

# Promotive Activities through Counseling on Immunization as an Effort to Manage Stunting

Nia Reviani<sup>1,2\*</sup>, Yunita R.M.B Sitompul<sup>3</sup>, Andriyani Risma Sanggul<sup>4</sup>, Romauli Lumbantobing<sup>5</sup>, Christine Handayani Tampubolon<sup>6</sup>
<sup>1,3,4,5,6</sup>Faculty of Medicine, Universitas Kristen Indonesia, Jakarta
<sup>2</sup>Ministry for Human Development and Culture Indonesia

Corresponding Author: Nia Reviani reviani\_nia@yahoo.com

# ARTICLEINFO

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## ABSTRACT

**Immunization** effort is to actively an create/increase a person's immunity against a disease so that if one day they are exposed to the disease they will not become sick or will only experience mild illness. By providing timely immunization, the community can remain protected and VPD outbreaks can be prevented. Diseases that can be prevented by immunization currently still threaten the world because they can cause death and disability. Based on this, it is very necessary to take preventive and promotive actions related to the importance immunization. The method used in this activity through socialization and discussions involving expert speakers in their fields with participants consisting of 67 mothers of toddlers. Participants came from three villages in Jatigede sub-district, Sumedang.

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# **INTRODUCTION**

The current direction of health development focuses on promotive and preventive efforts without neglecting curative and rehabilitative aspects. One preventive measure is the implementation of an immunization program. Immunization is an effort to actively create or increase a person's immunity against a disease so that if one day they are exposed to a disease, that person will not get sick or will only experience mild illness. In realizing the level of health of mothers and children in Indonesia, providing immunization is a public health effort that has been proven to be the most cost-effective. Immunization not only protects a person but also society by providing community protection or what is called herd immunity (Mangindara, et al 2022; Hanum F.N., et al 2022). Providing immunizations can prevent and reduce the incidence of morbidity, disability, and death due to diseases that can be prevented by immunization (VPD), which is estimated at 2 to 3 million deaths each year. Several infectious diseases are included in VPD, including Hepatitis B, TB, diphtheria, pertussis, tetanus, polio, measles, rubella, meningitis, and pneumonia.

Based on Health Law Number 36 of 2009, every child has the right to receive basic immunization by the provisions. The government is obliged to provide complete immunization to every baby and child. Provisions regarding the implementation of immunizations are contained in Minister of Health Regulation Number 12 of 2017. Next, we will discuss the immunization programs carried out by the government, including Basic Immunization for Babies. In Indonesia, every baby aged 0-11 months is required to receive complete basic immunization, consisting of 1 dose of Hepatitis B, 1 dose of BCG, 3 doses of DPT-HB-HiB, 4 doses of polio drops or Oral Polio Vaccine (OPV), 1 dose injectable polio or Inactivated Polio Vaccine (IPV) and 1 dose of Measles-Rubella. Determining the type of immunization and administration schedule is based on expert studies and epidemiological analysis of the diseases that arise. For several selected areas according to epidemiological studies, disease burden analysis, and expert recommendations, there are additional specific immunizations, namely Pneumococcal Conjugate Vaccine (PCV) and Japanese Encephalitis. The implementation of immunization has not yet been implemented nationally, so it is not counted as a component of complete basic immunization for babies (Usman A, 2021; Rifawan A, et al 2023).

According to Minister of Health Regulation Number 25 of 2014 concerning Health Services for Infants, Toddlers and Preschool Children, health services are provided to infants, toddlers and preschool children exclusively during the breastfeeding period up to 6 months, during the breastfeeding period up to 2 months. age. age (two) years, complementary foods for breast milk (MP ASI) starting at the age of 6 (six) months, complete primary vaccination for babies, DPT/HB/Hib follow-up vaccination for children starting at 18 months, and measles vaccination for children starting at 24 months. many years. months, giving vitamin A, parental efforts, monitoring growth and development, monitoring growth and development disorders, integrated care for sick babies (IMCI) and referral of cases that cannot be handled stably and on time. more competent health services (Ministry of Health of the Republic of Indonesia, 2023).

Based on information obtained from the Ministry of Health of the Republic of Indonesia through the Directorate General of P2P in the 2022 Indonesian Health Profile book, information was obtained that complete basic immunization coverage nationally will increase in 2022 to reach 99.6%. This figure has met the 2022 Strategic Plan target, namely 90%. Compared to 2021, the provinces that can achieve the strategic plan target have increased from 6 provinces to 15 provinces.



