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Relationship between Parents' Experience with Giving Complete Basic Immunization to Infants in The Working Area of the Montasik Health Center, Aceh Besar District

Ita Susanti[1*], Nur Asyiah Putri Helnasari[1], Maharani Maharani[2]

[1] Stikes Medika Nurul Islam, Aceh, Indonesia
[2] Department of Midwifery, Polytechnic of Health-Ministry of Health, Aceh, Indonesia

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CORRESPONDING AUTHOR*
Ita Susantii
itasusanti1990@gmail.com
Stikes medika Nurul Islam, Aceh, Indonesia

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ABSTRACT

Introduction: The basic immunization program organized by the Government is urgently needed for children aged 0-12 months. One of the reasons for the low coverage of complete basic immunization in the work area of the Montasik Health Center is the past experience of parents and families who have experienced Adverse Events after Immunization, then the next child they refuse to be re-immunized. This is because the parent gets pressure from the family and follows the advice the family more than health workers. Parents mentioned that the Adverse Events after Immunization is that are often experienced by infants include mild to severe fever, the baby has swelling at the injection site and seizures due to high fever after immunization.

Methods: This cross-sectional was conducted in the working area of the Montasik Health Center on January, 2022. The population in this study was 178 people consisting of 30 villages, while the sampling technique was cluster random sampling, which was 53 people. Test analysis of research results using the chi-square test.

Results: Most of the 12-month-old did not get complete basic immunization, (83.0%), 37 parents who have experience and did not complete basic immunization for their infants (75.7%). Parent's experience and the provision of complete basic immunization in the work area of the Montasik Health Center Aceh Besar, the value was 0.028 (< 0.05).

Conclusion: There is a relationship between parent's experience with the provision of complete basic immunization in the work area of the Montasik Health Center, Aceh Besar District.

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INTRODUCTION

Complete basic immunization is given to children before the age of 1 year, which consists of several types of vaccines, namely HB 0 vaccine, BCG, DPT-HB-HIB, polio, IPV and measles. Complete basic immunization aims to protect children from various infectious disease outbreaks, disability and death.

The immunization program has been implemented in Indonesia since 1956; although the government has established a complete basic immunization program for infants aged 0–12 months, there are still more than 1.4 million child deaths in the world each year caused by various infectious diseases that can be prevented by immunization. These infectious diseases include hepatitis B, polio, tuberculosis, diphtheria, pertussis, tetanus and measles. Infant and toddler deaths are most often caused by diseases that can be prevented by immunization, including diphtheria, measles and polio. Diseases that can be prevented by immunization are diseases that hopefully can be eradicated or suppressed by immunization [1,2].

The achievement of immunization nationally has decreased since 2020. Data for routine immunization for the month of October 2021, the coverage of complete basic immunization only reached 58.4% of the target of 79.1. Several provinces' complete basic immunization coverage is still below 60%, including the provinces of South Sumatra, Bengkulu, West Sumatra, Bali, Gorontalo, Lampung, Bangka Belitung, East Java,

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Maluku and Aceh. The coverage of measles/MR immunization in infants in Aceh in 2019 only reached 53% [3].

Meanwhile, the coverage of the Immunization program in Aceh Besar District in 2021, seen from the coverage of UCI Villages/Urbans, only reached 44.2% of 267 villages; this coverage is still too low [3]. The complete basic immunization program held at the Montasik Health Center in 2021 for infants aged 0-12 months consists of Hepatitis B immunization given at the age of < 7 days, BCG, DPT-HB-HiB3, polio 4, and measles. The coverage of complete basic immunization in 2021 is 55.3%.

The low coverage of complete basic immunization in the working area of the Montasik Health Center, Aceh Besar, is caused by several factors, one of which is the past experience of parents. Based on the results of a survey conducted on 15 mothers who had babies in the working area of the Montasik Health Center, Aceh Besar, it was shown that mothers refused to have their children immunized mostly for reasons of experience. These experiences include infants experiencing post-immunization follow-up events, obtaining information related to immunization from parties who cannot be accounted for, as well as experiencing negative issues regarding immunization that have been passed down from generation to generation. Past experiences of parents and families who have experienced post-immunization follow-up events in their infants, so on the next schedule or child, they refuse to be immunized again.

Parents are also pressured by the family; thus, they will follow the advice and advice from the family more than the health workers. Post-Immunization follow-up Events that often occur after their babies are given immunizations, namely babies experiencing mild to severe fever, babies experiencing swelling at the site of the vaccine injection, and even parents also mention that their babies have seizures due to high fever after immunization. Besides that, another thing that underlies the low coverage of complete basic immunization in the working area of the Montasik Aceh Besar Health Center from an experience point of view is that information obtained by parents comes from incompetent parties, in this case, not from health workers, causing parents not to immunize their infants.

