

**THE CORRELATION BETWEEN KNOWLEDGE AND ATTITUDE TOWARDS CHILD
BOOSTER IMMUNIZATION AT PUBLIC HEALTH CENTER (PHC)
OF SUNGAI ULIN BANJARBARU**

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Abstract

One of the indicators of the successful immunization program is the achievement of Universal Child Immunization (UCI). Indonesia has been hit the target UCI, where at least 80% of children in each village have acquired complete basic immunization before the age of one year, but there are still many children in Indonesia who have not been given booster immunization or repeated immunization in children under age of 3.

This study was conducted to determine the correlation between mothers' knowledge and attitudes to child booster immunization at Public Health Center (PHC) of Sungai Ulin Banjarbaru South Kalimantan Province in 2015.

The study was observational analytic method with the cross sectional approach. The study population was all the mothers who have children aged 18-36 months who are in the working area of Public Health Center (PHC) of Sungai Ulin. The samples were 86 people which were taken by sampling technique intentional.

The result showed the knowledge of mothers towards child booster immunization who have a good understanding is 11 respondents (12.8%), and pretty well is 52 respondents (60.5%), while for less understanding is 23 respondents (26.7%). Mothers' attitude toward child booster immunization has received the majority of positive attitude as many as 64 respondents (74.4%), and who have a negative attitude is as many as 22 respondents (25.6%). Based on the results of the Chi Square test, it was found that there is a significant correlation between knowledge in child booster immunization of the mothers with $p\text{-value} = 0.000$. In the mother's attitude towards child booster immunization $p\text{-value} = 0.000$. There is correlation between the mothers' knowledge in child booster immunization and the attitude of the mother to child booster immunization.

We hope that mothers can improve knowledge and attitudes about the importance of booster immunization so that mothers can bring their children to public health services.

Keywords : Knowledge, Attitude, Child Booster Immunization

A. Introduction

Infant Mortality Rate (IMR) is the number of people who die before reaching the age of 1 year which is expressed in 1,000 live births in the same year. Infancy is a condition that is vulnerable both to morbidity and mortality. Infant Mortality Rate (IMR) is the number of children who die before reaching the age of 5 years are expressed as numbers per 1,000 live births.

Achievement IMR 32 in the year 2012 is less encouraging than the Ministry of Health Republic Indonesia strategic plan targets to be achieved, namely 24 in 2014 year also MDG target of 23 per 1,000 live births in 2015. IMR decline slowed between 2003 to 2012 from 35 to 32 per 1,000 live birth, all babies access need to key interventions such as exclusive breastfeeding or basic immunization, while based research (Riskesdas) 2010 year coverage amounted to 15%

exclusive breastfeeding, DPT-HB3 immunization by 62% and measles immunization 74%. While IMR fairly sharp downward trend between 1991 and 2003, namely from 97 per 1,000 live births to 46 per 1,000 live births. Various factors can cause a decrease in IMR including support for increased access to health care include improved access to health care toddler and an increase in basic immunization coverage.⁽¹⁾

South Kalimantan Province alone IMR 2005 year ranks 5th highest in Indonesia at 41 per 1,000 live births. However, the mortality rate of newborns (neonatal) which in 2007 year was 39 per 1,000 live births (IDHS, 2007) which shows the figure is still above the national average, while in 2012 year based on the census conducted BPS in 2010 year reached 44 per 1,000 live births (Indonesia Health Profile, 2012).⁽²⁾

One indicator of the success of the immunization program is the achievement of Universal Child Immunization (UCI). WHO and UNICEF define indicator immunization coverage is 90% nationally and 80% in all districts. At 1990 year, Indonesia has reached a target UCI, where at least 80% of infants in each village has to get fully immunized before the age of one year, but there are still many children in Indonesia who have not been Booster immunized / repetition under the age of 3 years (MoH-RI, 2005).⁽³⁾ Based on the recommendations of the SAGE (Strategic Advisory Group Of Expert On Immunization) and based on the review of the Regional Review Meeting on Immunization WHO / SEARO in New Delhi and Indonesian Technical Advisory Group on Immunization (ITAGI) by 2010, the administration of Hib combined with DPT-HB into DPT-HB-Hib (pentavalent) to reduce the number of injections infants and need to be integrated into national immunization programs to reduce morbidity, disability and infant and child mortality due to pneumonia and meningitis so as to achieve the MDG's 4th "IMR 24 / 1,000 live births in 2015 years".