Source: Directorate General of P2P, Indonesian Ministry of Health, 2023 Figure 1. Complete Basic Immunization Coverage for Babies in Indonesia 2013-2022

Diseases that can be prevented by immunization currently still threaten the world because they can cause death and disability. Immunization is an effort to actively create/increase a person's immunity against a disease so that if one day they are exposed to the disease they will not become sick or will only experience mild illness (Minister of Health Regulation Number 12 of 2017 concerning Implementation of Immunization, 2017). By providing timely immunization, the community can remain protected and VPD outbreaks can be prevented. To get lifelong protection, a person needs to receive immunization according to the dose and schedule continuously and continuously. Apart from routine immunization, namely infant immunization, immunization for children under two years old (baduta), immunization for school-aged children, and adult immunization, there are also catch-up immunizations, additional immunizations, and special immunizations. Catch-up immunization is given to babies, toddlers, and school-age children who have not received the vaccine dose according to the age specified in the routine immunization schedule (Anggraini I.A, et al, 2019; Nurkhikmah, et al, 2021). Additional immunization is a certain type of immunization given to certain age groups who are most at risk of disease according to epidemiological studies in certain periods, meanwhile, special immunization is carried out to protect individuals and the community against certain diseases in certain situations.

The government through the Ministry of Health has made various efforts to prevent and control VPD. Efforts made include a) Increasing complete immunization coverage because immunization is specific prevention of VPD; b) Providing technical guidance and supervision of surveillance and immunization programs; c) Carrying out capacity building for PD3I surveillance officers to improve the performance of AFP and Measles-Rubella surveillance as well as Diphtheria control; d) Prepare, provide and distribute technical instructions for PD3I surveillance; e) Providing and distributing communication, information, and education (KIE) media for PD3I surveillance; f) Conduct socialization about VPD to cross-programs and related sectors as well as professional organizations (IDI, IDAI, IBI, PPNI, PAEI, etc.); g) Carrying out regular meetings with the National PD3I Expert Committee, to obtain recommendations to achieve the target of polio eradication, elimination of measles-rubella/CRS as well as diphtheria control and outbreak prevention strategies; h) Carrying out Diphtheria, Measles-Rubella/CRS, and Polio laboratory network meetings; i) Carrying out assistance in epidemiological investigations of potential outbreaks of disease including PD3I in areas.

Various diseases that can be prevented from spreading through immunization include 1) Tetanus Neonatorum, 2) Measles, 3) Diphtheria, and 4) Polio. This disease is still very threatening globally, including in Indonesia. In 2022, of the 21,175 suspected measles cases that occurred in all provinces in Indonesia, there were 79 suspected measles outbreaks in 18 provinces with a total of 1,101 cases. The incidence of suspected measles outbreaks in 2022 has experienced a significant increase when compared to the incidence of suspected measles outbreaks in 2021 which was 8 times in 6 provinces with a total of 75 cases. Of the 34 provinces, 5 provinces experienced outbreaks of suspected measles in 2021 and 2022, namely DI Yogyakarta, East Java, South Sulawesi, North Maluku, and Papua. Based on the description above, the UKI Faculty of Medicine's Community Service Team (PkM) has a calling to help the government and the community in the form of promotive actions through education about immunization accompanied by anthropometric measurements of babies in several villages in Jatigede District, Sumedang, West Java.

## IMPLEMENTATION AND METHODS

The method used in this community service is by providing promotions health regarding basic immunization for 67 mothers with toddlers from three villages in Jatigede District, namely: Ciranggem Village, Cisampih Village and Cijeunjing Village in December 2023. The target population for this community service is mothers who have children under 3 years old. Participants who participate in community service are invited through the assistance of village health cadres who also work as village midwives. Participants who attended came voluntarily and were willing to take part in basic immunization health promotion.

The health promotion process was carried out in six (6) sessions, starting with the opening session where the event was opened by the Head of the Sumedang District Health Service. After the opening remarks, the PkM Team started the third session with an introduction and then explained in detail the aims, benefits, and process of health promotion to mothers. The team leader then asked for willingness to participate in the immunization health promotion program and its evaluation. In the fourth session, the team gave a knowledge and attitude review sheet about basic immunization to all mothers and gave them 15 minutes to fill it out. After the study sheets were collected, material about immunization was presented in the fifth session. The health promotion material provided was adopted from information material about immunization from the Health Service (West Java Provincial Health Service, 2014) which includes:

- 1. diseases that can be prevented by immunization are diphtheria, pertussis, tetanus, tuberculosis (tb), measles, polio, and hepatitis b.
- 2. types of vaccines
- 3. schedule for immunizations for babies

After all the material has been given, the knowledge and attitude assessment sheet towards immunization is given again. In the sixth session, the cadre again took over the event and gave closing remarks at the end of the entire health promotion session.

