

PUBLICATION MANUSCRIPT

**FACTORS RELATED TO BASIC IMMUNIZATION COMPLIANCE IN
INFANTS IN THE WORKING AREA OF LELOGAMA KUPANG SUB-
DISTRICT**



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Factors Associated with Basic Immunization Compliance in Infants in Lelogama District, Kupang

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ABSTRACT

backgrounds:Coverage of all basic and advanced immunizations for children under 2 years old in 2020 is below the minimum target set. In 2020, the coverage of basic immunization in NTT has decreased, one of which occurred in Kupang Regency by 82.2%. The lowest coverage in Kupang Regency was at the Lelogama Health Center at 66.2%. Many factors influence immunization adherence, one of which is family support.

objective: To find out the factors that influence basic immunization compliance in infants in the Work Area of the Lelogama Kupan Health Center in 2023

Methods:Research design using cross sectional. The population in this study were all mothers who had babies aged 9-24 months in 2023 in the working area of the Lelogama Health Center, Amfoang Selatan District, Kupang Regency, a total of 219 people. Samples were taken based on the inclusion and exclusion criteria of 70 people. The instrument used is a questionnaire. The instrument has been tested for validity and reliability. Data analysis was performed using univariate analysis, chi square, and logistic regression.

Results:The results showed that most of them had basic education (54.3%), did not work (58.6%), were at risk of age (65.7%), were far away from health services (57.1%), did not comply with immunizations (70%), have sufficient knowledge (41.4%), support health workers (60%), families do not support (40%). Factors related to compliance with basic immunization were education (p value=0.021), distance to health services (p value 0.002), mother's age (p value 0.008), knowledge (p value 0.031), and family support (p value = 0.035). The most dominant factor is family support (p value 0.007; OR 11.235).

Conclusion:There is a relationship between education, age, distance to health services, knowledge, and family support

Keywords:Family support, Basic Immunization, Compliance, Knowledge

ESSENCE

Background:Coverage of all basic and advanced immunizations for children under 2 years of age in 2020 is below the minimum target set. In 2020, the coverage of basic immunization in NTT has decreased, one of which occurred in Kupang Regency by 82.2%. The lowest coverage in Kupang Regency was at the Lelogama Health Center at 66.2%. Many factors influence immunization adherence, one of which is family support.

Objective:Knowing the factors that influence basic immunization compliance in infants in the Work Area of the Lelogama Kupan Health Center in 2023

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Results:The research results show that most have basic education (54.3%), do not work (58.6%), are at risk age (65.7%), distance to health services is far (57.1%), do not comply with immunization (70%), have sufficient knowledge (41.4%), health workers support (60%), family does not support (40%). Factors related to compliance with basic immunization were education (p value=0.021), distance to health services (p value 0.002), mother's age (p value 0.008), knowledge (p value 0.031), and family support (p value = 0.035). The most dominant factor is family support (p value 0.007; OR 11.235).

Conclusion: There is a relationship between educational factors, age, distance to health services, knowledge, and family support

Keywords: Family support, Basic Immunization, Compliance, Knowledge

INTRODUCTION

Improving the quality of children's health in the Sustainable Development Goals (SDGs) as a global development agreement from 2015-2030, with one of the goals being good health and well-being. The goal of SDGs health development is to reduce infant and child mortality in 2030 by 25 per 1,000 live births throughout the country. One of the preventive actions taken to reduce infant and child mortality and improve public health status is to provide basic immunization starting from newborn baby. Immunization is one of the disease prevention measures that is proven to be very cost effective

One of the preventive measures taken to reduce infant and child mortality as well as improve public health status is to provide basic immunization starting from newborns. Immunization is a disease prevention measure that is proven to be very cost effective.³ Immunization is a proven means of controlling and eliminating life-threatening infectious diseases and is estimated to prevent between two and three million deaths each year. The national immunization policy according to the Health RPJMN for the 2015-2019 period is to achieve 93% IDL coverage at the age of 0-11 months.⁴

