# RELATIONSHIP OF MOTHER'S KNOWLEDGE ABOUT POLIO IMMUNIZATION WITH MOTHER'S BEHAVIOR POST INFANT'S POLIO IMMUNIZATION IN VILLAGE MANCANG COMMUNITY HEALTH CENTERS SELESAI- LANGKAT 2014

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#### Abstract

The breast-milk that comes out when the baby is aged 0-3 months contain antipoliomilities high levels of substances that can neutralize the virus polio vaccine in the gut of children thus inhibiting the formation of an antibody. The mothers do not know that breastfeeding soon after giving polio immunization may affect the effectiveness of the polio immunization given by mouth. The aim of research to determine the relationship of mother knowledge about polio immunization with the mother's behavior post infant's polio immunization in Mancang village Community Health Centers Selesai Langkat. There ara 54 mothers as the samples who comes to immunizing infants aged 0-3 months, using purposive sampling. Data were analyzed using Fisher's Exact. Results of this study found that the majority of mothers were both knowledgeable and well behaved post polio immunization in infants 13 people (24.07%), and mothers who are less knowledgeable and less behaved 38 people (70.38). There is a significant relationship between mothers knowledge and behavior after the polio immunization, evidenced by the value of p = 0.000. Conclusions from this research is a relationship between mothers knowledge and behavior after the polio immunization because lower knowledge and behavior of the mothers are also getting less. Therefore, health workers are expected to provide information about polio immunization so that the knowledge and behavior to be better mothers.

Keywords: knowledge, behaviors, polio immunization

### INTRODUCTION

Nowadays, fact of the world especially in developing countries every 14.5 million children under five years old were die because of preventable diseases, malnutrition, dehydration due to vomiting and each year 3.5 million children under five die by diseases that could be prevented by immunization, According to Markum (2002 in Widayati, 2009 1)

Results of Indonesian Demographic and Health Survey (IDHS) 2007 showed that Infant Mortality Rate (IMR) 34 per 1,000 live births and the Child under five Mortality Rate (CMR) 44 per 1,000 live births. Target achievement of the target in 2015 that Infant Mortality Rate (IMR) 23 per 1,000 live births and the Child under five Mortality Rate (CMR) 32 per 1,000 live births. Based on data from the Directorate General Sub-Directorate **Immunization PLP PPM** and Departement (2004) immunization coverage in Indonesia is per antigen coverage namely to 4 doses of polio reach the target of 85%.

The first major outbreak in the United States occurred in 1916, more than 27,000 people affected by this disease and about 6,000 people die and most are children. There are only 1,266 cases of polio around the world until year 2004, mostly found in polio endemic countries, namely Yemen, Nigeria, India, Pakistan, Egypt, Afghanistan, that is in the world, approximately 25% was in Indonesia and was ranked third in this world.

The number of polio cases in Indonesia until the date of 21 March 2006 was found in 305 children spread at 10 provinces in Indonesia, namely West Java (59 cases), Banten (160 cases), Central Java (20 cases), Lampung (26 cases), Jakarta (4 jerseys), North Sumatra (10 cases), Riau (3 jerseys), East Java (10 cases), Southern Sumatra (5 cases) and NAD (5 cases).

According to the North Sumatra Health Office (2009), achievement of immunization programs in North Sumatra is quite high when viewed from immunization term which the

306.221 babies are being targeted. It is known that the third polio immunization for babies 286.359 (93.51%). Polio may cause mild or very severe illness symptoms. This disease can affect the digestive system and the nervous system. Polio causes fever, vomits and muscle stiffness and can affect the nerves resulting in permanent paralysis. The disease can paralyze breathing and swallowing muscles that support the process, causing death. Between two and five percent of people with polio will die from this disease and approximately 50% of patients who survive suffer permanent paralysis. Polio can be spread when feces contaminate people with food, water or hands (Proverawati and Andhini 2010 p.56)

Poliomyelitis is an acute fever disease caused by the polio virus. There are about 95% of all polio infections. According to estimates of the ratio of the disease without any symptoms of the disease paralatik vary from 50:1 to 1000:1 (average of 200:1). Patients with an infection without excreting the virus with feces can transmit the virus to others. Approximately 4% - 8% of polio infection without clinical symptom.

