

The Relationship of Maternal Knowledge and Attitudes with Basic Immunization in Babies Aged 12 Months in The Clinic

Sri Ilawati ¹

¹ Sekolah Tinggi Ilmu Kesehatan Sehat Medan Prodi DIII kebidanan

Email corespondensi : sriilawati468@gmail.com

Track Record Article

Diterima : 31 May 2022
Dipublikasi: 20 July 2022

Abstrak

Immunization is one of the effective methods of increasing immunity for babies. The average immunization rate in Indonesia is only 72%, which is one indicator of low immunization in Indonesia. This is a shocking tragedy and should not have happened. This type of research is analytical research. This research uses a cross-sectional approach. The population and sample in this study were all mothers who had a 12-month-old baby in the Juliana Dalimunthe Tembung Clinic Area, Deli Serdang District, which amounted to 50 people. The data analysis used is bivariate. The results of the study, based on the age of the majority of respondents aged 20-30 years, as many as 29 people (58%), the majority of respondents having high school/vocational education as many as 26 people (26%), the majority of respondents being housewives as many as 24 people (48 %). Relationship between knowledge and basic immunization in infants aged 0-12 months. It can be concluded that there is a relationship between a mother's knowledge and basic immunization for infants aged 0-12 months. Based on the results of the Chi-Square test of significance (α) = 0.05, a p-value of 0.000 (<0.05) was obtained, then Ho was rejected, and Ha was accepted. It can be concluded that there is a relationship between the mother's attitude and basic immunization for infants aged 0-12 months. It is hoped that all mothers will increase their knowledge and attitudes about immunization, and it is expected that mothers who have babies immunize their babies in a health facility for the protection of their baby.

Keywords: Attitude, Immunization, Infant, Knowledge, Maternal

1. Pendahuluan

The immunization program is part of basic health services. This program is also part of an effort to accelerate the termination of the transmission chain for immunization (diseases that can be prevented by immunization) to improve public health status. One of the immunization activities is carried out through the PIN (National Immunization Week) activity. Immunization is a health intervention that effectively reduces infant and toddler mortality. Immunization can prevent various diseases such as tuberculosis (tuberculosis), diphtheria, pertussis, tetanus, hepatitis B, poliomyelitis and measles (Riani & Machmud, 2018 Siregar, 2018; Sugiarto, 2019 ;Sabri, 2019). The importance of providing immunization can be seen in the number of toddlers who die from diseases that can be prevented by immunization. Therefore, to prevent toddlers from suffering from some dangerous diseases, immunization in infants and toddlers must be complete and given according to the schedule (Mulyani, 2018).

Immunization is one of the health interventions that has proven to be the most cost-effective because it can prevent and reduce pain, disability, and death from PD3I, estimated at 2 to 3 million deaths annually. The immunity obtained by a person through immunization is active so that if exposed to a certain disease, they will only experience mild pain and not get sick. Infectious diseases such as tuberculosis, diphtheria, Tetanus, Hepatitis B, Pertussis, Measles, Polio, inflammation of the brain lining, and pneumonia are some of the diseases included in the Disease That Can Be Prevented by Immunization (PD3I). Immunization will protect children against these dangerous diseases and can prevent disability and will not cause death (Dillyana, 2019).

The World Health Organization (WHO), issued in 2015, states that 27 million children under five and 40 million pregnant women worldwide still do not receive routine immunization services. As a result, these vaccine-preventable diseases are estimated to cause more than 2 million deaths yearly. This figure includes 1.4 million children under five whose lives were taken (Adamu, 2020). The average immunization rate in Indonesia is only 72%. This means that the numbers in some areas are very low. Around 2400 children in Indonesia die daily, including those who die from preventable causes, such as measles, diphtheria and tetanus. This is a shocking tragedy and should not have happened.

Immunization is a form of health intervention that effectively reduces under-five mortality. Seven infectious diseases in toddlers can cause death or disability, although some toddlers can survive and become immune. The seven diseases are poliomyelitis (paralysis), measles, diphtheria, pertussis (whooping cough, hundred days cough), tetanus, tuberculosis, and hepatitis B. Therefore, immunizations for infants and toddlers must be complete and given according to schedule (Hidayah, 2018).

Knowledge can increase a mother's understanding of infant immunization. Mothers who know immunization tend to be able to understand well the benefits of immunization. Attitudes influence the advantages and disadvantages of giving immunizations because a good attitude can affect the provision of immunizations for babies. Mother is one of the most influential family members, so any changes in babies will affect the family (Astuti, 2020).

