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Titel : Analysis Factors of Completeness Advanced Immunization (Dpt-HB-Hib And Measles) For Toddlers In Work Area Leupung Health Center of Aceh Besar District

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Banda Aceh, 11 September 2021
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Analysis factors of Completeness Advanced Immunization (DPT-HB-Hib and Measles) for Toddlers in Work Area Leupung Health Center of Aceh Besar District

Faradilla Safitri[1], Nuzulul Rahmi[2]

[1]Universitas Ubudiyah Indonesia, Jln. Alue Naga Desa Tibang, Kecamatan Syiah Kuala, Banda Aceh, Indonesia
[2]Universitas Ubudiyah Indonesia, Jln. Alue Naga Desa Tibang, Kecamatan Syiah Kuala, Banda Aceh, Indonesia

*Correspoding Author : faradilla@uui.ac.id

Abstract. Advanced immunization is a repeat of basic immunization to maintain the level of immunity and to extend the optimal protection period from further immunization and this is only obtained if the child has received complete basic immunization. The coverage of children under five who received advanced immunization (DPT-HB-Hib and measles) in 2019 is 75.95%, however 50% of the provinces have not yet achieved the target, one of which is Aceh Province (26.91%). The purpose of this study was to analysis faktor relationship between knowledge, attitudes, support from husbands with the completeness of advanced immunization for children under five in the working area of the Leupung Aceh Besar Community Health Center. This research is analytic with a cross-sectional approach, the population in this study were all mothers who have children aged 3-5 years as many as 132 people, the sample was taken by simple random sampling of 57 people. The research data collection was carried out from 9 June - 17 June 2020, the research instrument used a questionnaire, data processing using computers and data analysis were univariate and bivariate. The results of the research on bivariate analysis were found in the variable knowledge (p value = 0.0001, OR = 29.333), attitude (p value = 0.0001, OR = 40.250), husband's support (p value = 0.0001, OR = 70.000), support from health workers (p value = 0.045, OR = 5.804). The conclusion in this study is that there is a relationship between knowledge, attitudes, husband's support and family support with the completeness of advanced immunization for children under five in the working area of Puskesmas Leupung, Aceh Besar District. It is advisable for health workers to be able to provide education to mothers, husbands and their families about the importance of providing advanced immunization to children under five in order to reduce morbidity, disability and death caused by diseases that can be prevented by immunization.

Keywords: Advanced immunization, knowledge, attitudes, support from husbands

INTRODUCTION

Immunization is an effort to actively generate and increase a person's immunity against a disease so that if one day they are exposed to the disease they will not get sick or only experience mild illness, with the main aim of providing protection against diseases that can be prevented by immunization, reducing morbidity, disability and death from diseases that can be prevented by immunization [1].

When children are toddlers, they are given further immunizations or booster immunizations. This second stage of immunization is in accordance with the policy of the Ministry of Health, which in its study concluded that DPT-HB Hib immunization is given in 2 stages, namely the first stage 3 times (basic immunization), and followed by the second

stage at the age of 18 months which is useful for maintaining and increasing titers. antibodies in children who decreased in cases of DPT disease at the age of 15-18 months [2].

Follow-up immunization is a repeat of basic immunization to maintain the level of immunity and to extend the protection period for children who have received basic immunization, namely by giving 1 dose of DPT-HB-Hib at 18 months of age and 1 dose of measles/MR at 24 months of age. Optimal protection from the provision of further immunization is only obtained if the child has received complete basic immunization [3].

Follow-up immunizations for toddlers (under three years) are DPT-HB Hib and Measles. Further immunization / booster needs to be given because it serves to maintain immunity levels and extend the period of protection. Follow-up immunization of DPT-HB-HIB when the child is 18 months or 1.5 years of age, the immunity formed after the previous 3 doses of DPT-HB-Hib will decrease when the child reaches the age of 15 months to 1.5 years, as well as the increase in measles outbreaks In Indonesia, further immunization (booster) needs to be given [4].

About 1.5 million children in the world die each year from diseases that can be prevented by immunization. In 2018, there were approximately 20 million children who did not receive complete immunizations and there were even children who did not receive any immunizations at all. And in 2019 this number increased to 25.7 million children who did not get complete immunizations [5].

Measles is a disease that can be prevented by immunization. Measles suspects in 2019 were spread in almost all parts of Indonesia, with an Incidence Rate (IR) of 3.29 per 100,000 population. This figure increased when compared to 2018 which was 3.18 per 100,000 population. Although the number of suspected measles cases increased in 2019 [6].