Paralysis occurs as a result of damage to the cells of motor neurons in the medulla spinalist spinal cord) caused due to virus invasion. This paralysis is asymmetrical so inclined to cause deformity (body shape disorder) which tends to stabilize or even become more severe. The vast majority of paralysis will strike the leg (78.6 percent), while 47.4 percent will strike the arm. This paralysis will go gradually and takes 2 days s / d 2 months).

According to Nelson (2006 in Widayati 2009, 5) it is important for parents to know why, when, where, and how many times the child should be immunized. The main obstacle to the success of immunization of infants and children in a health care system that is low awareness and a lack need of immunization in community. The entrances to the immunization services are inaccurate, neglect opportunities for vaccine delivery and accurate source for public health and prevention programs.

Immunization in infants and children not only give prevention of disease in the child, but also provide a wider impact because it can prevent transmission of the disease to other children. Therefore, the knowledge and attitudes of parents, especially mothers, is very important

to understand about the benefits of immunization for children in Indonesia.

According to Ranuh (2006 in Widayati, 2009: 6) Mothers knowledge about immunizations affect the implementation of immunization, when mothers knowledge the immunization are less, feeling of unnecessary or just going along with it, the course in children would immunization appropriate with the schedule in both time and distance. If mothers knowledge immunization are good, it's expected of immunization distribution are on schedule, so that the immunization program can fulfill the quantity and quality of the baby's health, finally have an impact on improving the health status and community resources in the future.

Wahyuhono (2002, in Widayati 2009:8) claim that post-immunization behaviors also affect success of immunization, where the breastfeeding (breast milk) after polio immunization in infants aged 0-3 months can weaken the polio vaccine which dripped into the baby's mouth, so that polio immunization is not effective. Milk that came out at the time of infants aged 0-3 months contain many antipoliomelitik substances that can neutralize the virus polio vaccine in the children's gut thus inhibiting the formation of antibody substances.

From the description above, we want to know about a Relationship Of Mother's Knowledge About Immunization Polio With Mother's Behavior Post Infants Polio Immunization in the Mancang village Community Health Centers Selesai, Langkat in 2014.

## **METHOD**

This research is descriptive analytic with cross sectional. The design which measurements or observations were made at a certain moment or at one time. All mothers who come to give polio immunization for their baby in Community Health Centers Selesai Langkat during March to June 2014 as many as 115 people become population, and samples are part of mothers who gave polio immunization to their baby at the Community Health Centers Selesai Langkat on March - June 2014.

Result

Table 1 .

Distribution Characteristics of Respondents Who Came For Infant's Polio Immunisation in the Mancang village Community Health Centers Selesai, Langkat 2014

Characteristics of Respondents	f	%
1. Age		
<20 years	13	24,08
20 - 35	35	64,81
> 35 years	6	11,11
Total	54	100
2. Education		
Elementary School		
Junior High School	9	16,67
Senior High School	18	33,33
Coledge	23	42,60
-	4	7,40
Total	54	100
3. Work		
Does not work		
Work	29	53,70
	25	46,30
Total	54	100
4. Resources		
Mass media	14	25,93
Family	8	14,81
Health Workers	32	59,26
Total	54	100

Based on Table 1 it can be seen that the demographic characteristics of the mothers who come for their infant's polio immunization at the age of 0-3 months, the majority of mothers aged 20-35 years old are 35 people (64.81%). Majority of mothers education 23 people (42.60 %) are High School. Majority of mothers job 29 people (53.70%) are unemployed. The source of information that majority given by health care workers can be as many as 32 people (59.25%).

Mother knowledge about polio immunization in the Mancang village Community Health Centers Selesai, Langkat can be seen in the following table.

knowledge About Polio Immunization in the Mancang village Community Health Centers Selesai, Langkat 2014

No	Maternal knowledge	F	%
1 2	Less Good		70,38 29,62
2	Good	10	27,02
Total		54	100

Based on the table 2 data obtained on the mother's knowledge about polio immunization is the majority have less knowledge as many as 38 people (70.38%).