Based on the profile Banjarbaru Health Department there are 8 Public Health Centers (PHC) under the auspices of the Banjarbaru Health Department wherein Five Basic immunization

coverage Complete (LIL) for babies under one year which includes HB0, + Polio1 BCG, DPT-HB-Hib 1 + Polio 2, DPT- HB-Hib 2 + 3 Polio, DPT-HB-Hib 3 + 4 Polio and measles has reached the target according to the standard UCI 80%

Banjarbaru Health Department South Kalimantan Province immunization start programs continued called booster immunization in Infants under three years in May 2014 simultaneously in 8 Public Health Centers (PHC) that exist in the work area Banjarbaru consisting of PHC Banjarbaru at South Banjarbaru, Sungai Ulin, Sungai Besar, Cempaka, Landasan Ulin, Guntung Payung, North Banjarbaru and Liang Anggang.

Immunization booster in toddlers is giving two immunization (DPT-HB-Hib4 at the age of 18 months and measles 2 at the age of 24 months) immunization continued on schedule for children under 3 years, booster immunization useful to strengthen protection for longer against diseases dangerous, Target booster immunization in children expected Banjarbaru health department in 2014 was 80% with a target amount as much as 6.726 toddlers, but it turns out of 8 public health centers that exist in the Banjarbaru in May to December 2014 for DPT-HB- Hib 4 only reached 34.42% and 21.86% Measles 2 achieve this due to the child booster immunization program is still new so there are still many people who do not know.

Booster immunization data in child (DPT-HB-Hib 4 + Measles 2) of the month of May to December of 2014, the achievement of each health center in the Banjarbaru is PHC South Banjarbaru (30.0% + 23.3%) Total 53.3 %. Sungai Besar (17.9% + 4.9%) Total 22.8%. Cempaka (50.6% + 30.7%) Total 81.3%. Landasan Ulin (42.8% + 27.7%) Total 70.5%. Guntung Payung (22.7% + 15.9%) Total 38.6%. North Banjarbaru (28.6% + 15.3%) Total 43.9%. Liang Anggang (57.3% + 43.8%) Total 101.1% and Sungai Ulin (25.5% + 13.3%) Total 38.8%.

From the research by Abu Baker Ibrahim Lebur in Taif Saudi Arabia in 2013 with the title of the knowledge and attitudes of parents towards immunization showed as many as 731 parents who have a good knowledge and a

positive attitude on several aspects related to immunization, but the gap in both domains tend to be influential.

Completeness of immunization status can be influenced by knowledge, education and information obtained by the mother and the mother's attitude in bringing her child to the place of Public Health Care (PHC) to be immunized. Based on the above background research on " Related Knowledge and Attitude towards Child Booster Immunization Public Health Center (PHC) Sungai Ulin Banjarbaru"

B. Methods

The study design was observational analytic with cross sectional method is identifying / studying the relationship between maternal attitude toward in children Booster immunization. The research location is PHC Sungai Ulin at Banjarbaru South Kalimantan Province by 2015.

The population in study are all mothers with children aged 18-36 months who are in PHC Sungai Ulin totaling 577 people in 2014. The sample in this study were mothers of children aged 18-36 months who are in the PHC Sungai Ulin in April-May 2015.

The sampling technique was done by purposive sampling is a sampling technique that is based on the consideration or a specific purpose. The sample in this study was mothers who have children aged 18-36 months in PHC Sungai Ulin which will be held in April-May 2015 were 86 respondents, with consideration to the Inclusion criteria: Children aged 18-36 months, yet get booster immunization (DPT-HB-Hib 4 and measles 2), male and female. While the Exclusion Criteria: Children aged 18-36 months who are sick. Primary data in this study is about the knowledge and attitudes of mothers of children aged 18-36 months for booster immunization in toddlers in the PHC Sungai Ulin, which are collected questionnaires.

Research variables are independent variables is the knowledge and attitudes of mothers of children aged 18-36 months against child booster immunization, while the dependent variable was all mothers who have children aged 18-36 months

who visited PHC Sungai Ulin by 2015. Analysis of this study is to connect knowledge and the attitude of mothers of children aged 18-36 months against child booster immunization. Analysis technique used is the analysis of che-square statistical test with confidence level $\alpha = 0.05$.

