

Provision of Basic Immunization for Toddlers during Covid-19 Pandemic in Mekarjaya Village Tangerang Regency

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Abstract

Background: Immunization is important in health services to protect vulnerable individuals from *PD3I*. Immunization efforts make a significant contribution to increasing the Human Development Index related to one of its components, such as life expectancy, because it can avoid unwanted deaths, if not addressed immediately it will have an impact on increasing cases of Extraordinary Events and the spread of disease will accelerate. Especially during the the Covid-19 pandemic which caused restrictions on activities which certainly had an impact on participation in immunization visits at Posyandu.

Objective: To determine factors that influence the obedience of mothers bringing their toddlers to get basic immunization during the Covid-19 pandemic in Mekarjaya Village, Tangerang Regency.

Methodology: Using a cross sectional approach, a sample of 100 mothers who had toddlers. The research instrument was a questionnaire that had been tested valid and reliable, bivariate analysis had been done by the Chi Square test.

Results: there is a significant relationship between knowledge, attitudes, motivation, family support and the role of cadres with mothers' compliance to bring toddlers to get basic immunization during the co-19 pandemic in Mekarjaya Village.

Conclusion: Internal factors are the main factor for mother's compliance to bring their toddler to get immunization. It is hoped that mothers who have toddlers can increase their knowledge about the importance of immunization through various media and reliable sources.

Key words: compliance, basic immunization, knowledge, role of cadres.

Introduction

The Covid-19 Pandemic period is a very worrying time, especially for mothers who have toddlers. Meanwhile, immunization is very important for toddlers to prevent various dangerous diseases. During the Covid-19 Pandemic, health workers continued to socialize immunizations to parents, even though the results were in 2018 2019 immunization participants decreased sharply⁽¹⁾. One of the things to highlight during the Covid-19 pandemic, this is a threat to children's health problems. This is because many *Posyandu* and Health Centre have closed immunization services for toddlers. Another fact illustrates that during the Covid-19 Pandemic, the majority of parents were worried about bringing their children to health facilities to get immunizations. This means that in the midst of the current Covid-19 pandemic, the coverage of basic immunization for toddlers will be even smaller².

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World Health Organization (WHO) in 2017, an estimated 19.9 million babies worldwide were not reached by routine immunization services such as 3 doses of DTP vaccine. About 60% of these children live in 10 countries including Indonesia³. Meanwhile in Indonesia, according to the 2018 Basic Health Research Data, it shows that 32.9% of infants in Indonesia did not receive complete basic immunization and 9.2% of infants did not carry out immunizations, an increase from 2013 was 32.1%⁴. Based on data in Banten Province in 2019, the percentage of babies who received complete basic immunization was only 90%, this number is still below the target of 100%⁵. As for Tangerang Regency in 2018 the total coverage of basic immunization in infants was around 93.4%. Based on data from the Sepatan Health Center, Tangerang Regency, it has not yet reached the target, which will be 53.7% in 2020 and will increase to 65.8% in 2021. Mekarjaya Village Posyandu has coverage that is still below the target of 100%⁶.

Immunization is important in health services to protect vulnerable individuals from PD3I or diseases that can be prevented by immunization⁷. In immunization there is the concept of Herd Immunity or Group Immunity. This group immunity can only be formed if the immunization coverage on the target is high and evenly distributed throughout the region. The immunity of most of these targets will indirectly help provide protection for other age groups, so that if there is one or a number of cases of diseases that can be prevented by immunization in the community, the disease will not spread quickly and extraordinary events (*KLB*) can occur. prevented. This concept is proof that immunization programs are very effective as well as efficient because only by targeting vulnerable groups can the whole community be protected⁸.

According to the Rules of Ministry of Health, toddlers are required to receive mandatory immunization which is immunization that is required by the government for a person according to their needs in order to protect the person concerned and the surrounding community from certain infectious diseases which are given according to the schedule as stipulated in the guidelines for administering immunization. Compulsory immunization consists of routine immunizations that are required by the government to be given to toddlers. Routine immunization is an immunization activity that is carried out continuously according to a schedule consisting of basic immunization and advanced immunization. Basic immunization is given to babies before they are 1 (one) year old. Basic immunization types consist of Bacillus Calmette Guerin (BCG), Diphtheria Pertussis Tetanus Hepatitis B (DPT-HB) or Diphtheria Pertussis Tetanus-Hepatitis B-Hemophilus Influenza type B (DPT-HB-Hib), Hepatitis B in newborns; Polio and Measles⁸.

According to the results of Novianda's research (2020) it shows that there are relationship between attitudes, beliefs, family support, access and information with mother's behavior in fulfilling basic immunization during the Covid-19 pandemic⁹. During the Covid-19, immunizations must still be pursued in full according to schedule to protect children from PD3I. Immunization services are carried out according to the principles of infection prevention and control and maintaining a safe distance of 1-2 meters. The health office must coordinate and advocate for the local regional government in providing immunization services during the Covid-19 pandemic. In addition, health workers are expected to be able to monitor the immunization status of each target in their working area⁷.

