortality and disability due to diseases that can be prevented by immunization. Immunization is very effective in preventing infectious diseases, through immunization our bodies will not be susceptible to infectious diseases (Faisal, 2021).

According to the World Health Organization (WHO) in 2019, the global coverage of Haemophilus influenza type b (HIB) immunization was estimated at 72%. Global coverage of the hepatitis B three-dose vaccine is estimated at 84%. Global coverage of single-dose hepatitis B vaccine is 43%. Polio immunization coverage is 85%. Rota virus is the most common cause of severe diarrheal disease in young children worldwide. Coverage is estimated at 28%. Rubella is a viral disease that is usually mild in children, but infection during early pregnancy can cause fetal death. Global coverage is estimated at 52%. Tetanus is caused by bacteria that grow without oxygen. It is estimated that 85% of newborns are protected through immunization (WHO, 2020).

In 2019, basic immunization coverage for infants in America was 91%. In the Western Pacific region immunization coverage for infants is 28%. In Southeast Asia, immunization coverage for infants is 86% (Azis, 2020). In Indonesia, every baby (0-11 months) is required to receive complete basic immunization, which consists of 1 dose of hepatitis B, 1 dose of BCG, 3 doses of DPT-HB-HIB, 4 doses of polio drops, 1 dose of measles/MR. The determination of the type of immunization is based on expert studies and epidemiological analysis of emerging diseases. Complete basic immunization coverage in Indonesia from 2017 to 2019 was 85.41%, 72.76%, and decreased again in 2019 by 71.98% (Kemenkes RI, 2020).

The coverage of basic immunization of West Sumatra Province from 2017-2020 has decreased. In 2019, basic immunization coverage was complete by 84.21% of infants who had been immunized. Meanwhile, in 2018, complete basic immunization coverage experienced a large decrease of 47.37%. In 2019, the complete basic immunization coverage rate again decreased by 42.11% of infants who had been immunized. Immunization coverage in 2020, increased by 54.1% (Kemenkes RI, 2020).

Complete basic immunization coverage for 2019-2020 in North Sumatra Province. In 2019, the complete basic immunization coverage was 93.67%. Have started to meet the targets set. In 2020 complete basic immunization coverage experienced a large decline of 75.8% (Health District/City, 2020).

Complete basic immunization coverage in Mandailing Natal 68.27% still does not meet the specified target (Health District/City, 2019). Based on an initial survey that researchers have conducted at the Mompang Jae Health Center, North Panyabungan District, Mandailing Natal Regency in 2021. According to (Mompang Health Center Health Profile, 2021) Complete basic immunization coverage in January-September 2021. Immunization coverage in January 35.2%, February 37.65%, March 35.9%, April 39.3%, May 37.18%, June 38.25%, July 37.5%, August 39.65% and 41.5% of infants at the Mompang Health Center who Get immunized in September 2021.

From these data, Mompang Health Center has the lowest immunization coverage. The lack of coverage of infant immunization at the Mompang Health Center is caused because there are still parents who refuse to immunize their babies. Of the 10 respondents who were interviewed, 3 mothers had good knowledge about giving basic immunization to babies and 7 mothers who had less knowledge about giving basic immunizations to babies. Efforts are being made to increase the coverage of basic immunization for infants, namely immunization counseling in the Mompang Health Center area where immunization coverage is still low, approaches to community groups who still refuse immunization by involving community leaders. of mothers who have babies who become targets of immunization require basic immunization knowledge. Therefore, researchers are interested in knowing whether there is a "Relationship between Mother's.

Level of Knowledge and Giving Immunization to Babies in the Mompang Public Health Center, Panyabungan Utara District, Mandailing Natal Regency in 2022.

2. Method

This research was conducted using an analytical survey method, using a cross sectional approach. This research was conducted at the Mompang Jae Public Health Center, North Panyabungan District, Mandailing Natal Regency. The population in this study were mothers who had babies 0 -12 months at the Mompang Jae Health Center. Research sample. Based on the method used, the overall sample required 35 respondents. Data analysis used the chi-square test.