Diphtheria is also a disease that can be prevented by immunization. Diphtheria cases in 2019 spread in almost all areas of Aceh. The number of diphtheria cases in 2019 was 130 cases, the number of deaths was 7 cases, with a CFR of 5%. This number of cases decreased compared to 2018 (200 cases). However, the number of deaths from diphtheria increased from the previous year (3 cases). Likewise, the spread of suspected measles cases is found in almost all areas of Aceh. There were 2,986 suspected measles cases, much higher than in 2018 which was 2,142 cases. The most suspected measles were in Pidie Regency (470 cases), followed by Aceh Besar (414 cases), Bireuen (370 cases), and Banda Aceh City (327 cases)[7].

The coverage of children under five who received further/booster immunization (DPT-HB-Hib and measles) in 2019 was 75.95%. This figure has met the 2019 Strategic Plan target of 70%. However, 50% of provinces still have not been able to achieve the target. Provinces with the lowest coverage are Aceh (26.91%), Papua (41.95%) and East Nusa Tenggara (43.2%)[6].

Leupung Health Center is one of the health centers located in Aceh Besar District, the working area of Leupung Health Center Leupung District consists of 6 villages (Deah Mamplam, Lamseunia, Layeun, Meunasah Bak Ue, Meunasah Mesjid and Pulot) where based on the latest data obtained there are still villages or the gampong is not yet a UCI village, meaning that immunization is still not evenly distributed and covers all villages because there are still gampongs where the number of infants who receive complete basic immunization is less than 80%.

METHODS

This study uses an analytic type of research with a cross-sectional design. The population in this study were all mothers who had toddlers aged 3-4 years and were in the working area of the Leupung Health Center, Aceh Besar District, as many as 132 people, the

sample was taken by simple random sampling as many as 57 people. This research instrument uses a questionnaire that has been tested for validity and reliability and data collection by distributing questionnaires. Data collection has been carried out on June 9 to June 17, 2020 in the Leupung Health Center Work Area, Aceh Besar District. Processing data using a computer through the process of editing, coding, transferring and tabulating. Data analysis with two data, namely univariate and bivariate analysis.

RESULT

Table 1
Distribution of the frequency of completeness of advanced immunization of husband's knowledge, attitude, and support in the working area of Leupung Health Center Aceh Besar District

No	Variable	Frequensy (f)	Percentage (%)
1.	Advanced Immunization		
	a. Complete	24	42.1
	b. Incomplete	33	57.9
2.	Knowledge		
	a. Tall	31	54.4
	b. Low	26	45.6
3.	Attitude		
	a. Positive	35	61.4
	b. Negative	26	38.6
4.	Husband Support		
	a. Support	24	42.1
	b. Does not support	33	57.9
Total		**57**	**100.0**

Based on the table. 1 it can be seen that from 57 respondents, 33 people (59.9%), mothers with high knowledge (54.4%), mothers who had a positive attitude were 35 people (61.4%), mothers who did not receive complete follow-up immunization 33 people did not get the support of their husbands (57.9%).

Table 2
Relationship of Knowledge, Attitude and Husban Support with Completeness of Advanced Immunization for Toddlers in the Working Area of Leupung Health Center Aceh Besar District

Variable	Advanced Immunization				Total		P Value	OR
	Complete		Incomplete					
	f	%	f	%	n	%		
Knowledge								
a. Low	22	71.0	9	29.0	31	100.0	0.0001	29.333
b.High	2	7.7	24	92.3	26	100.0		

Attitude								
a. Positive	23	65.7	12	34.3	35	100.0	0.0001	40.250
b. Negative	1	4.5	21	95.5	22	100.0		
Husban Support								
a. Support	21	87.5	3	12.5	24	100.0	0.0001	70.000
b. Does not support	3	9.1	30	90.9	33	100.0		

Based on table 2, it can be seen that of the 26 respondents who have low knowledge and incomplete provide follow-up immunizations to their toddlers as many as 24 people (92.3%), while from 31 respondents who are highly knowledgeable and incomplete provide follow-up immunizations to toddlers as many as 9 people (29.0%). Statistical test results obtained p-value = 0.0001, meaning that there is a significant relationship between mother's knowledge and completeness of advanced immunization for toddlers in the working area of Leupung Health Center, Aceh Besar District, and OR value = 29.333, which means mothers have low knowledge of advanced immunization for toddlers. have a 29 times greater chance of not providing complete follow-up immunizations to their toddlers compared to mothers with high knowledge of providing follow-up immunizations.

Attitude variable can be seen that from 22 respondents, mothers who have a negative attitude as many as 21 people (95.5%) do not provide complete follow-up immunizations for their toddlers, while from 35 respondents, mothers who have positive attitudes as many as 12 people (34.4) also do not give immunizations. complete follow-up for toddlers. Statistical test results obtained p-value = 0.0001, meaning that there is a significant relationship between mother's attitude and completeness of advanced immunization for toddlers in the working area of Leupung Health Center, Aceh Besar District, and OR value = 40.250, which means that mothers who have a negative attitude towards follow-up immunization have 40 times greater chance of not giving complete follow-up immunizations to their toddlers compared to mothers who have a positive attitude towards giving further immunizations.