Basic immunization is the act of vaccinating children so that the body is not infected with infectious diseases such as tetanus, whooping cough (pertussis), measles (measles), polio, tuberculosis, rubella and meningitis. Complete basic immunization is a condition where children receive complete routine immunizations which are given to babies before they are one year old (at the age of 0-11 months), consisting of 3 doses of hepatitis B, 1 dose of BCG, 3 doses of DPT-HB-Hib, 4 doses of polio drops, and 1 dose of measles/MR.²

World Health Organization data for 2018 shows that around 194 developed and developing countries have immunized their infants and toddlers. WHO noted that the lowest immunization coverage was Africa, followed by the Eastern Mediterranean and Southeast Asia. Basic immunization services for children in Indonesia has been integrated starting from Posyandu, Puskesmas and Hospitals, but the overall coverage of basic immunization is still below the target set by the government.⁵ Based on 2019 Ministry of Health data, the coverage of UCI villages in Indonesia is 81.34%. There are three provinces that have reached 100% UCI village/kelurahan coverage, namely Bali, DI Yogyakarta, and DKI Jakarta. Meanwhile, the provinces with the lowest achievements were East Nusa Tenggara (51.72%), Papua (44.21%) and Aceh (23.76%). Meanwhile, complete basic immunization in Indonesia was 93.7%, while the province with the lowest achievement, namely Aceh, was 50.9%.⁶

The downward trend actually increased during the Covid-19 pandemic. The COVID 19 pandemic has had an impact on efforts to improve the health status of the Indonesian people and the Indonesian health system which can be seen from the decreased performance of several health programs, especially immunization.⁷ Coverage of all basic and advanced immunizations for children under 2 years of age in 2020 is below the minimum target set.⁷ Measuring maternal compliance in carrying out complete basic immunization is used to assess coverage rates for complete basic immunization and UCI (Universal Child Immunization). Coverage of infants who received complete basic immunization and UCI (Universal Child Immunization) are indicators of evaluating the success of an immunization program. ⁸

The Complete Basic Immunization Indicator (IDL) in Indonesia in 2015 was 86.54%, while in 2016 it had reached the Strategic Plan target of 91.5%.⁸ IDL coverage has fallen again, although in the last five years it has always been above 85% but has not yet reached the target set by the Ministry of Health's Strategic Plan. The Indonesian Ministry of Health noted that there were more than 786,000 children in Indonesia who had not received complete basic immunization in 2020. The 2020 routine immunization data shows that all antigen complete basic immunization coverage is still below the minimum target of

95%. This means that the expected community immunity from immunization cannot be achieved.⁹

Based on data from the East Nusa Tenggara Provincial Health Office, in general in 2017 as many as 57.96% of children received basic immunization, experienced a decrease in 2019 of 44.41% and in 2019 experienced a slight increase of 4.44%. In 2020, the coverage of basic immunization in NTT has decreased, one of which occurred in Kupang Regency by 82.2%. The lowest coverage in Kupang Regency was at the Lelogama Health Center at 66.2%.⁹ Data in East Nusa Tenggara (NTT) Province found that the coverage of all types of basic immunization did not reach the target, namely BCG immunization 88.95% of the target 95%, DPT immunization 83, 89% of the 95% target, Polio immunization 87.96% of the 95% target, measles immunization 71.43% of the 90% target and Hepatitis B immunization 83.83% of the 95% target.¹⁰

Based on the data obtained from the Lelogama Health Center, it is known that there are several types of complete basic immunization that are less than the target set, namely immunization for HB0, BCG, DPT/HB Combo 1, and measles. The achievement of complete basic immunization at the Lelogama Health Center in 2020 is known from 10 types of immunization there are 5 types of immunization that have achievements below the standards set, namely HB0 immunization (83.3% of the 95% target), BCG (72.7% of the 80% target), DPT/HB Combo 1 (83.3% of the 95% target) DPT/HB Combo 3 (87.9% of the 90% target) and Measles (86.4% of the 90% target).¹¹