3. Results and Discussion

This research was started in January – March 2022. The method of collecting data at that time was self-conscious and without coercion from anyone. The researcher received approval from educational institutions, namely the MadinaHusada Midwifery Academy and permission from Barbaran Jae Village, Kec. West Panyabungan to conduct an initial survey, after receiving a reply letter from Barbaran Jae Village, Kec. Panyabungan Barat i, then researchers can conduct research in. The researcher first asked 10 mothers in the village of Barbaran Jae about immunization. That the mother was willing to be a respondent, then the researcher observed

the questionnaire and checklist sheet, after the respondent had finished answering all the questionnaires distributed by the researcher. The researcher again collected all the questionnaires, then the researcher continued processing the data. The results of these studies can be seen in the table below.

Table 1
Characteristics of Respondents at Mompang Jae Public Health Center, North
Panyabungan District, Mandailing Natal Regency in 2022

No	Respondent characteristics	N	%
1	Education		
	SD	9	25,7
	SMP	11	31,4
	SMA	14	40,0
	Perguruan Tinggi	1	2,9
2.	Umur		
	<20 Year	1	2,9
	20 – 35 Year	30	85,7
	>35 Year	4	11,4
3	Profession		
	IRT	18	51,4
	Farmer	9	25,7
	Entrepreneur	7	20,0
	PNS	1	2,9
4.	Resources		
	Elektronik Media	18	51,4
	Friends/Family	12	34,3
	Health Workers	5	14,3

Based on Table 1 above, it can be seen that the most respondents have high school education as many as 14 people (40.0%), maternal age 20-35 years as many as 30 people (85.7%) IRT work as many as 18 people (51.4%) and sources of information on electronic media as many as 18 people (51.4%). To test the relationship of independent variables which include education, mother's age, occupation, sources of information with the dependent variable, namely the level of knowledge of mothers with immunization for infants 0-12 months, bivariate analysis was carried out using the chi-square test with $\alpha=0.05$ described. as follow.

Table 2.
Frequency Distribution of Respondents Based on Knowledge at Mompang Jae Health Center,
North Panyabungan District, Mandailing Natal Regency in 2022

No	Nutritional Status	N	%
1	Good	12	34,3
2	Enough	14	40,0
3	Not Enough	9	25,7

Based on table 2, the knowledge of moderate mothers was 14 people (40.0 %), good as many as 12 people (34.3 %), less than 9 people (25.7 %). Knowledge is the result of knowing from various symptoms that are found and obtained by a person by using his mind to recognize certain objects or events that have never been known or felt before by sensing that occurs through the five human senses, namely the senses of sight, hearing, smell, touch and feeling (Nuryati, 2018).

According to Selina Heraris (2018) in her research, it shows that the average level of knowledge of the respondents is sufficient. The cause of the sufficient level of mother's knowledge about immunization is not necessarily enough knowledge of the mother with the material asked on the questionnaire about mother's knowledge, so that the mother cannot answer all the questions correctly.

According to Nelly Nugrawati (2019) in her research explaining that knowledge about immunization is very important for mothers who have babies 0-12 months, especially mothers who have just given birth to their first child, in this study the level of knowledge is still sufficient because there are still many babies who do not receive complete immunizations. This opinion is in line with research conducted by Nurul Maghfirah, Sulaiman Yusuf, and siti Hajar HaristinaHalaw.

This knowledge is assessed from education, occupation, and age (2017). In the research of HettiMarlinaPakpahan (2021), knowledge is a very important domain level for the formation of a mindset for immunization shortages. From the respondent's data (in HettiMarlinaPakpahan's research) it was found that knowledge was sufficient. And there are still some mothers who want to bring their children for immunization, the rest there are still many mothers who do not bring their children for immunization. This knowledge is assessed from the source of information.

From the results above, it is known that the mother's knowledge is sufficient with giving immunizations to infants. Because some mothers bring their children for immunization and there are still many mothers who do not provide basic immunizations for their babies. Immunization in infants is very important is one of the ways to increase immunity in infants. The risk factor for infants who do not receive immunizations is increasing disease and infant mortality. In this study, there was an influence between mother's knowledge and giving immunizations to babies.