The husband's support variable can be seen that of the 33 respondents, who did not get support from their husbands as many as 30 people (90.9%) did not provide complete follow-up immunizations for toddlers, while out of 24 respondents, who received support from their husbands as many as 3 people (12.5%) did not provide support. complete follow-up immunizations for toddlers. Statistical test results obtained p value = 0.0001, meaning that there is a significant relationship between husband's support and completeness of advanced immunization for toddlers in the working area of Leupung Health Center Aceh Besar District, and OR value = 70,000, which means that mothers who do not get support from their husbands have a chance of 70 times greater for not getting further immunizations for their toddlers compared to mothers who get support from their husbands.

DISCUSSION

Knowledge with Advanced Immunization

Based on the results of the study, it can be seen that 24 mothers (92.3%) did not provide complete follow-up immunizations to their toddlers, but there were also mothers who had high knowledge about giving further immunizations to toddlers who did not provide further

immunizations. complete for toddlers as many as 9 people (29.0%). The results of statistical tests using computer applications obtained p-value = 0.0001, which means Ho is rejected, meaning that there is a relationship between mother's knowledge about advanced immunization and completeness of advanced immunization for toddlers in the working area of Leupung Health Center, Aceh Besar District. The statistical results also obtained an OR value = 29.333, which means that mothers who have low knowledge of advanced immunization for toddlers have a 29 times greater chance of not giving complete follow-up immunizations to their toddlers compared to mothers with high knowledge of further immunization.

The results of this study are in line with the research conducted by Munawaroh, Syamsulhuda and Widjanarko on several factors related to the practice of advanced pentavalent booster immunization in the Mangunsari Health Center Salatiga Work Area in 2016, the results showed that the practice of pentavalent booster immunization that had not been implemented was more common in group of respondents with less knowledge about pentavalent immunization (40%), with p-value = 0.039, meaning that there is a significant relationship between knowledge and practice of pentavalent booster immunization [8].

Similar to the results of research conducted by Pangaribuan regarding the determinants of completeness of advanced immunization in toddlers in the working area of the Sentosa Baru Health Center, Medan City in 2018, it can be concluded that there is a significant relationship between mother's knowledge and completeness of advanced immunization in toddlers with p value = 0.001, and the level of knowledge has an Exp (B) value of 6.789, meaning that respondents who have good knowledge are 6.7 times more likely to complete further immunizations for toddlers than mothers who have poor knowledge levels [9].

The results of research conducted by Harahap, Perwitasari and Puspasari about the description of mother's knowledge and motivation regarding the provision of advanced DPT immunization (booster) at the Simpang IV Sipin Health Center Jambi City, it can be concluded that most respondents have less knowledge as much as 44.3% and most toddlers do not. received Advanced DPT (booster) immunization as much as 83.2% [10].

The results of this study are also in accordance with the theory put forward in Smiley's book (1947), knowledge can be defined as facts or information that we consider true based on thoughts that involve empirical testing (thinking about phenomena that are directly observed) or based on other thought processes such as giving reasons. logic or problem solving. Basically knowledge is our awareness and understanding of something and our acceptance as a group that this understanding is true [11].

The results of data collection during the study, the researchers saw that there were still many mothers who did not want to take their children to be given further immunizations on the grounds that the children had received complete basic immunizations and the children had been protected from various diseases and they did not know the benefits of this follow-up immunization. increase children's immunity to viruses that can be prevented by immunization, mothers do not know what diseases can be avoided if children are given immunizations and at what months of age children are given further immunizations. In addition, mothers who already know the importance of giving follow-up/booster immunizations to their toddlers but still do not bring their children to be given immunizations on the grounds that some are working, and some who do not dare to take their children to health workers due to the COVID-19 pandemic, so that missed schedule for giving further immunizations to their toddlers.

Thus the researcher concludes that good knowledge becomes a person's reference to be able to change his attitudes and actions from a negative to a positive direction. So, if the mother's knowledge of advanced immunization is lower, then this will be a motivating factor for mothers not to bring their toddlers to be given further immunizations, and vice versa, the

higher the mother's knowledge of advanced immunization, the mother will bring her children to get further immunizations regularly.

Attitude with Complete Immunization Follow

Based on the results of the study, it can be seen that mothers who have a negative attitude towards the provision of follow-up immunizations to toddlers as many as 21 people (95.5%) do not provide complete follow-up immunizations to their toddlers, while mothers who have a positive attitude towards giving further immunizations as many as 12 people (34.3%) also do not. complete to receive follow-up immunizations for toddlers. Statistical test results obtained p-value = 0.0001, Ho is rejected, meaning that there is a significant relationship between attitudes and completeness of advanced immunization for toddlers in the working area of Leupung Health Center, Aceh Besar District. The test results also obtained an OR value = 40.250, which means that mothers who have a negative attitude towards further immunization have a 40 times greater chance of not giving a complete follow-up immunization to their toddlers compared to mothers who have a positive attitude towards further immunization.

