

Relationship between Knowledge and Attitudes of Parents About IPV (Inactivated Poliovirus Vaccine)Immunization at the Age of 4 – 18 Months

Erna Rahmawati*

Institut Ilmu Kesehatan Bhakti Wiyata Kediri, Indonesia

*Corresponding author: erna.rahmawati@iik.ac.id

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ABSTRACT

Parents' knowledge and attitudes about Inactivated Poliovirus Vaccine IPV immunization are very important to improve children's health status. Children under 5 years old are a vulnerable phase to disease and vulnerable to death caused by viruses. This study aims to determine whether there is a relationship between knowledge and attitudes of parents about immunization ipv at age 4 – 18 months. This study uses a correlation analytic method with a cross sectional approach. The sampling technique used accidental sampling on mothers of babies who came for IPV immunization and obtained a sample of 42 respondents. How to get data by distributing questionnaires, the data analysis technique used the Spearman Rank correlation test. Out of 42 respondents, the results of the study obtained good knowledge of 15 respondents and showed positive attitude of 24 respondents, and 24 respondents with sufficient knowledge with a negative attitude of 18 respondents. Spearman Rank correlation test obtained significant results of $0.000 < 0.05$ which means there is a relationship between knowledge and attitudes of parents about IPV immunization at the age of 4-18 months.

I. Introduction

Achieving polio immunization is a global commitment that is expected in 2020 to achieve Polio Eradication worldwide. So this is a major achievement achieved by the world in the field of health after the reduction in the Eradication of Smallpox or Variolla which was achieved in 1974. Indonesia together with the countries in the Southeast Asian Region have obtained a Polio Free Certificate from the World Health Organization (WHO) in March 2014 (Rokom 2016) The number of child and infant deaths is a reflection of the level of a country and the quality of life of the community itself. The health programs initiated by the Ministry of Health of the Republic of Indonesia have focused on reducing infant mortality rates which are still relatively high. One of the efforts that have been made to reduce infant mortality rates is the immunization program which is one of the programs that is considered effective, especially in preventing morbidity, disability and death caused by a virus or disease that can be prevented by immunization(Proverawati and Andhini 2010).

Baby's health is the most important thing in growth and development in general, babies and toddlers learn the environment in several ways including touching, smelling and feeling. In general, babies and toddlers are not aware of the dangers that occur when they learn to explore the environment around them. This can interfere with their health, so it is not surprising that thousands of infants and toddlers are contaminated with dangerous diseases every year (Indra 2010). One in five children in the world (21.8 million children) do not receive immunizations, each year there are approximately 10.6 million children who die before they reach the age of 5. About 1.4 million children die due to diseases that can be prevented by immunization. Some diseases that can be prevented by immunization are: TB, Diphtheria, Tetanus, Hepatitis B, Pertussis, Measles, Polio, Meningitis, and Pneumonia². The large number of children who have not received polio immunization has resulted in paralysis and even death which could have been prevented by



immunization. Paralysis of the legs occurs, from 5-10% die when the respiratory muscles cannot work properly due to a virus infection (UNICEF 2020).

According to Permenkes No. 12 of 2017, the government has a polio immunization program divided into 4 doses of Oral Polio Vaccine (OPV) immunization and administration of 1 dose of Inactivated Polio Vaccine (IPV) in the immunization schedule for infants. OPV4 immunization coverage has reached 90% in 3 years last but not yet meet the national target of 95%. Whereas the coverage of IPV immunization shows that there has been an increase every year since launching in 2016 but the coverage is still less than 80%. (Kemenkes RI 2020) Knowledge is all the results of curiosity through sensory processes, in the eyes and ears of an object. Domain knowledge is important in forming open behavior (Donsu, J, D 2016). Factors triggering low immunization coverage include working parents, lack of knowledge about the importance of immunization and low attention to children's health, and insufficient information. about the benefits of immunization and types of immunization. To decide on the Endgame Polio Strategy, it is necessary to administer Polio immunization by injection of one dose in children aged 4 months into the national routine immunization program, to provide protection to children from the threat of Polio disease (Kemenkes RI 2022). Coverage of immunizations Nationally, the average complete vaccination coverage in 34 provinces is currently on an upward trend at 68.02% as much as knowledge and attitudes of parents about immunization affect children getting IPV immunization (Darmawan 2023). Based on the research objective, namely to find out whether there is a relationship between knowledge and attitudes of parents towards IPV immunization. The author is interested in conducting research with the title "The Relationship between Knowledge and Attitudes of Parents About IPV Immunization in Infants Aged 6-18 Months".