The Tangerang Regency area, especially the Sepatan District, was once a red zone because there were positive cases of Covid which have now been declared cured. However, it is undeniable that this raises concerns for parents to bring their children to *Posyandu* or to health services to get immunized. The Sepatan Health Center has a health development program that is directed at increasing promotive and preventive efforts in addition to quality curative and rehabilitative activities proportionally. One related to preventive efforts is the implementation of immunization programs. Immunization efforts make a significant contribution to increasing the Human Development Index related to one of its components, namely life expectancy, because it can avoid unwanted deaths.

The results of a preliminary study conducted by researchers on 10 mothers who brought their toddlers to *Posyandu*, found that there were 5 (50%) mothers who did not know the importance of basic immunization and brought their toddlers to the *Posyandu*, and there were 5 (50%) mothers who already knew the importance basic immunization and bringing their toddler to the *posyandu*, this is due to their lack of knowledge and also their attitude that does not care about their child's health. And other causes of which are because parents are busy working, lack of time.

Method

This research is a quantitative research, the research design uses a cross sectional approach, namely to see the relationship between the independent variables and the dependent variable. This research was conducted in April 2021 in Mekarjaya Village, with a total sample of 100 mothers with toddlers aged 2-5 years. Purposive sampling technique had been used, data were collected by a questionnaire that had previously been tested valid and reliable. Bivariate analysis used the chi square test with the SPSS 24 tool.

Results

Table 1

Frequency Distribution of Varibales

Variables	Category	Frequency (f)	Percentage (%)
Compliance	ObeY	58	58
	Not obey	42	42
Knowledge	High	62	62
	Low	38	38
Attitude	Positive	63	63
	Negative	37	37
Motivation	High	54	54
	Low	46	46
Family support	Supported	58	58
	Not Supported	42	42
The role of cadres	Yes	61	61
	No	39	39

Based on table 1 above, it can be seen that out of 100 mothers who had toddlers, 58% were found to be obedient in bringing their toddlers to Posyandu Desa Mekarjaya to get basic immunization, 62% had good knowledge about immunization, 63% had a positive attitude, 54% were motivated, 58% got family support and 61% due to the role of cadres.

Table 2

The relationship of knowledge, attitude, motivation, family support, cadre's role, compliance

Variables	Category	Compliance				Total		P-Value
		Not Obey		Obey		n	%	
		n	%	n	%			
Knowledge	High	10	26.3	28	73.7	38	100	0.013
	Low	32	51.6	30	48.4	62	100	
Attitude	Negative	10	27	27	73	37	100	0.020
	Positive	32	50.8	31	49.2	63	100	
Motivation	High	14	30.4	32	69.6	46	100	0.031
	Low	28	51.9	26	48.1	54	100	
Family support	Not Supported	34	81	8	19	42	100	0.000
	Supported	8	13.8	50	86.2	58	100	
The role of cadres	No	11	28.2	28	71.8	39	100	0.025
	Yes	31	89.8	30	49.2	61	100	

Discussion

1. The Relationship between knowledge and compliance of Mothers Bringing Toddlers to Get Basic Immunization during the Covid-19 Pandemic

In this study, it was found that there was a significant relationship between knowledge and compliance of mothers in bringing their toddlers to get basic immunization at the Posyandu in Mekarjaya Village. The results of this study are in line with research conducted by Nugrawati (2019) that there is a relationship between knowledge and immunization ¹⁰.

According to L. Green in Notoatmodjo (2017) knowledge is one of the indicators of someone taking action. If someone is based on good knowledge of the respondent's awareness to bring their baby for immunization. Mothers who are willing to bring their baby's immunizations because they understand correctly and deeply about basic immunizations. In addition, due to paying attention to the immunization schedule. Knowledge is the result of knowing and this occurs after people sense a certain object. Sensing occurs through the human senses, namely the senses of sight, hearing, smell, taste and touch. Most of human knowledge is obtained through the eyes and ears ¹¹.

It can be said that mothers who have good knowledge about the benefits of basic immunization for their toddlers, will try to bring their babies to health service facilities to get immunized, so that toddlers will get complete immunizations and according to the schedule given by health workers. Posyandu Desa Mekarjaya is one of the posyandu that is still providing services during the Covid 19 pandemic. Services are provided according to restrictions set by the government and strict health protocol provisions. This should be able to give mothers a sense of comfort and security because they are not easily exposed to Covid in that place. Mothers who have good knowledge will think positively and want to bring their babies to the posyandu.

2. The Relationship between Attitude and Mother's Compliance in Bringing Toddlers to Get Basic Immunization During the Covid-19 Pandemic

The results of this study indicate that there is a significant relationship between attitudes towards the obedience of mothers in bringing their toddlers to the Posyandu in Mekarjaya Village to get basic immunization during the Covid-19 pandemic. This research further strengthens Nugrawati's research (2019) that there is a significant relationship between attitude and complete immunization¹⁰.

According to the theory put forward by Notoatmodjo (2017), attitude is a mental and nervous state of readiness, which is regulated through experience that exerts a dynamic or directed influence on individual responses to all objects and situations related to them. Attitudes as a sedentary organization of motivational, emotional, perceptual and cognitive processes concerning some aspects of the individual's world. A person's attitude towards an object is a feeling of support or partiality or a feeling of not supporting or not taking sides with an object¹¹.