The experience of parents who have received many negative issues about immunization for generations from previous parents, causes parents not to give immunizations to their infants. As for the negative issues regarding immunization circulating in the community, one of them is vaccines that contain substances that are considered legally unlawful in Islam. In fact, the Fatwa of the Indonesian Ulema Council Number 04 of 2016 has confirmed that halal immunization vaccines are given to children. This is of course the basis for the formation of parental experiences that influence the provision of basic immunizations to their infants [4].

The impact caused by the low coverage of complete basic immunization for infants causes morbidity and mortality in infants and toddlers to tend to increase. This of course, can trigger several infectious diseases that have started to decrease, such as hepatitis B, measles, tuberculosis and even diphtheria disease reappearing [5]. Based on this background, researchers are interested in conducting research on whether the experience factor is related to the provision of complete basic immunization to infants?

MATERIAL AND METHODS

This is an analytic survey with a cross-sectional approach to determine the relationship between parents' experience with providing complete basic immunization to infants in the working area of the Montasik Health Center, Aceh Besar District. This research was conducted in the working area of the Montasik Health Center on January 2022.

The population in this study was 178 people consisting of 30 villages, while the research sampling technique was cluster random sampling, namely 53 people from 6 villages in the Montasik Health Center working area. The inclusion criteria are parents who have babies aged 9-12 months, are domiciled in the working area of the Montasik Health Center and are willing to be respondents. The independent variable in this study experiences, while the dependent variable is the provision of complete basic immunization to infants.

The analytical test was used to test the hypothesis of a relationship between the independent variable and the dependent variable, using a statistical test of chi-square interval (CI) 95% with a limit of significance ($\alpha = 0.05$) and processed using a computer with the SPSS program.

RESULTS

Table 1 shows that the characteristics of the respondents are based on age, most of the respondents aged 21-30 years are 34 respondents (63.1%), while the education of respondents is mostly middle educated as many as 42 respondents (79.3%), and most of the respondents' occupation are didn't work 40 people (75.5%). The higher the age of parents, the more experience they have with immunization compared to parents who are younger. The experience of parents is related to the knowledge acquired [6]. Likewise, with parents' education, the higher the education, the more experience. This is related to the knowledge gained by parents about the importance of immunization, schedules and diseases that can be prevented by immunization [7]. Meanwhile, working parents have more experience than non-working parents. This is

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because working parents have more relationships, so their insights are also broader regarding immunization [8]. Based on the research results, the distribution of the characteristics of the respondents (age, education, occupation) is obtained as follows.

Table 1. Distribution of Respondent Characteristics in the Work Area of the Montasik Health Center

Characteristics	Frequency *(n)*	Percentage (%)
Age		
< 20 years	1	1,7
21-30 years	34	63,1
31-40 years	16	29,8
41-49 years	3	5,4
Total	53	100
Education		
Primary	4	7,5
Middle	42	79,3
College	7	13,2
Total	53	100
Occupation		
Did not work	40	75,5
Farmer	7	13,2
Honorary	4	7,5
Contract Teacher	1	1,9
Government Employees	1	1,9
Total	53	100

Table 2. Distribution of Parents' Experiences on Giving Complete Basic Immunizations to Babies in the Work Area of the Montasik Health Center

Previous Experience	Frequency *(n)*	Percentage (%)
Yes	37	69.8
No	16	30.2
Total	53	100

Based on Table 2, it was found that most of the respondents had experience with complete basic immunization in infants, namely 37 respondents (69.8%). Based on Table 3, it can be seen that most of the 12 month old babies did not get complete basic immunization, namely 44 respondents (83.0%). There were 37 parents who have experience and did not complete basic immunization for their infants as much as 75.7%, and parents who complete basic immunizations for their babies only 24.3%. Based on Table 4, the analysis of the data obtained using the chi-square test, the value of 0.028 (< 0.05), it can be concluded that the hypothesis is accepted which states that there were a relationship between experience with the provision of complete basic immunization in the work area of the Montasik Health Center District Aceh Besar.