Attitude is a readiness to react to objects in a certain environment as an appreciation of the object. The mother's knowledge strongly influences a mother's attitude towards giving immunizations to infants. Mothers' attitudes about immunized

include the comfort of the mother when the child is immunized, the attitude of the mother about the effects of immunization, and the religious view (halal/haram) of immunization. Factors that influence the number of respondents who have negative attitudes about immunization are insufficient knowledge; the lower the mother's knowledge about immunization, the greater the contribution to forming a negative/unfavourable attitude about immunization. Someone who already knows the truth about something will also have a positive attitude towards it and immunization. The formation of this attitude is also inseparable from other people who are considered important, the mass media, emotional factors of the individual and the experience of immunization (Triana, 2016).

The problem of immunization remains; many mothers who do not come to the posyandu provide immunization to their children; in daily reality, many of us see, including social factors and other factors, namely distance constraints, lack of time due to busyness, preferring to take their children to the practice doctor because the time does not clash with the busyness of the mother or parents of the baby (Andryana, 2015). The completeness of immunization can be influenced by various factors, one of which is the role of health workers. This shows that health workers are at the forefront of implementing immunization programs in the community. A Health officer is any person who is devoted to the field of health and has knowledge and or expertise through education in the field of health, which for a certain type requires the authority to carry out health efforts (Putri, 2018).

Based on data in Deli Serdang Regency in 2021 the total coverage of BCG immunization is 6,765 (106.27%), DPT1 6,984 (109.71%), DPT3 6,345 (99.67%), POLIO3 6,594 (103.58%) and measles 6,296 (98 ,90%). Meanwhile, at the Juliana Dalimunthe Clinic, there were 328 children under five and many infants aged 10-12 months, namely 50 people with total immunization coverage from March to May 2011 BCG 302, Polio1 302, polio2 278, Polio3 289, polio 263 people, measles 235 people, DPT HB0 257 people, DPT1 282 people, DPT2 280 people, DPT3 278 people.

Parental knowledge and compliance are very important for achieving the fulfilment of complete basic immunization, especially for midwives who play an active role in providing immunization services (Astuti, 2020). In the results of the initial survey that the author conducted at the Juliana Dalimunthe Clinic, the author interviewed eight mothers who had babies; it turned out that one mother understood the importance of

immunization and the immunization schedule, and two mothers only knew about the importance of immunization but did not know the immunization schedule, and five more people do not know about the importance of immunization and the schedule for its administration. The provision of immunization to children follows the existing schedule by providing immunizations according to a predetermined schedule providing optimal antibody results so that they can protect children from exposure to disease. In Indonesia, the immunization schedule is issued by the Indonesian Ministry of Health, which requires parents to provide complete basic immunization (Hidayah, 2018). Based on the background above, the writer is interested in taking the title. "The Relationship of Mother's Knowledge and Attitude with Basic Immunization in Infants Age 0-12 Months at the Juliana Dalimunthe Clinic Tembung, Deli Serdang Regency in 2021".

Promotive and preventive efforts are carried out through routine, and additional immunization activities are given to infants and toddlers. The relevance of the immunization program is that with immunization, there will be a decrease in the mortality and pain of infants and children, and it will indirectly improve their health. Improving health and reducing disability due to disease will increase productivity. So immunization is a program that has priority or high relevance to general and basic human policies, improving health development and people's welfare (Santi, 2016).

2. Metode

This is an analytical study to determine the relationship between maternal knowledge and attitudes about basic immunization in infants aged 0-12 months to the completeness of basic immunization at the Juliana Dalimunthe Tembung Clinic, Deli Serdang Regency. This study uses a cross-sectional approach. The population and samples in this study were all mothers who had a 12-month-old baby in the Juliana Dalimunthe Tembung Clinic Area, Deli Serdang District, totalling 50 people. In this study, questionnaires were used as a data collection tool. The data used are primary. The data analysis used is Univariate, and bivariate analysis aims to explain or describe the characteristics of each research variable, which results in the frequency distribution of respondents based on age and source of information.