## RESULTS AND DISCUSSION

The implementation of outreach activities on Immunization in Jatigede District, Sumedang, West Java received a very positive response from both the local government and residents. The enthusiasm of the residents, especially mothers with toddlers, was clearly visible during the outreach, they admitted that they received a lot of important information regarding immunization. Likewise, support from the regional government, specifically the Sumedang District Health Service, supports the presence of the UKI FK PkM team in carrying out community empowerment activities as an implementation of the collaboration that has been established between UKI and the Sumedang District Government, where Sumedang District is an area supported by the UKI Medical Faculty specifically in preventing and handling stunting, in accordance with the scientific vision of FK UKI (documentary evidence as in Figure 2 below.

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Figure 2. Documentation of Immunization Education Activities

The following is a description of the results of the outreach on immunization to 67 mothers with toddlers from three villages in Jatigede District, Sumedang:

a. Results of Evaluation of Preparation Stage Achievement

Table 1. Achievements of the Preparation Stage

No	Type of Activity	Achievement		
		Implemented	Not Implemented	
1	Conduct a survey of the condition of the location where activities are carried out	100%	-	
2	Manage permits and bureaucracy	100%	-	
3	Strengthen preparations, including outreach materials	100%	-	

From the data information in table 1, it can be concluded that the preparation stages were carried out well so that this became one of the supporting factors for carrying out follow-up activities. This preparation stage was carried out well, of course thanks to the support of all parties, including the regional government of Sumedang Regency, which provided easy access for the team to organize the preparation of activities.

# b. Evaluation of Increased Knowledge Post Counseling

Evaluation of the increase in participants' knowledge after the counseling was carried out by distributing pre and post-questionnaires. The results of the processed data are presented in Table 2 below:

Table 2. Description of mother's knowledge before and after immunization Counseling

No	Question	Mean Answer Score (Pre test)	Mean Answer Score (Post test)	Sig
1	What complete basic immunization programs for children do you know about?	75, 00	100,00	0.00
2	What diseases can be prevented by giving BCG immunization to children?	52,87	98,35	0.00

3	How many times should BCG immunization be given to children?	57,56	100,00	0.00
4	When is the right time to give BCG immunization to children?	84.56	97,35	0.00
5	What diseases can be prevented by giving Hepatitis B immunization to children?	78,50	90,00	0.00
6	How many times should Hepatitis B immunization be given to children?	20,00	95,60	0.00
7	When is the right time to give Hepatitis B immunization to children?	45,87	93,50	0.00
8	What diseases can be prevented by giving DPT immunization to children?	48,33	97,37	0.00
9	How many times should Combo DPT-HB immunization be given to children?	56.50	98,00	0.00
10	Combo DPT-HB immunization is given at what age is the child?	78,80	89,00	0.00
11	What diseases can be prevented by giving Polio immunization to children?	76.80	90,58	0.00
12	How many times should Polio immunization be given to children?	36,00	97,50	0.00
13	When is the right time to give Polio immunization to children?	50,55	96,78	0.00
14	What diseases can be prevented by immunizing children against measles?	64,50	95,40	0.00
15	How many times should measles immunization be given to children?	63,33	96,67	0.00
16	Measles immunization is given at what age is the child?	53,45	94.60	0.00
17		85.00	97.80	0.00
18	Who gets basic immunization?	80,00	96,75	0.00
Average		56,14	95,80	0.00

Table 2 shows that the average level of maternal knowledge before health promotion about immunization was 56.14%, which was included in the poor knowledge category. Mother's knowledge after health promotion about basic immunization has an average result of 95.80%. This means that the answer falls into the good knowledge category. In table 2 it can also be seen that maternal knowledge about basic immunization before and after health promotion is

significantly different from the p value in maternal knowledge about basic immunization for toddlers between before and after health promotion.

Mother's knowledge plays a very important role in providing immunizations to children, therefore health promotion regarding basic immunizations in children is needed. The immunization program aims to reduce morbidity and mortality rates from diseases that can be prevented by immunization, including diphtheria, tetanus, whooping cough (pertussis), measles, polio, and tuberculosis. Low levels of maternal knowledge can be prevented by providing education about basic immunization. The education must cover all matters related to immunization, especially regarding the administration schedule (Ladyani, 2021; Simanjuntak, et al, 2019) stated that providing health education about immunization is effective in increasing mothers' knowledge about immunization. The aspect of knowledge of mothers in Sukajaya village regarding basic immunization that was found to be the lowest before health promotion was regarding "Frequency of Hepatitis B immunization" which was in the low category (20.00). Mothers' knowledge about the frequency of hepatitis B immunization then changed and increased to (95.60) very good after providing health promotion.

## CONCLUSIONS AND RECOMMENDATIONS

Community service activities through health-promotive activities regarding basic immunization for mothers with toddlers have shown to be significantly effective in increasing mothers' knowledge and attitudes towards basic immunization as seen from the increase in the average pre-test score, namely 56.14 to 95.80 (average Post Test). Health promotion is the essence of the role of nurses which actually provides a positive impact in efforts to increase community participation in improving the health status of children, especially the community and the nation.

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