Attitude is an aspect that will respond to knowledge, which can be assumed that the better the mother's knowledge about the importance of immunization, the higher her positive attitude towards immunization. In this study it was very clear that most people were afraid to leave the house but some of the mothers in Mekarjaya Village who had toddlers wanted to come to the posyandu to bring their toddlers to get basic immunizations. This compliance is formed because of good knowledge and a positive attitude so that it has an impact on good behavior.

3. The Relationship between Motivation and Mother's Compliance in Bringing Toddlers to Get Basic Immunization during Covid-19 Pandemic

This study has shown that there is a significant relationship between motivation and compliance of mothers in bringing their toddlers to receive basic immunization at the Posyandu in Mekarjaya Village. These results are in line with Triana's research (2016) which showed a significant relationship between motivation and complete basic immunization ⁽¹²⁾.

According to the theory put forward by Robbins (2018), motivation is a process that produces an individual intensity, direction and persistence in an effort to achieve a goal ⁽¹³⁾. According to Notoatmodjo's theory (2017) motivation is an encouragement from within a person that causes that person to carry out certain activities in order to achieve a goal ⁽¹¹⁾.

Motivation is one of the internal factors of a person who is strongly influenced by knowledge related to something. In this study it was found that mothers who had good knowledge, had a positive attitude also had high motivation to bring their toddlers to Posyandu in Mekarjaya Village so they could get basic immunizations. During the posyandu activities, researchers saw that mothers were full of joy and were happy with giving immunizations because they knew that the actions given would be able to protect them from dangerous diseases that are often experienced by toddlers.

4. The Relationship between Family Support and Mother's Compliance in Bringing Toddlers to Get Basic Immunization during Covid-19 Pandemic

In this study, it was found that there was a significant relationship between family support and the obedience of mothers in bringing their toddlers to get basic immunization during the Covid-19 pandemic at the Posyandu in Mekarjaya Village. In line with Santoso's research (2021) that there is a relationship between family support and complete basic immunization ⁽¹⁴⁾.

According to the theory put forward by Hidayat (2017), family support is a form of interaction in which there is a relationship of mutual giving and receiving of real assistance carried out by the family (husband, wife, siblings, in-laws, parents) to the mother⁽¹⁵⁾. Family is an important part in the life of every individual because it is a unit in a family. In terms of providing basic immunization, the mother will have a higher motivation if she gets family support to bring her toddler to the posyandu to get basic immunization. Family support can be in the form of moral or material support or information. Conversely, if the family does not support it will have an impact on the motivation and obedience of the mother. Researchers also encountered this when conducting research, in which mothers and toddlers seemed happy and enthusiastic about participating in a series of posyandu activities because they were accompanied by their husbands.

5. The Relationship between Cadres' Role and Mother's Compliance in Bringing Toddlers to Get Basic Immunizations during the Covid-19 Pandemic

The results of this study indicate that there is a significant relationship between the role of cadres and the obedience of mothers in bringing their toddlers to the posyandu in Mekarjaya Village to get basic immunizations during the Covid-19 pandemic. According to the theory put forward by Wulandari (2016) the role of a cadre is very important compared to ordinary people in general⁽¹⁶⁾.

A cadre is a volunteer from the local community who is considered to have sufficient influence on the local community and is considered capable of providing health services. However, the existence of health cadres is relatively unstable because there is no guarantee that cadres will be able to carry out their functions properly. If there are family interests, cadres will usually prioritize their personal interests or prefer to leave their duties. According to the Indonesian Ministry of Health (2018) a posyandu cadre is a person who because of his skills or abilities is appointed, selected and or appointed to lead the development of a Posyandu in a place or village⁽¹⁷⁾.

When participating in posyandu activities in Mekarjaya Village, the researchers noticed that the cadres were very close and familiar with mothers who brought their toddlers to just weigh and who received immunization. It was also seen that the cadres explained about the re-immunization schedule or just paid attention to remind the mother that her toddler's immunization had not been fulfilled according to age. This shows that the

community, especially mothers who have toddlers, have good trust in cadres so they tend to comply with what the cadres say.

Research Limitation

Limitations in this study include: a). The number of samples is not too large so it cannot be generalized, b). This is a quantitative study that only presents the results of statistical analysis but does not explore in depth other factors that increase mother's adherence to immunizing their toddlers.

Conclusion

The results of this study indicate that mothers who have high adherence to bring their toddlers to get basic immunization are those who have good knowledge, have a positive attitude, have high motivation, get husband's support and cadre participation. This research also shows that there is a significant relationship between knowledge, attitudes, motivation, family support and the role of cadres with the obedience of mothers in bringing their toddlers to Posyandu in Mekarjaya Village to get basic immunizations during the Covid-19 pandemic. It is hoped that mothers who have toddlers will continue to seek information on the importance of immunizing their children, so that they are motivated to continue to give their best.

Ethical Clearance

Prior to this research being conducted, prior approval was obtained from the Faculty of Health Sciences at the Nasional University and the approval of prospective respondents prior to data collection.

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