Mother's behavior post infant's polio immunization in the Mancang village Community Health Centers Selesai, Langkat 2014, can be seen in the following table 3.

Table 3.
Frequency Distribution Of Mother's Behavior
Post Infant's Polio Immunization
In The Mancang Village Community Health
Centers Selesai, Langkat 2014

No	Mother's behavior Post infant's polio immunization	F	%
1	Less	41	75,93
2	Good	13	24,07
Tota	al	54	100

Based on Table 3 data obtained on Mother's behavior post infant's polio immunization is of 54 respondents the majority that behaves less as many as 42 people (77.78 %).

Relationship mother's knowledge about polio immunization with mother's behavior post infant's polio immunization in the Mancang village Community Health Centers Selesai, Langkat 2014 are as follows:

Table 4.

Relationship Mother's Knowledge About Polio Immunization With Mother's Behavior Post Infant's Polio Immunization In The Mancang Village Community Health Centers Selesai, Langkat 2014

Mother	Mother's behavior							
knowledge	post infant's polio					value	value	
about polio	immunization			T	otal	count	table	
immunization	Good Less		S	1				
	F	%	F	%	f	%		
Less	0	0	38	70,38		70,38		
Good	13	24,07	3	5,55	16	29,62	0,000	0,05
Total	13	24,07	41	75,93	54	100,0		

Based on the research results, majority of mother who come to the community health centers for infant's polio immunization has less knowledge about polio immunization as many as 38 people (70.38%), which behaves less in the Mancang village Community Health Centers as many as 41 people (75.93%).

From the statistical test using Fisher's Exact test with significance level of 5% (0.05) was obtained p = 0.000. So that the results obtained are p < 0.05 then ha received. This means that there is a significant relationship between

mother's knowledge about polio immunization with the mother's behavior post infant's polio immunization in the Mancang village Community Health Centers Selesai, Langkat 2014

#### Discuss

Results of the research that has been done it can be seen that the majority of the 54 respondents are knowledgeable about as many as 38 respondents (70.38%)

Sensing occurs through human senses, namely: the senses of sight, hearing, smell, taste and touch. Most of the human knowledge acquired through the eyes and ears. The researchers assumption of mother's knowledge who give polio immunization to their baby in this study majority of them were less knowledgeable due to their lack of a sense of curiosity and concern for an information about polio immunization. Then it is advisable to all mothers to always be active in seeking information about polio immunization.

From 54 respondents can be seen that 13 respondents aged < 20 years were majority knowledgeable as many as 12 respondents (22.22%), and of 34 respondents aged 20-35 years were majority less knowledgeable as much as 22 respondents (40,74%), and from 6 respondents aged > 35 years the majority knowledgeable about as many as 4 respondents (7.41%).

Notoatmodjo (2007) stated that age is closely related to a person's knowledge level because the more human lifespan increased the more the experience or the knowledge that they gained.

So there is a gap with Notoatmodjo's opinion that age affects the person's knowledge. Because in this study there are 6 mother aged > 35 years the majority of them were less knowledgeable as many as 4 respondents (7.41%) and this is because at this age the mothers seem do not care in searching for information because they are more focused on taking care of their family circumstances.

Based on the results data obtained from 54 respondents, It can be seen that the 9 respondents graduated from elementary school that less knowledgeable as much as 9

respondents (16.67%), of 18 graduated from Junior High School that majority less knowledgeable as many as 14 respondents (25.92%), of the 23 respondents graduated from Senior High School that majority less knowledgeable as many as 14 respondents (25.92%), and of 4 respondents graduated from university that majority well knowledgeable as many as 4 respondents (7.41%).

Education in general is all effort that planned to influence others; either individuals, groups and communities. So they will do what is expected by the education actors in the search for knowledge and aspects of life. The level of education has a close relationship with the social, cultural, political, economic, and so on. Education is also one of the factors that influence someone's perception to easily accept new ideas / technologies.

There is no gap with Notoatmodjo that is with education someone can grow and develop through the learning process from the education because in the process of learning a person was given a lesson in order to become from not knowing to knowing. So that a person with low education, the lower of his knowledge level that he get, because the less educated tend to be more difficult to understand something or receive information. Vice versa, the higher one's education are more likely easier to receive information and to understand something. These affect their insight. Education also will affect mother's mindset, attitude and actions.