C. Results and Discussion

1. Knowledge mother against child Booster Immunization at PHC Sungai Ulin.

Based on the table 1 above that of the mother Knowledge Booster immunization in infants majority Both have knowledge as much as 11 respondents (12.8%), and pretty well as much as 52 respondents (60.5%) while less good by 23 respondents (26.7%) .

2. The mother's attitude toward child booster immunization at PHC Sungai Ulin.

Based on the table 2 above that the mother's attitude towards attitudes child Booster immunization obtained the majority have a positive attitude as much as 64 respondents (74.4%), and having a negative attitude as much as 22 respondents (25.6%).

3. Relationship Knowledge of Child Booster Immunization at PHC Sungai Ulin, 2015.

The observation of the relationship of mothers towards in children immunization Booster Knowledge in PHC Sungai Ulin 2015 of 86 respondents presented in Table 3.

Based on Table 3 above it can be seen that a good mother knowledge with attitude giving Booster immunizations of 11 respondents (12.8%) and knowledge well enough to give a booster immunization as many as 46 respondents (53.5%) while less knowledge either by providing as much Booster immunizations 1 respondent (1.1%). Then the knowledge of the mother well enough to not give a booster immunization as much as 6 respondents (7.0%), while less knowledge either by not giving Booster immunizations were 22 respondents (25.6%). Results of statistical test by Chi-square ($\alpha = 0, 05$) p value = 0.000 which is smaller than 0.05 then H_0 is rejected means that statistically there in child booster immunization against knowledge relations in PHC Sungai Ulin 2015.

Based on the results of the research showed that the mothers' knowledge in children booster immunization majority Both have knowledge as much as 11 respondents (12.8%), and pretty well as much as 52 respondents (60.5%) while less good by 23 respondents (26.7%) ,

From the above results can be seen on maternal knowledge Booster immunization is very important to raise awareness about the importance of healthy living with prevention through Booster immunization. Maternal knowledge about booster immunizations may be obtained from various sources of mass media and information media such as television, radio, print media and so on in order to make people behave in a life healthy. This is in accordance with what is stated by Notoatmodjo (2012), (4)states that knowledge also can get in a formal manner through the mass media, electronic media,

and of others.

Advanced Booster immunizations (DPT-HB-Hib), and measles is aiming to further improve the immune re-formed, because at the age of 15-18 months the number of antibodies in the body start to decline. Advanced immunization for children aged 18 months (1.5 years) was given DPT-HB-Hib, where the distance of at least 12 months of his administration of DPT-HB-Hib last. While children aged 24 months (2 years) immunized against measles with a minimum requirement of 6 months from the first dose of measles. For further immunization can still be given to children aged less than 36 months. DPT-HB-Hib is a vaccine that can prevent the basis of the five diseases such as diphtheria, pertussis, tetanus, hepatitis B and Haemophylus influenzae type B (5).

Complete basic immunization accompanied by immunization Booster / amplifier is useful to provide a long and comprehensive

Table 1. Mother Knowledge frequency distribution based on child Booster immunization in PHC Sungai Ulin 2015

No	Knowledge	Respondent	Percentage
1	Good	11	12,8%
2	Pretty good	52	60,5%
3	Not good	23	26,7%
Total		86	100%

Table 2. Frequency distribution by mother's attitude towards in child Booster immunization at PHC Sungai Ulin 2015

No	Knowledge	Respondent	Percentage
1	Positive	64	74,4%
2	Negative	22	25,6%
Total		86	100%

Table 3. Knowledge of the relationship of mothers towards in child Booster immunization in PHC Sungai Ulin 2015

Knowledge	Immunization				Total		Statistical test results p=0,000
	Yes		No		N	%	
	n	%	n	%			
Good	11	12,8	0	0	11	12,8	
Pretty good	46	53,5	6	7,0	52	60,5	
Not good	1	1,1	22	25,6	23	26,7	
Total	58	67,4	28	32,6	86	100	

Cit: n=Sample., %=Percentage

protection against dangerous diseases that can be prevented by immunization. By providing a complete immunization schedule, the child's body is stimulated to have immunity so that the body is able to defend against the invasion of harmful diseases that can be prevented by immunization (Banjarbaru Health Department, 2014). (13) They were still sufficient knowledge and less on the benefits of booster immunization for children and when a booster immunization schedule due to lack of information from both print and electronic media as well as the lack of information from health workers on immunization Booster to mothers who have children. Knowledge is the result out and this happens after someone did sensing to a particular object. Sensing occurs through human senses, the sense of sight, hearing, smell, taste and touch. Mostly obtained through the eyes and ears. Domain knowledge is very important for the formation of action seseorag (over behavior). (6)