Even though the benefits of immunization have been recognized, not a few mothers are still unwilling to immunize their children for a very simple reason, namely incorrect perceptions related to immunization. In fact, children who do not get complete basic immunization will cause the child's immune system to become vulnerable and susceptible to infection. This will widely cause outbreaks which will increase mortality rates.¹² Several factors influence parental adherence in providing basic immunization according to the theory of the Health Belief Model, there are 3 main categories in health services, namely modification factors consisting of age, sex, ethnicity, socio-economic, knowledge, individual perception factors, and action likelihood factor. WHO states that factors that may influence immunization are age, education, occupation, income and knowledge as direct causes. In addition, access to health services (distance, transportation facilities, and costs) as well as support from health workers and families can also affect the provision of immunizations to infants.¹³

In order to increase parents' awareness to involve their children in getting immunizations, it is necessary to provide education by health workers to families of toddlers regarding the importance of immunization. Efforts that have been made by local health workers include giving invitations to attend immunizations and conducting home visits, however these efforts are considered to be less successful.¹⁴ This can be caused by health workers not being optimal in providing health education related to the importance of immunization accompanied by the provision of attractive brochures so that mothers can easily understand information on the importance of immunization and side effects that may occur after immunization so that if a fever occurs in a child, the mother does not panic too much.¹⁵

Based on the data presented, the researcher is interested in conducting research on the factors that influence basic immunization compliance in infants in the working area of the Lelogama Kupang Health Center in 2023.

METHOD

This type of research is a quantitative cross sectional design. The population in this study were all mothers who had babies aged 9-24 months in 2023 in the working area of the Lelogama Health Center, South Amfoang District, Kupang Regency, totaling 219 people. The sample to be used in this study were mothers who had babies aged 9 to 24 months who visited the Lelogama Health Center, Amfoang Selatan District, Kupang Regency to immunize their babies who met the inclusion and exclusion criteria as many as 70 people. Sampling by purposive sampling. The place used for research was the Lelogama Health Center, South Amfoang District, Kupang Regency. Types of data using primary data taken directly from respondents using a questionnaire. The instruments used have been tested for validity and reliability. The data analysis performed was chi square. The research has received an ethically proper letter from the ethical commission of the Yogyakarta Ministry of Health Poltekkes No DP.04.03/e-KEPK.1/395/2023 dated March 28, 2023.

RESULTS

The description of the univariate research variables explains the general description and distribution of research variables which include the independent variable and the dependent variable (adherence to basic immunization). The research results are as follows:

Table 1. Frequency Distribution of Research Variables

No	Variable	n	%
1.	Mother's Education		
	Basic education	38	54.3
	Higher education	32	45.7
2.	Job status		
	Doesn't work	41	58.6
	Work	29	41.4
3.	Mother's Age risky	46	65.7
	No risk	24	34.3
4.	Service Distance		
	Far (≥ 5 km)	40	57.1
	Near (< 5 km)	30	42.9
5.	Knowledge		
	Not enough	5	7.1
	Enough	29	41.4
	Good	36	51.4
6.	Health Workers Support		
	Does not support	28	40
	Support	42	60
7.	Family support		
	Does not support	40	57.1
	Support	30	42.9
8.	Immunization Compliance		
	Not obey	49	70
	obey	21	30
	Total	70	100

Based on the results of the analysis, it is known that the majority of mothers have higher education (high school/university) as many as 38 mothers (54.3%), have a non-working status of 41 mothers (58.6%), the majority are at risk age (< 20 or ≥ 35 years) as many as 46 mothers (65.7%), has a far distance from home to health services (≥ 5 km) as many as 40 mothers (57.1%). Based on the variable level of knowledge, most of them had good knowledge as many as 36 mothers (51.4%), but there were still those who had less knowledge as many as 5 mothers (7.1%). Based on the variable support from health workers, the majority of them supported giving immunizations as many as 42 respondents (60%), and most mothers did not receive support from their families, as many as 40 mothers (57.1%). Based on the variable of adherence to basic immunization,

Bivariate analysis was used to determine the relationship between the variables of education, employment status, mother's age, service distance, knowledge, support from health workers, and family support with adherence to immunization. The research results are as follows:

Table 2. Relationship between the variables of education, employment status, mother's age, service distance, knowledge, health worker support, and family support with immunization compliance