The results of this study are in line with research conducted by Afrilia and Fitriani at the Curug Health Center in 2017, the results showed that there was a significant relationship between mother's attitude and completeness of infant immunization with p value = 0.001 and OR = 28.800, which means that mothers who have a positive attitude have the opportunity to 29 times more likely to have complete follow-up immunization status than mothers who have a negative attitude4. Similar to the results of research conducted by Pangaribuan on the determinants of completeness of advanced immunization in toddlers in the work area of the Sentosa Baru Health Center, Medan City in 2018, it can be concluded that there is a relationship between attitude and completeness of advanced immunization in toddlers with a score of p=0,033[9].

Attitude is a person's closed response to a particular stimulus or object, which already involves the factors of opinion and emotion concerned. Attitudes involve thoughts, feelings, concerns, and other psychological symptoms[12].

The results of data collection during the study, researchers saw that there were still many mothers who did not want to bring their toddlers to be given further immunizations with the attitude that follow-up immunizations were not too important because children had been given basic immunizations and mothers thought that after their children were given basic immunizations, their children were still susceptible to disease, as well as other reasons because mothers can't bear to see their children have a fever, their feet hurt after being immunized so that mothers don't bring their children for further immunizations.

Thus the researcher concludes that a person's attitude becomes important in taking an action, in this case is an action to bring his child to get further immunizations. Changing one's attitude is not easy, it takes patience and perseverance to keep trying so that the wrong view of advanced immunization in toddlers can be overcome so that more and more toddlers get complete follow-up immunizations. Therefore, the role of health workers, be it midwives, puskesmas officers and the health office, is very much needed and very important in providing continuous health education and education to change the views of every mother, especially regarding follow-up/booster immunization (DPT-HB-Hib and measles)

Husband Support with Complete Immunization follow

Based on the results of the study, it can be seen that of the 33 respondents, who did not get support from their husbands as many as 30 people (90.9%) did not provide complete follow-up immunizations for toddlers, while out of 24 respondents, who received support from their husbands as many as 3 people (12.5%) did not provide support. complete follow-up immunizations for toddlers. Statistical test results obtained p value = 0.0001, meaning that there is a significant relationship between husband's support and completeness of advanced immunization for toddlers in the working area of Leupung Health Center Aceh Besar District, and OR value = 70,000, which means that mothers who do not get support from their husbands have a chance of 70 times greater for not getting further immunizations for their toddlers compared to mothers who get support from their husbands.

The results of this study are in line with the research conducted by Munawaroh, Syamsulhuda and Widjanarko on several factors related to the practice of advanced pentavalent booster immunization in the Mangunsari Health Center Salatiga Work Area in 2016, the results showed that most of the respondents did not receive support from their husbands/families in practice. pentavalent booster immunization with p value = 0.001, meaning that there is a significant relationship between husband/family support and the practice of pentavalent booster immunization[8].

The results of data collection during the study, researchers saw that there were still many mothers who did not want to bring their toddlers to be given further immunizations on the grounds that they did not get approval from their husbands and families to bring their children to be immunized because there was a lot of information about immunization vaccines made from illicit goods, and because of the side effects of immunization itself which makes mothers and families not want to take their children to be given further immunizations.

Thus, the researchers concluded that husband's support is no less important than mother's knowledge of advanced immunization for toddlers, because husbands are the determinants in decision making in the family, if husbands do not give permission to give immunizations to their children, mothers cannot take their children for further immunizations. Here the need for the role of health workers to provide understanding to husbands about advanced immunization for toddlers, so husbands understand the importance of providing follow-up immunizations for toddlers.

CONCLUSION

Based on the results of the study, it can be concluded that there is a relationship between knowledge (p value = 0.0001, OR = 29.333), attitude (p value = 0.0001, OR = 40.250), husband's support (p value = 0.0001, OR = 70.000), with completeness of follow-up immunizations. toddlers in the working area of the Leupung Health Center, Aceh Besar District.

Suggestions

It is hoped that health workers can provide continuous education to the community, especially about immunization for infants and toddlers through health counseling, distribution of brochures, installation of billboards in strategic places and dissemination of videos through social media accounts that contain the importance of giving immunizations to children, as well as eliminating misunderstanding of information (hoax news) that is widely circulated in the community, health workers can also work together with cadres, community leaders, religious leaders, and health education institutions so that together they can promote the slogan "immunization is important" for children as the nation's next generation. By increasing

the coverage of advanced immunization for children under five, it can reduce morbidity, disability and even death caused by diseases that can actually be prevented by immunization.

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