Table 3. Distribution of Complete Basic Immunization for Infants in the Work Area of the Montasik Health Center

Complete Basic Immunization	Frequency *(n)*	Percentage (%)
Incomplete	44	83.0
Complete	9	17.0
Total	53	100

DISCUSSION

Based on Table 4, the results of the chi-square test show that there is a relationship between experience with the provision of complete basic immunization in the working area of the Montasik Health Center, Aceh Besar District. Most of the respondents had experience, but did not complete basic immunizations for their babies. This is due to the past experience of parents or families whose children experienced after being given immunizations, so that parents did not return to immunize their babies. This is because the mother gets pressure from the family, especially from parents and husband, which in the end the parent follows the advice and advice of the family more than health workers.

Mothers who have babies tend to follow past experiences from both those around them and their families. Mothers feel it is not important to find out new things about health, especially about immunization [9]. Experience is very important for mothers as a basis for making decisions and it is unfortunate that the experience that mothers get is an unpleasant experience about immunization [10]. Less experience and gained from unpleasant past events and also pressure from family and people around make the mother wrong in making decisions. So that what you should do becomes a scary thing to do. A person's experience will help ripen the person concerned to make decisions and help him to determine certain steps in making decisions and experience should be used as a means to hone one's ability to make conclusions and choices [11].

Basically, parents' decisions regarding immunization are very important to increase immunization compliance and coverage, as an effort to prevent various infectious diseases in children. Parents' knowledge and attitudes about immunization are the main factors that contribute to their decision to have their children immunized [9,10]. Research by Fisha Alebel, et all in Wadla Woreda, North East Ethiopia showed that respondents who had good knowledge about infant immunization four times (AOR= 4,592, 95% CI: (2,709-7,786) had more influence on having a good attitude towards immunization in infants [14]. This is supported by the results of research conducted in Saudi Arabia, Bangalore, India, Lebanon, Lithuania

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Table 4. Distribution of Complete Basic Immunization for Infants in the Work Area of the Montasik Health Center

Previous Experience	Complete Basic Immunization						*p value*
	Complete		Incomplete		Total		
	n	%	*n*	%	*n*	%	
Yes	9	24.3	28	75.7	37	100	0,028
No	0	0	16	100	16	100	

and Italy [12–15]. This may be because good knowledge is the most important and tangible factor that helps to achieve good attitudes towards infant immunization, and mothers who have better knowledge and understanding are more likely to comply and less likely to refuse immunization of their infants [9].

Experience is also influenced by factors of knowledge, attitudes, and practices of parents about immunization [14]. Parents' knowledge is the most important factor that can contribute to their baby's immunization decisions. Thus, parental decisions about immunization are very important to improve immunization compliance. Parental compliance basically leads to complete immunization of the baby, which aims to prevent various infectious diseases in children [16,17]. Based on the results of research by Fisha Alebel et al., it shows that the decision of parents to give basic immunization to their babies depends on their level of formal education. Parents with primary, secondary, and tertiary education had an effect of about twice (AOR=2.513, 95% CI: (1.526-4.136), twice (AOR=2.546, 95% CI: (1.159-5.9590) and two twelve times (AOR=11,988, 95% CI: (4,470–32,147) to give immunizations to their babies compared to respondents who did not attend formal education. The results of this study are also supported by the results of research conducted in the city of Arba Minch and Zuria District, Mizan Aman Town (Ethiopia), Sinan District, Tehulederie District, Taif (Saudi Arabia), Kama District (Afghanistan), Nepal, Bengaluru (India), urban slum areas of Varanasi (India), Lebanon, and Georgia [6, 18–22]. This is related to the level of education of parents, which influences parents' decision-making to immunize their babies. In addition, parental education also has an influence on changes in attitudes, habits, feelings, and beliefs, as well as increased autonomy, which encourage individual behaviour in improving health status [21].

Besides the unpleasant experience, the most common reason for parents not to complete their baby's immunizations is the inadequate stock of vaccines in health facilities. About one-fifth of the women revealed that they lacked knowledge about the benefits of immunization, the immunization schedule and the number of doses needed. Most parents believe that their children are too early to receive immunization vaccines, especially those that use syringes. In addition, parents also believe that their child has received several vaccines and appears to be healthy and growing normally, so there is no need for additional vaccines. Parents also believe that too many vaccines can be harmful to children. Most parents gave reasons that showed their dependence based on immunization socialization carried out by health workers, waiting for immunization officers to visit their homes and lack of availability of vaccines in health care facilities, and lack of understanding about immunization [24,25].

CONCLUSION

Based on the results of the study, it was found the value of 0.028 (< 0.05), it can be concluded that there was a relationship between parents' experience with the provision of complete basic immunization in the work area of the Montasik Health Center, Aceh Besar District.

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CONFLICT OF INTEREST

The authors declared that there was no conflict of interest regarding the publication of this article.

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