II. Methods

The research design used in this study was cross sectional and the sample was taken using an accidental sampling technique. The population in this study were parents who had children aged 6-18 months who attended Posyandu for 60 respondents. The sample used in this study were infants who received IPV immunization of 42 respondents. Data analysis used in this study used Univariate analysis which had the aim of telling the characteristics of the variables used including the dependent variable (IPV immunization in infants after 6-18 months) and independent variables (knowledge and attitudes). Bivariate analysis used dependent and independent variables using chi square. Using SPSS with a 95% confidence level, with a significance limit of a 0.5 so that if the value of $p < 0.05$ means (H_a is accepted) if $p > 0.05$ means (H_o is rejected).

III. Results and Discussion

Characteristics of respondents based on level of knowledge about IPV immunization

Table 1 Respondent characteristics based on mother's knowledge about IPV immunization

No	Criteria	Total	Percentage (%)
1	Good	15	36
2	Enough	24	57
3	Less	3	7
	Total	42	100

Based on table 1, it was found that the majority of respondents had sufficient knowledge of 24 respondents (57%), and only 3 respondents (7%) had less knowledge and 15 respondents (36%) had good knowledge. Based on research that has been done with 42 respondents using a questionnaire.

Parents' attitudes toward IPV immunization

Table 2 Characteristics of parents' attitudes towards IPV immunization

No	Criteria	Total	Percentage (%)
1	Positive	24	57
2	Negative	18	43
	Total	42	100

Based on table 2, it was found that the majority of respondents had a positive attitude of 24 respondents (57%) and those who had a negative attitude were 18 respondents (43%). Based on research that has been done with 42 respondents by giving a questionnaire.

Relationship between Parents' Knowledge of IPV Immunization

Table 3. Relationship between Parents' Knowledge of IPV Immunization

No	Knowledge	Attitude				Total	
		Positive (N)	%	Negative (N)	%	(N)	%
1	Good	12		4	9.5	20	38.1
			28,5				
2	Enough	13	31	10	23.8	25	54.8
3	Less	0	0	3	7.2	8	7.2
	Total	13		9	40.5	53	100
			59.5				

$P - P\text{-value} = 0.000$

Based on table 3, the results obtained from 23 respondents with sufficient knowledge were 9 respondents (39.1%) who showed a negative attitude and 14 respondents (61%) who showed a negative attitude. Based on the results of the Spearman Rank test, the p value was 0.036 <alpha (0.05), which means that H1 is accepted and H0 is rejected, which states that there is a relationship between knowledge and parents' attitudes towards IPV immunization. After conducting an analysis with chi-square by setting the value of $P = 0.036$, namely Ha is accepted and it can be concluded that there is a relationship between parental knowledge and IPV immunization.

The results of the chi-square statistical test on the relationship between parents' knowledge about IPV immunization obtained a value of $p = 0.036$ ($p < 0.05$) which means that Ha is accepted so that it can be concluded that there is a relationship between parents' knowledge about IPV immunization. Knowledge is the result of sensing humans to objects through their senses (eyes, nose, ears) and measurement and knowledge can be done by interviewing or giving questionnaires whose contents ask questions about the material that the research respondents want to measure. (S 2018)

Based on the results of research conducted using the chi-square test, it was found that data on the relationship between parents' attitudes about IPV immunization obtained a value of $p = 0.229$ ($p < 0.05$). Attitude is a behavior that has not yet entered into action and has three components including beliefs, ideas, and concepts about an object from emotional life or evaluation of an object and tends to act. (Wawan A 2011).

If the polio vaccine, IPV, is not given to infants and toddlers, they will be at risk of developing polio (Cecilia 2016). This research is in accordance with the opinion (Suparyanto. 2011) which suggests that the family has a very large influence on the formation of attitudes in a family because the family is the person closest to other family members. If the family's attitude towards immunization is not very good, even to the point of ignoring or even not considering the implementation of immunization activities is not important, then the baby's mother will not immunize her child because there is no support from the family, the success of the parents in giving IPV immunization to their baby will decrease.

IV. Conclusion

Based on the results of the research and discussion, it can be concluded that the p value is 0.000 <alpha (0.05), which means that H1 is accepted and H0 is rejected, which indicates that there is a relationship between knowledge and attitudes of parents about IPV immunization at ages 4-18 months.

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