Based on the results of research conducted showed that of the 54 respondents, 25 respondents who worked that majority well knowledgeable as many as 13 respondents (24.07%), and of the 29 respondents who did not work that majority less knowledgeable as many as 26 respondents (48.14%).

Work is an activity that is performed daily, the type of work performed can be categorized as not working, wiraswata, civil servants and private employees in all areas of work are generally required a good social relationship. Work owned an important role in determining the quality of human. It limits the gap between health information and practices that

motivate a person to obtain information and to do something to avoid health problems.

From the research there is no gap with Notoatmojo, where of the results obtained by respondents influential enough because some of the respondents worked. This is because the mother has made interaction with others so that the information about polio obtained and received by the mother. It can be seen from the results of the study. Mothers who work as many as 25 respondents and the majority from them who well knowledgeable as well as 13 respondents (24.07%) this is due to the mother who work had made more interaction with people around the workplace because they will exchange information and knowledge they have acquired. So that the mother's level of knowledge even get higher. While Mothers who do not work who less knowledgeable as many as 26 respondents (48.14%) this is due to the mothers who do not work did not gained much information because they had not made interaction with people outside their home environment so that mother's knowledge is not much developed because the mothers do not work had less knowledge rather than those who work.

Based on results of the research data obtained from 54 respondents pregnant women, it can be seen that 18 respondents who obtained the information from the mass media that majority less knowledgeable as many as 11 respondents (20.37%), of the 10 respondents who received information from family that majority less knowledgeable as many as 6 respondents (11.11%), and of the 32 respondents who received information from health official that less knowledgeable as many as 21 respondents (38.89%).

According Notoatmojo (2007) Sources of information are all things that become intermediaries in conveying information, stimulate someone's mind and ability. Other people around us is one among the social component that influence our attitude.

According to the researchers assumption there is gap with Notoatmojo (2007), which is the information source obtained by the respondent did not affect his knowledge. The theory says the better sources of information will be the better of someone's knowledge. Examples

information source from the health care workers will be very good in providing information on polio immunization because health care workers are people who have been trained and trusted by the community in the health sector so that people will follow the advices from health workers.

But the results obtained by researchers respondents who received information from health care worker that majority less knowledgeable as many as 21 respondents (38.89%). This may be due to mother neglected the information that health care worker submitted.

Based on the study data showed that the mother majority of who give polio immunization to their baby in Public Health Centers Selesai 2014 that behaved less post polio immunization to their baby as many as 41 people (75.93%). One of the factors that influence the behavior is knowledge. Based on the results of the study, the majority of mothers who have less knowledge as many as 38 people (70.38%), 13 people (24.07%) behaved well post polio immunization on infants. So knowledge is an important domain of the formation of a person's behavior (Notoadmodjo, 2012 p.138).

According to the researchers assumption the majority of respondents who behaved less due to his less knowledgeable or mothers who neglect the knowledge that she gets from health workers. Examples of health workers who provide information about polio immunization with breastfeeding but the mother does not care about the information she gets, possibly because the mother was busy taking care of the family and household.

Relationship Of Mother's Knowledge And Behavior Post Infant's Polio Immunization In The Mancang Village Community Health Centers Selesai Langkat 2014

Based on the research that has been done shows that the value of p < 0.05 then there is a significant relationship between knowledge and behavior where the majority of mothers that well knowledgeable and well behave post polio immunization to the baby as much as 13 people (24.07%), and the majority of mothers

that less knowledgeable and less behave as many as 38 people (70.38 %).

This is consistent with research Widayati (2009) in An- Nissa Maternity Hospital Surakarta that there is a significant relationship between mother's knowledge about polio immunization with mother's behavior post polio immunization evidenced by p value of 0.0001.

## Conclusion

The majority of respondents that less knowledgeable as many 38 respondents (70.38%; less behaved as much as 41 respondents (75.93%), and there is a significant relationship between mother's knowledge with mother's behavior post polio immunization. This means that the lower the person's knowledge, the behavior is also increasingly less proven with p value of 0.000.

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