Variable	Immunization Compliance						P-value	OR	95%CI	
	Not obey		obey		Total				Lower	Upper
	n	%	n	%	n	%				
Mother's Education										
Basic education	31	81.6	7	18.4	38	100	0.021	3,444	1.173	10.115
Higher education	18	44.3	14	43.8	32	100				
Job status										
Doesn't work	31	75.6	10	24.4	41	100	0.223	1894	0.673	5,332
Work	18	62.1	11	37.9	29	100				
Mother's Age										
risky	37	80.4	9	19.6	46	100	0.008	4,111	1,393	12.131
No risk	12	50	12	50	24	100				
Service Distance										
Far (>=5km)	34	85	6	15	40	100	0.002	5,667	1,840	17,453
Near (<5km)	15	50	15	50	30	100				
Knowledge										
Not enough	2	40	3	60	5	100	0.031			
Enough	17	58.6	12	41.4	29	100				
Good	30	83.3	6	16.7	36	100				
Health Workers Support										
Does not support	20	71.4	8	28.6	28	100	0.831	1,121	0.393	3,199
Support	29	69	13	31	42	100				
Family support										
Does not support	32	80	8	20	40	100	0.035	3,059	1,061	8,821
Support	17	56.7	13	43.3	30	100				

Based on the education variable, the proportion of mothers who have basic education (SD/SMP) and are not compliant in giving immunizations is 31 respondents (81.6%) more than mothers who have higher education and are not compliant in providing immunizations (56.3%). The results of the chi square test showed that there was a significant relationship between mother's education and adherence to basic immunization, expressed by a p value of 0.021 <0.05. The odds ratio value is 3,444 (1,173-10,115), meaning that mothers who have basic education are 3 times at risk of not complying with immunization compared to mothers who have higher education. Based on occupational variables, the proportion of mothers who did not work and did not comply with immunizations was 31 mothers (75.6%), more than mothers who worked and did not comply with immunizations (62.1%).

Based on the age of the mother, the proportion of mothers who are at risk (<20 or >=35 years) and are not compliant with immunizations is 37 respondents (80.4%), more than mothers who are not at risk (20-35 years) and do not comply with immunization. There is a significant relationship between maternal age and adherence to immunization (p value = 0.008 <0.05).

that mother having an age at risk of 4 times the risk of non-adherence in immunization compared to mothers who are not at risk (20-35 years), expressed by an OR value of 4,111 (1,393-12,131). The proportion of mothers who have homes far from health services and are not compliant with providing basic immunizations is 34 mothers (85%), more than mothers whose homes are close and do not provide basic immunizations as many as 15 mothers (50%). There is a significant relationship between distance to health services and

adherence to immunization. Mothers whose homes are far away are 5 times at risk of not complying with basic immunization compared to mothers whose homes are close to health services (OR=5.667, 95% CI 1.840-17.453).

Based on the knowledge variable, the proportion of mothers who have good education and are not compliant with basic immunization is 30 people (83.3%), more than mothers who have less/sufficient education and are not compliant with basic immunization. There is a significant relationship between knowledge and adherence to basic immunization. There is a relationship between knowledge and adherence to basic immunization, expressed by a p value of 0.031.

Based on the variable support from health workers, there were 20 mothers (71.4%) who did not receive support from health workers and were disobedient in giving basic immunizations, compared to mothers who received support from health workers and were disobedient in providing basic immunizations (69%). There is no significant relationship between health support and basic immunization, expressed by a p value of 0.831.

Based on family support variables, there were 32 mothers who did not receive support from their families and were not compliant in administering immunizations (80%), more than mothers who received family support and were not compliant in administering immunizations (56.7%). There is a significant relationship between family support and adherence to immunization (p value = 0.035). Mothers who do not receive family support are 3,059 times at risk of not providing immunization compared to mothers who receive family support.