3. Results

Tabel 1. The Relationship of Knowledge and Attitudes with Basic Immunization in Infants Aged 0-12 Months

Knowledge	Immunization				Total	P Value	
	Completed		Not Completed				
	n	%	n	%	N		%
High knowledge	17	94,4	1	5,6	18	100	<0,001
Medium knowledge	18	72	7	28	25	100	
Low knowledge	1	14,3	6	85,7	7	100	

Attitude	Immunization				Total	P Value	
	Completed		Not Completed				
	n	%	n	%	N		%
Positif	35	83,3	7	16,7	42	100	<0,001
Negatif	1	12,5	7	87,5	8	100	

The results of this study showed that of the 42 respondents who had a positive attitude, the majority of basic immunizations given to their babies were completed by as many as 35 people (83.3%), and the incomplete minority was seven people (16.7%). Of the eight respondents with a negative attitude, most basic immunizations given to their babies were incomplete; as many as seven people (87.5%) and the complete minority was one person (12.5%). Based on the Chi-Square test of meaningfulness (α) = 0.05 obtained p-value <0.001, H_0 was rejected, and H_a was accepted. It can be concluded that there is a relationship between mothers' attitudes and Basic Immunization in Infants Aged 0-12 Months at the Juliana Dalimunthe Tembung Clinic, Deli Serdang Regency in 2021.

4. Discuss

This pandemic has hampered immunization services as an important form of basic routine health services. Millions of children in the world, both developed and developing countries, are at risk of PD3I, such as diphtheria, measles, polio and pneumonia, which were previously controlled by the presence of immunizations (Felicia, 2020; Chandir, 2020).

Table 5 shows a relationship between a mother's knowledge and basic immunization in infants aged 0-12 months at the Juliana Dalimunthe Tembung Clinic,

Deli Serdang Regency, in 2021. There is still much maternal knowledge about the completeness of basic immunization in babies, which is still low, namely knowledge about the frequency and time of providing complete basic immunization. This is because the provision of immunization schedules is routine as a weighing activity for toddlers at Posyandu, so mothers only play a passive role in complying with the schedule for providing measles immunizations because these weighing activities are accompanied by providing basic immunizations to babies so that many mothers do not know for sure when is the right time to provide measles immunization. This also causes mothers not to know how often measles immunization is given to their babies because information on the immunization schedule is only submitted without mentioning the type of immunization (Mulyani, 2018).

Knowledge results from knowing and occurs after people make senses (sight, hearing, touch, taste and smell) of a certain object. Cognitive knowledge is very important in shaping one's behaviour (Siregar, 2019). The study results indicate that most mothers' knowledge is sufficient for as many as 18 people. Knowledge of immunization includes knowing the meaning of immunization, diseases that can be prevented, benefits of immunization, immunization services, the timing of immunization, type of immunization and number of immunizations (Wulandari, 2018). It is hoped that sufficient knowledge can influence a mother's actions in providing complete immunization to her child. The results of this study are also in line with study Rahmi (2018), which states that a highly knowledgeable person will tend to have good behaviour in the health sector, in this case, immunizing their children. Study Hafid (2016) shows that educated parents will have a high income, be more exposed to the media and have good health knowledge. The results of this study are contrary to the theory and results of previous studies; statistically, the results of this study show no influence between the level of maternal education on the basic immunization status, complete with a p-value = 0.177.

The basic concept of education is a learning process which means a change towards a more mature, better and more mature individual, family and community. Education is very important in influencing knowledge. Individuals who have a high level of education tend to be more receptive to information as well as the problem of information about immunizations provided by health workers; on the other hand, mothers with low levels of education will have difficulty receiving the information so that they do not understand the completeness of immunization (Triana, 2016). A

person's further education will also affect a person in decision making; mothers with higher education are easier to accept a new idea than mothers with low education, so that information is more easily accepted and implemented (Siregar, 2020). The issue of understanding, understanding and compliance of the mother in her baby's immunization program will not be a big obstacle if adequate education and knowledge about it are provided (Hartati., 2019).

Knowledge about immunization is very important for mothers, especially mothers who have just given birth to their babies (Yuda, 2017). Immunization is giving vaccines to infants so that toddlers' body immunizations can increase and become immune to disease (Yundri, 2018). Because at the time they are born, the immunizations in the baby's body are still very weak and very susceptible to various diseases, many of which can even lead to infant death. A mother's education is one factor that affects the completeness of basic immunization. The higher the education of a mother, the better the mother's knowledge about immunization . This study shows that the mother's education does not affect the infant's basic immunization completeness. According to the researcher's assumption, good knowledge is needed by a mother about giving immunizations to her baby: the better a mother's knowledge, the greater the mother's desire to complete basic immunization.

Table 6 shows a relationship between a mother's attitude and basic immunization in infants aged 0-12 months at the Juliana Dalimunthe Tembung Clinic, Deli Serdang Regency, in 2021. This is under Nugrawati's 2019 research on the relationship between knowledge and a mother's attitude towards giving complete immunization and attitude with complete immunization ($p < 0.001$).