Influencing knowledge factors is age, education, employment, information, culture, social and economic environment. Increasing the age will be growing anyway perception and thought patterns, Till knowledge obtained is getting better. The higher one's education the easier person to receive the information, parent education is one important factor in the growth and development of children as a good education, parents can receive all the information from the outside, especially about good parenting, how to keep children's health and education. Maternal employment status can affect the child's health status. There many of difference in

the child's immunization status, if in addition to housewives as well as the breadwinner (work) because as a working mother means most of the time will be taken so that its role in terms of bringing their children for immunization had to be done by others, while a mother who does not work tend to take their children for routine immunization. Mothers get new innovation through the development of technology and the mass media. Social economy will also determine the availability of a facility that is required for certain activities. The reverse reaction of individuals towards the environment and culture also affect the level of knowledge. (7)

One of the most affecting learning, media / information and the environment because of information obtained from both formal and non-formal education can influence so as to produce a change or an increase in knowledge. Lack of information about immunization Booster for causes mothers do not give a booster immunization to her toddler. It is generally caused by a lack of information on Immunization Booster. Information obtained maternal influence maternal behavior in the face of health problems children when trying to get a full basic immunization and booster immunizations. Submission of misinformation or incomplete and delivery of information overload can cause confusion among mothers to various problems, one of them on the issue of Booster Immunization. This research was supported by Azizah (2013)(8) conducted in the PHC South Alalak in getting the results of the 66 respondents to the completeness mother Knowledge Base on Childhood immunization 1-1.5 Good Year

Table 4. Relations mother's attitude towards child immunization Booster in PHC Sungai Ulin 2015

attitude	Immunization				Total		Results of statistical tests
	Yes		No		n	%	
	n	%	N	%	n	%	p=0,000 OR=24,300
Positive	54	62,8	10	11,6	64	74,4	
negative	4	4,7	18	20,9	22	25,6	
Total	58	67,4	28	32,6	86	100	

Cit: n=Sample., %=Percentage

majority have knowledge of 20 respondents (30.3%) and pretty well as much as 28 respondents (42.4%), while less well as 18 respondents (27.3%), and this research was supported by Widayati (2012)(9) that the majority of respondents who have this level of knowledge was as much as 88 respondents (53%), while respondents with low knowledge as much as 34 respondents (20%). This research connect was supported by Isnaini (2013)(10), which examines the basic immunization that mothers who have children Good knowledge as much as 14 respondents (23.0%), and pretty well as much as 44 respondents (73.3%), while less well as 2 respondents (3, 3%).

4. Relationship Attitudes Toward Child Booster Immunization at PHC Sungai Ulin.

The observation of the relationship of mothers towards child immunization booster knowledge in PHC Sungai Ulin 2015 of 86 respondents presented in Table 4.

Based on Table 4 above can be seen that the attitude positive mothers in providing booster immunizations of 54 respondents (62.8%) and negative mother's attitude by providing booster immunization by 4 respondents (4.7%), while the mother is positive attitude by not giving as much Booster immunizations 10 respondents (11.6%) and negative maternal attitude by not giving immunizations Booster total of 18 respondents (20.9%). Results of statistical test by Chi-square ($\alpha = 0, 05$) p value = 0.000 which is smaller than 0.05 then H_0 is statistically means no relationship Attitudes Toward child Booster immunization at PHC Sungai Ulin 2015, with the value OR = 24.300, which means women having a positive attitude will give you a chance 24.300 times in child booster immunization compared to mothers who have a negative attitude.

Based on the results of the research showed that the mother's attitude toward child Booster immunization in infants obtained the majority have a positive attitude as much as

64 respondents (74.4%), and having a negative attitude as much as 22 respondents (25.6%).

According to the researchers assumption maternal attitudes towards immunization included in the positive category this directly affects the mother's action in giving in children Booster immunization and some mothers who act negatively because mothers do not need to argue given Booster immunizations because they think their children have received complete immunization without there must be a repeat immunization and also influenced by environmental factors such as people who are influential around. Attitude is a reaction or respon were still closed from a person to a stimulation or object. Manifestations attitude can not be seen, but can only be interpreted in advance of a closed behavior. That attitude is still a closed reaction, not an open reaction or behavior open. An attitude of readiness to react to the object .⁽⁶⁾

Of the various manifestations of an attitude limits the attitude that can not be seen, but can only be interpreted in advance of behaviors covered. Attitude clearly shows the connotation of the suitability of a reaction to a particular stimulus. Attitude is the readiness or willingness to act. Factors, influencing attitudes towards an attitude object, among others: personal experience, Influence others that are considered important, influence of culture, media, education and religious institutions as well as emotional factors.