The results of the bivariate analysis that produces a p value <0.25 can be included in the multivariate analysis stage. Variables that met the requirements from the bivariate analysis were entered into the multivariate analysis. The variables that meet the requirements are mother's education, employment status, mother's age, distance to health services, knowledge, and family support. Based on the results of multivariate analysis with logistic regression, the p value of each variable was produced. The results of the analysis are as follows:

Table 3. Multivariate Analysis of Variables Influencing Basic Immunization

Variable	Coef β	<i>p-values</i>	OR	CI (95%)
Mother's education	2.157	0.016	8,642	1500-49784
Job status	0.772	0.332	2,164	0.454-10.314
Mother's age	1,854	0.032	6,388	1169-34905
distance to health services	2,139	0.008	8,495	1752-41185
Knowledge	-1,865	0.007	0.155	0.040-0.600
Family support	2,419	0.007	11.235	1912-66007
Constant	-10.104	0.003	0.00	

Based on the analysis conducted, it shows that the variables that contribute to the success of exclusive breastfeeding are mother's education, mother's age, distance to health services, knowledge, and family support, while the variable of employment status is a confounding variable. The most dominant variable influencing adherence to immunization is a variable with an odds ratio (OR) value that is further away from 1, the closer to number 1, the factor does not affect adherence to immunization. The most related variable is family support with the OR value farthest from 1, namely 11,235 (95% CI 1,912-66,007) meaning that the family support variable is the most dominant factor influencing immunization administration.

DISCUSSION

The results showed that of the 38 respondents with low education, the majority were disobedient in giving immunizations (56.3%). There is a significant relationship between education and adherence to immunization. Education is a learning process which

means a change towards a more mature, better and more mature individual, family and society. Education is very important in influencing knowledge. Individuals who have a high level of education tend to more easily receive information as well as the problem of information about immunization provided by health workers, conversely mothers with low levels of education will have difficulty receiving the information available so they do not understand the completeness of immunization.

A person's different education will also affect a person's decision making, for mothers with higher education it is easier to accept a new idea than mothers with low education so that information is more easily received and implemented. 16 Based on the research results, a p-value was obtained.) namely 0.589 or $p > 0.05$, which means there is no relationship between mother's education and the completeness of basic immunization in infants. These results are consistent with research conducted by Wahyuni Hafid which showed no relationship between the level of education of the mother and complete basic immunization status. 17

These results are not in line with research conducted by Muhammad Wahyu Hariyanto which shows that there is a relationship between the education level of the mother and the completeness of immunization. 18 The difference in these results could be due to differences in the characteristics of respondents in one region to another, which are different, thus affecting the understanding of respondents. 16 The results of the study which stated that there was no significant relationship between the level of education of parents and the administration of complete basic immunization to infants contradicted the concept. 19 The level of education one obtains from formal school can affect one's knowledge. Health education can help mothers or community groups, besides being able to increase knowledge as well as to improve behavior to achieve optimal health status. The mother's level of education and knowledge greatly influences the implementation of child/infant immunization activities, both formal and non-formal education

The results showed that most of the mothers did not work or were housewives. Mothers who do not work are more disobedient in giving complete basic immunization. Trauma due to previous immunizations that made their children sick after being immunized caused mothers to not comply with complete basic immunization. Meanwhile, there are also more working mothers who are disobedient in giving complete basic immunization even though they are aware of the importance of complete basic immunization for their children so they will spend their working time to take their children to the immunization site or ask family members who care for their babies to go to the immunization site.

Mother's occupation has no effect on disobedience in giving complete basic immunization to under-fives. There was no effect because the proportion of working mothers in the case and control groups was almost the same. In addition, the proportion of mothers who did not work in the control and case groups was almost the same. Working and non-working mothers have the same opportunity to obtain information about basic immunization from health workers and various media such as TV, radio and newspapers. The results of this study are in accordance with Rahmawati's research, namely that there is no effect of the mother's occupation on the completeness of immunization where most infants or toddlers are not fully immunized to mothers who do not work or are housewives.

This study is also in accordance with the research of Konstantyner et al, that mothers who do not work have no effect on the completeness of immunization for children <18 months in Sao Paulo, Brazil. The results of this study are contrary to research by Makamban et al in 2010 that working mothers must be divided between their attention on work and taking care of children which results in giving complete basic immunization not being a priority while mothers who do not work or housewives are more obedient in providing complete basic immunization. Mothers who do not work or housewives have more time at home so that attention to children's health, in this case is the provision of complete basic immunization, is better when compared to working mothers.