According to Sari, (2015), attitude is an evaluation or reaction of feelings. A person's attitude towards an object is a feeling of support or partiality and not supporting or taking sides with the object. A mother's attitude is related to infant immunization status. The mother's positive attitude towards immunization causes her to bring her baby to the service centre for complete immunizations .

According to Notoatmodjo (2017) theory, factors influencing behaviour or attitudes are the facilities and support of others. Inadequate facilities certainly make immunization services inadequate as well. Facilities also affect the reduced interest of mothers to immunize their children—support from others such as family, environment and peers (Rambe, 2016). Research findings show that parents and neighbours are very little help in providing immunization information.

The results of this study are also under research conducted by Triana (2016) showed a statistical analysis of the attitude variable obtained a p-value of 0.013 (p-value <0.05), meaning that there was a significant relationship between parents' attitudes and the provision of complete immunization. In infants in Kuranji District, Padang City, in 2015 with a PR value = 1.92 (95% CI: 1.16-3.19), meaning that parents who have a negative attitude about immunization are at risk of 1.92 times greater not giving complete immunization in their babies than mothers who have a positive attitude. The results of Sari (2015) study showed that maternal attitudes and family support were the factors that had the strongest influence on the status of complete basic immunizations in the Konang and Geger Health Centers, Bangkalan Regency.

According to the assumption of the researcher that the attitude toward providing complete immunization at the Juliana Dalimunthe Tembung Clinic, Deli Serdang Regency, the attitude of respondents in bringing toddlers to the Clinic for complete immunization, there are still some respondents whose attitudes are negative because respondents are busy with work, so they forget to bring their toddler immunizations so that sometimes baby immunizations are incomplete and regular.

5. Conclusion

Based on maternal characteristics regarding basic immunizations aged 0-12 months, the majority aged 20-30 years as many as 29 people (58%), and minorities aged < 20 years as many as five people (10%). Based on knowledge of basic immunizations aged 0-12 months, the majority of respondents were knowledgeable enough, as many as 25 people (50%), and the knowledgeable minority was less than 17 people (14%). Based on attitudes about basic immunization aged 0-12 months, The majority of respondents had a positive attitude of 42 people (80%), and a minority of negative attitudes of as many as eight people (16%). There is a relationship between basic immunization aged 0-12 months At the Juliana Dalimunthe Tembung clinic, Deli Serdang Regency in 2021.

It is expected of all mothers who have babies to provide basic immunizations to their babies. It is hoped that all mothers will increase their knowledge of basic immunization challenges in babies.