Research on attitudes supported by Azizah (2013) ⁽⁸⁾ conducted in the PHC South Alalak in getting the results of 66 respondents attitude towards basic immunization mother obtained the majority have a positive attitude as much as 40 respondents (60.6%), and having a negative attitude as much as 26 respondents (39.4%). This research connect with by Widayati (2012) ⁽⁹⁾ Attitudes towards basic immunization mother obtained the majority have a positive attitude as much as 19 respondents (63.3%), and having a negative attitude as much as 11 respondents (36.7%),

and research supported by Isnaini (2013) ⁽¹⁰⁾ showed that maternal attitudes about immunization support base by 27 respondents (45.0%), while women who do not support as many as 33 respondents (55.0%).

D. Conclusion

Relationship Knowledge of mothers towards child booster immunization at Public Health Center (PHC) Sungai Ulin, and there is a relationship mother's attitude towards child booster immunization at PHC Sungai Ulin with $p = 0.000$ and $\alpha = 0.05$.

E. References

1. Primadi, Oscar. 2012. Health Statistics. Jakarta: Ministry of Health- RI.
2. Immunization Task Force Indonesian Pediatric Association. 2011. Immunization 2011. Fourth Matter. Jakarta: Agency Publisher Indonesian Pediatric Association.
3. The Ministry of Health-RI (MoH). 2005. "National Health System". Jakarta
4. Notoatmojo, 2012.
5. Savitri, Dayu. AD 2014. "Immunization pentavalent - New Combination Vaccine For Infants and Children". Health article.
6. Wawan and Dewi.2010. Knowledge, Affective and Attitude Theory and Measurement, Yogyakarta, Nuha Medika
7. Green, Lawrence et al. 2002. Education and Behavioral Health: Jakarta
8. Azizah, Ayu. Y. 2013. "Knowledge and Attitudes Relations Completeness Mother Against Childhood Basics Immunization In 1-1.5 years in PHC South Alalak, Banjarmasin" KTI, Banjarbaru Midwifery Academy students.
9. Widayati, Siti. N. 2012. "The relationship between mother Knowledge Level of Polio immunization with polio immunization completeness status in PHC Tanon Sragen". Health Sciences Aisyiyah Surakarta College. Surakarta.
10. Isnaini, emmy. 2013. "The relationship between mother's level of knowledge and attitude towards compliance with the provision of basic immunization in infants in rural districts Mororejo Kaliwungu Kendal" Nursing Student Stikes Telogorejo Semarang.
11. Elbur, AI 2013. "Parent's Knowledge and Attitudes on Childhood Immunization". Saudi Arabia: Taif University
12. Beta Nurdahlia. 2014. "The Ministry of Health, Health Department Central Java Province". Jakarta: PT Bio Farma.
13. Health Department at Banjarbaru. 2014. Report of the Local Regional Immunization Coverage Primary And Booster immunization. Banjarbaru.
14. Hidayat, 2007. AAA Midwifery Research Methods and Data Analysis Techniques. Jakarta: Salemba Medika.
15. Machfoedz, ircham. 2014. Quantitative and Qualitative Research Methodology for Health, Nursing, Midwifery, Medical. Yogyakarta: Fitramaya.
16. Marimbi, hanum. 2010. Growth, Nutritional Status and Basics Immunization In Toddlers. First Edition. Yogyakarta: Nuha Medika.
17. Sari, Maulida. 2014. "The Relationship of Knowledge and Attitudes About Immunization With Mother Giving Compliance Immunization in Infants" Nursing Science- Faculty of Medicine –Lambung Mangkurat University.
18. Saryono and Dwi Mekar Anggraeni. 2013. Qualitative and Quantitative Research Methodology. First Edition. Yogyakarta: Nuha Medika.
19. Sifa, Revelation. 2013. "The relationship between knowledge and attitude of the mother with the provision of Hepatitis B immunization in 0-7 days working area Bakongan Public Health Center East South Aceh".
20. Verawati. 2010. Vaccination Powerful Ways to Prevent Infectious Diseases. Yogyakarta, Canisius.