The results showed that the age of the mother who was most at risk was 46 people (65.7), age also had a close relationship with various other people's characteristics, and also with place and time. Rizqiawan stated that the age of mothers who have increased

within certain limits can increase the mother's experience in caring for children, so that it will have an effect on efforts to prevent and control the emergence of disease. Age is not a risk factor for getting health services, especially for infant immunization, because both have the opportunity to immunize their children. Participation in immunization services does not differentiate between ages, both mothers aged less than 20 years to those aged more than 30 years have no difference in playing an active role in the immunization program.

The early adult age group is the most productive age and the most ideal age in the formation of health activities where mothers have a lot of life experience and are easy to accept behavior changes. The older the mother, the better the level of maturity in thinking. Early adulthood is a period in which a person is considered physically, psychologically and cognitively mature where the habit of rational thinking increases in early adulthood. Mother's age which has increased within certain limits can increase the mother's experience in caring for children so that it influences efforts to prevent and treat disease.

Inderwati's research in Sukoharjo in 2018 showed that mothers aged 20–35 years are at risk of not complying with their children's immunizations compared to mothers who are over 35 years old. Increasing mother's age increases experience in caring for children and has an impact on mother's behavior, one of which is giving complete basic immunization to children. Early adulthood is a period of adjustment. The more mature the mother's age, the more life experience she has so that in terms of giving complete basic immunization, it is hoped that the mother will already have sufficient knowledge and experience so that she becomes more obedient in carrying out complete basic immunization. Mother's age has no effect on non-compliance with complete basic immunization for under-fives

The results of this study indicate that 15% of those who are far from health service locations complete basic immunization for toddlers, with a value of $p = 0.02$ ($p < 0.05$), meaning that there is a relationship between the affordability of health care facilities and the completeness of immunization for toddlers at the Lelogama Health Center. The results of this study are not in line with research conducted by Istriyanti, there is no relationship between the distance to the place of immunization services and the completeness of basic immunization for infants in Kumpulrejo Village, Argomulyo District, Salatiga City with a p value = 0.573. Service places that are far away can make people reluctant to come to them. The distance to the place of health services can cause additional expenses such as transportation costs. Therefore,

Researchers assume that the distance to a health service is an obstacle for a mother to be able to provide immunization for her child, this can be based on the mother's low knowledge and negative attitude towards immunization, thus the mother will consider how far to travel to reach to a health service, the mother does not think about the health of the baby so that she can avoid dangerous diseases. This is due to the distance from the puskesmas which is relatively far from the house on average, which is > 5 km (miles of more than 15 minutes) and the influence of public transportation such as motorcycle taxis, public transportation, buses, and others which are difficult to obtain so that it can become a time barrier. The location of the immunization service is in a place that is difficult for the community to reach,

The results showed that of the 36 respondents who had good knowledge and had complete basic immunization status, 6 respondents (16.7). Meanwhile, out of 29 respondents with sufficient knowledge and incomplete basic immunization status, there were 12 respondents (41.4%). Knowledge is needed to generate self-confidence as well as attitudes and behavior every day, so that it can be said that knowledge is a very important domain for the formation of one's actions. People who have knowledge about something then it will apply this knowledge in everyday life. The same goes for immunizations. Parents/mothers with high knowledge about immunization, they will provide complete basic immunization to their babies and pay attention to when is the right time to give these immunizations. Vice versa, mothers who have low knowledge will not know what should be done for their babies, especially immunization issues

Therefore, the action that can be taken to increase parental knowledge is to strive for the implementation of routine counseling for the community, especially mothers who have babies. This counseling can be carried out at the Puskesmas, Posyandu, both individually and in groups. Counseling can also be done by distributing leaflets/posters or social media. ¹³ Based on the research results, the p-value (p-value) is 0.031 or p-value > 0.05.