Reference

- Adamu. (2020). COVID-19 and routine childhood immunization in Africa: Leveraging systems thinking and implementation science to improve immunization system performance. *Int J Infect Dis*, 98(1), 161-165.
- Andryana. (2015). Minat Ibu Mengunjungi Posyandu di Wilayah Kerja Puskesmas Simpang Baru Kecamatan Tampan. *Jom Fisip*, 2(2), 1-15.
- Astuti, E. D. (2020). Hubungan Pengetahuan Ibu Mengenai Imunisasi Dasar Dengan Kepatuhan Imunisasi Bayi Usia 12 Bulan. *Bunda Edu-Midwifery Journal (BEMJ)*, 3(2), 10-15.
- Chandir. (2020). Impact of COVID-19 lockdown on routine immunisation in Karachi, Pakistan. *Lancet Glob Health*, 8(1), 1118-1120.
- Dillyana, T. A. (2019). Hubungan Pengetahuan, Sikap dan Persepsi Ibu dengan Status Imunisasi Dasar di Wonokusumo. *Jurnal Promkes*, 7(1), 68-78. <https://doi.org/doi: 10.20473/jpk.V7.I1.2019.68-78>
- Felicia, F. V. (2020). Pelayanan Imunisasi Dasar pada Bayi di Bawah Usia 12 Bulan dan Faktor yang Memengaruhi di RSUD Wangaya Kota Denpasar Selama Masa Pandemi COVID-19. *Sari Pediatri*, 22(3), 139-145.
- Hafid, W. (2016). Faktor Determinan Status Imunisasi Dasar Lengkap pada Bayi di Puskesmas Konang dan Geger. *Jurnal Wiyata*, 3(1), 38-46.
- Hartati., I. (2019). Faktor-Faktor Yang Mempengaruhi Status Imunisasi Dasar Lengkap Pada Bayi Usia 0-12 Bulan Di Desa Suka Mulia Kecamatan Rantau Kabupaten Aceh Tamiang. *JP2K*, 2(1), 41-53.
- Hidayah, N. (2018). Faktor yang berhubungan dengan Pemberian Imunisasi Dasar Lengkap pada Bayi Tahun 2017. *Jurnal Endurance*, 3(1), 153-161. <https://doi.org/http://doi.org/10.22216/jen.v3i1.2820>
- Mulyani, S. (2018). Pengetahuan Ibu Tentang Kelengkapan Imunisasi Dasar Pada Bayi. *JAMBI MEDICAL JOURNAL "Jurnal Kedokteran Dan Kesehatan*, 6(1), 45 - 55. <https://doi.org/https://doi.org/10.22437/jmj.v6i1.4820>
- Notoatmodjo, S. (2017). *Promosi Kesehatan Teori dan Aplikasinya*. Rineka Cipta.
- Putri, D. K. (2018). Faktor Yang Mempengaruhi Perilaku Ibu Terhadap Kelengkapan Imunisasi Dasar Pada Bayi Di Wilaya Kerja Puskesmas Satria Kota Tebing Tinggi. *Jurnal Bidan Komunitas*, 1(2), 104-114.
- Rahmi, N. (2018). Faktor yang Mempengaruhi Kelengkapan Imunisasi Dasar pada Bayi di Wilayah Kerja Puskesmas Peukan Bada Kabupaten Aceh Besar. *Journal of Healthcare Technology and Medicine*, 4(2), 209-222.
- Rambe, H. M. (2016). *Hubungan Perilaku dan Dukungan Keluarga dengan Pemberian Imunisasi Campak di Wilayah Kerja Puskesmas Polonia Tahun 2016*. Universitas Sumatera Utara.
- Riani, R. E. S., & Machmud, P. B. (2018). Kasus Kontrol Hubungan Imunisasi BCG dengan kejadian TB Paru pada anak tahun 2015-2016. *Sari Pediatri*, 19(6), 321-327. <https://saripediatri.org/index.php/sari-pediatri/article/download/121/115>
- Sabri, R. (2019). Faktor yang Memengaruhi Tingginya Penyakit ISPA pada Balita di Puskesmas Deleng Pokhkisen Kabupaten Aceh Tenggara. *Contagion :Scientific Periodical of Public Health and Coastal Health*, 1(2), 69-82. <https://doi.org/10.30829/contagion.v1i2.6883>
- Santi, J. D. K. (2016). Analisis Faktor Penyebab Pencapaian Imunisasi Bayi yang Rendah. *Juni Dwi Kurnia Santi*, VII(3), 136-142.
- Sari. (2015). Komparasi Kelengkapan Imunisasi Dasar pada Bayi dengan Ibu yang

- Bekerja dan Tidak Bekerja. *Husada Nursing Journal*, 1(2), 1–10.
- Siregar, P. A. (2018). Analisis Faktor yang Berhubungan dengan Kejadian Tuberkulosis Paru Anak di RSUD Sibuhuan. *Jurnal Berkala Epidemiologi*, 6(3), 268–275.
- Siregar, P. A. (2019). Perilaku Ibu Nifas dalam Mengonsumsi Kapsul Vitamin A di Kecamatan Kota Pinang Kabupaten Labuhanbatu Selatan. *Jurnal Kesehatan*, 12(1), 115–127.
- Siregar, P. A. (2020). *Promosi Kesehatan Lanjutan dalam Teori dan Aplikasi* (Edisi Pert). PT. Kencana.
- Sugiarto. (2019). Faktor Risiko Kejadian Diare Pada Balita. *Jurnal Contagion*, 1(1), 47–57. <https://doi.org/10.30829/contagion.v1i01.4434>
- Triana, V. (2016). Faktor Yang Berhubungan Dengan Pemberian Imunisasi Dasar Lengkap Pada Bayi Tahun 2015. *Jurnal Kesehatan Masyarakat Andalas*, 10(2), 123–135. <https://doi.org/https://doi.org/10.24893/jkma.v10i2.196>
- Wulandari, D. (2018). Pengetahuan dan Persepsi Ibu yang Menolak Pemberian Imunisasi Dasar Balita. *Indonesian Journal On Medical Science*, 4(1), 1–10.
- Yuda, A. yan D. (2017). Hubungan Karakteristik, Pengetahuan, Sikap Dan Tindakan Ibu Terhadap Kepatuhan Imunisasi Di Wonokusumo, Surabaya. *Jurnal Berkala Epidemiologi*, 6(1), 1–10.
- Yundri. (2018). Faktor Yang Berhubungan Dengan Ketidaklengkapan Status Imunisasi Anak Di Puskesmas Kuala Tungkal II. *Jurnal Berkala Epidemiologi*, 5(3), 1–10.