Table 3.
Frequency Distribution of Relationship between Mother's Knowledge Level and Giving Immunization to Infants 0-12 Months at Mompang Jae Health Center, North Panyabungan District, Mandailing Natal Regency in 2022

No	Parity	Knowledge Level						Amount		Prob (P)
		Good		Enough		Not Enough		F	%	
		F	%	F	%	F	%			
1.	Primipara	2	11.8	2	52.9	6	35.3	9	100	0.009
2.	Multipara	12	41.4	1	48.3	3	10.3	2	100	
				0				5		
3.	Grandemultipara	-	-	-	-	-	-	-	-	
	Total	14	30.4	1	50.0	9	19.6	3	100	
				2				5		

Based on table 3, the majority of respondents in Multipara parity have good knowledge of 12 people (41.4%), the majority of primiparous respondents have less knowledge as many as 6 people (35.3%).

From the results of the Chi-Square test, it was found that $p \text{ value} = 0.009 \leq 0.05$, then H_a was accepted and H_o was rejected, which means that there is a relationship between Mother's Knowledge Level and Immunization for 0-12 Months Babies in the Mompang Jae Health Center Work Area, North Panyabungan District, Mandailing Regency. Christmas Year 2022. This study is also continuous with research conducted by Selina Heraris (2018), that there is a relationship between the level of knowledge of the mother and the provision of immunization, where the p -value is $0.001 < 0.05$, mother's knowledge is very influential with giving immunizations to infants.

The results of this study are in line with the conclusions of Siti Humairah Alhaddad's research (2020), namely there is a relationship between the mother's level of knowledge and giving immunizations to babies with the results obtained p -value $0.001 < 0.05$ so H_o is rejected and H_a is accepted, meaning there is a relationship between the level of knowledge mothers by immunizing their babies.

The results of this study are in line with the conclusions from the research of Hetti Marlina Pahpahan (2021), namely there is a relationship between mother's knowledge and immunization for infants 0-12 months with the results obtained p -value $0.001 < 0.05$ so H_o is rejected and H_a is accepted. This means that there is a relationship between mother's knowledge and immunization for infants 0-12 months. According to previous research (in the research of Hetti Marlina Pahpahan, 2021) found that mother's knowledge of the baby has a significant relationship with immunization. This is obtained through the mother's knowledge of the baby, the better the mother's knowledge of the baby, the better the baby will be and will avoid diseases that are prevented by immunization and conversely, the worse the mother's knowledge, the more likely the baby will experience the disease. Because the disease that occurs as a result of the mother's lack of knowledge about immunization.

According to the researcher's assumption, incomplete immunization is caused by a lack of mother's knowledge so that babies are susceptible to diseases that can be prevented by immunization. There is a significant relationship between mother's knowledge and giving immunizations to babies. The results of this study are in line with other studies, that mother's knowledge of giving immunizations to infants is continuous. The findings from previous studies

indicate that there is a relationship between mother's knowledge and immunization for infants 0-12 months. There is no research that says that there is no relationship between maternal knowledge and immunization. Likewise in this study, that there is a relationship between these variables.

4. Conclusion

Based on the results of the study, it can be concluded as follows: Of the 35 respondents based on the characteristics of knowledge, the majority have sufficient knowledge as many as 14 people (40.0%), and the minority with less knowledge are 9 people (25.7%), based on the educational characteristics the majority have high school education 14 people (40.0%), and a minority with a college education of 1 person (2.9%), based on the age characteristics of the majority aged 20-35 years 20 people (85.7%), and a minority with an age of <20 years 1 person (2.9%), based on the characteristics of the work, the majority worked as IRT 18 people (51.4%), and the minority worked as civil servants 1 person (2.9%), based on the characteristics of the source of information the majority of information was sourced from electronic media 18 people (51.4%), and the minority sourced information from 5 health workers (14.3%).

From the results of research on 35 respondents obtained $p\text{-value} = 0.009$ with $\alpha = 0.05$, it can be concluded that there is a significant relationship between Mother's Knowledge Level and Giving Immunization to Babies 0-12 Months in the Work Area of the Mompang Jae Health Center, District North PanyabunganMandailing Natal District in 2022.

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