The results showed that there was no significant relationship between the support of health workers and the mother's knowledge of basic immunization. The results of this research are not in line with previous research with the title factors affecting the completeness of basic immunization, the result is a p value of 0.034, which means there is a relationship between the support of health workers and knowledge of basic immunization. Health workers can try to provide services and explanations to patients in a professional manner in order to provide services and explanations to patients properly. In addition, the service support of health workers has an important role to increase mother's knowledge in fulfilling immunization needs. A health worker has a role as an educator or educator

In this case the health worker's role is to assist patients and families in increasing the level of knowledge regarding information about immunization and post-immunization adverse events such as fever, swelling at the injection area, crying children continuously, seizures, skin rashes and even diarrhea, which information should be obtained by the mothers and families through health counseling as a form of support from health services. So that changes in patient and family behavior appear after health education is carried out

Based on the results of cross-tabulation of the relationship between family support and maternal adherence in carrying out complete basic immunization, it shows that respondents with unsupportive levels of family support totaled 40 people, as many as 32 people (80%) did not comply with the level of compliance of mothers in carrying out complete basic immunization and there were 8 people (20%) adhere to the level of compliance of mothers in carrying out complete basic immunization. Whereas in respondents with a supportive family support level, there were 30 people, as many as 17 people (56.7%) did not comply with the mother's compliance level in carrying out complete basic immunization and there were 13 people (43.3%) adhered to the mother's compliance level in carrying out immunization complete basis. This shows that family support helped make the respondent obedient in carrying out complete basic immunization. The results of the analysis using the Chi Square test obtained a significance value (p value) of 0.035. The test results showed that the significance value was less than 0.05, meaning that there was a relationship between family support and mother's compliance with complete basic immunization for infants in the Work Area of the Lelogama Health Center. The results of the study showed that there was a significant relationship between family support and maternal compliance with complete basic immunization. this means that there is a relationship between family support and maternal compliance in carrying out complete basic immunization for infants in the Lelogama Health Center Work Area. The results of the study showed that there was a significant relationship between family support and maternal compliance with complete basic immunization. this means that there is a relationship between family support and maternal compliance in carrying out complete basic immunization for infants in the Lelogama Health Center Work Area. The results of the study showed that there was a significant relationship between family support and maternal compliance with complete basic immunization.

The family support that the respondents had, namely from their husbands, in-laws/parents and relatives which included: informational support, appraisal support, instrumental support, and emotional support turned them out to be obedient in carrying out complete basic immunization. Respondents who were supported by their families and those who were not supported had different behaviors in immunizing their children. The family support that they get should influence the formation of good opinions and belief in something, because if seen from the points of family support it can direct one's opinion, trust and feel comfortable according to what is expected.

The results of this study prove that family support is the most important factor that greatly influences a person's level of compliance. So that the higher the family support provided, the higher the effort to reduce one's level of non-compliance. Data regarding the results of calculating family support with maternal compliance in carrying out basic immunizations for infants shows that the majority of respondents have less family support so that respondents have disobedient behavior in carrying out basic immunizations for their infants. This research is reinforced by the theory which states that adherence to basic immunization in infants is more commonly found with good husband support for mothers. Whereas the mother's disobedience in providing immunization without the support of her husband will not be carried out properly. The family can be a very influential factor in determining individual health beliefs and values and can also determine the treatment program they can receive. Family support in the form of support from family members is the most important factor in adherence to medical programs. 27 Based on the results of this study, it can be concluded that family support plays a very important role in forming obedience in the mother because with support it creates conditions in the mother. appears, directed and maintains behavior to be obedient in giving immunizations to their babies according to a predetermined age The family can be a very influential factor in determining individual health beliefs and values and can also determine the treatment program they can receive. Family support in the form of support from family members is the most important factor in adherence to medical programs. 27 Based on the results of this study, it can be concluded that family support plays a very important role in forming obedience in the mother because with support it creates conditions in the mother. appears, directed and maintains behavior to be obedient in giving immunizations to their babies according to a predetermined age The family can be a very influential factor in determining individual health beliefs and values and can also determine the treatment program they can receive. Family support in the form of support from family members is the most important factor in adherence to medical programs. 27 Based on the results of this study, it can be concluded that family support plays a very important role in forming obedience in the mother because with support it creates conditions in the mother. appears, directed and maintains behavior to be obedient in giving immunizations to their babies according to a predetermined age

CONCLUSION

Factors related to adherence to immunization are mother's education, mother's age, distance to health services, mother's knowledge, and family support. The most dominant factor affecting adherence to immunization is family support

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