ISSN. 2338-7475
E-ISSN. 2620-7869
Hearty
Jurnal Kesehatan Masyarakat
Beriman, Tulus, Sepenuh Hati,Berbesar Hati, Jujur, Sehat dan Kuat
Vol. 13 No. 2, April 2025, Hal. 488-497

THE RELATIONSHIP BETWEEN MATERNAL BEHAVIOR AND THE COMPLETENESS OF BASIC INFANT IMMUNIZATION AT THE SINAR BARU BANGKA HEALTH CENTER 2024

Evi Afriany *, Siswanto, Deri Kusmadeni
Faculty of Health, Universitas Anak Bangsa
Jl. Pinus I No.693, Kacang Pedang, Kec. Gerunggang, Kota Pangkal Pinang, Kepulauan Bangka Belitung 33684, Indonesia
Email : *eviafiany@gmail.com*

Abstract

The results of the immunization program indicator achievement in 2023 are a big record for the Ministry of Health. Based on the results of immunization achievements in 2023, it has not met the expected target. This indicates that there is an underlying problem in maternal knowledge, attitudes, and actions related to immunization. This decrease in coverage can result in an increased risk of spreading diseases that can be prevented by immunization, so this study is very relevant. The purpose of this study is to determine the relationship between maternal behavior and the completeness of basic infant immunization at the Sinar Baru Health Center, Sungailiat District in 2024. This study uses a type of quantitative research with observational analysis using a cross sectional design. The results showed the relationship between mothers' knowledge about immunization and the completeness of basic childhood immunization with a value of p 0.001, the relationship between mothers' attitudes regarding immunization and the completeness of basic childhood immunization with a value of p 0.014, the relationship between mothers' actions regarding immunization and the completeness of basic childhood immunization with a value of p 0.004. The conclusion of the study is that there is a relationship between mothers' knowledge, attitudes and actions regarding immunization and the completeness of basic immunization of children.

Keywords: Attitude, Behavior, Immunization Completeness, Knowledge

Introduction

Children's health is an important aspect that needs to be considered both in the world and Indonesia. The main indicators of health according to the WHO include health status, risk factors, service coverage and health systems. These three indicators include things related to children's health, namely mortality and pain rates, risk factors for child nutrition problems, coverage of newborn and child services and immunizations, and efforts to improve children's health through the health system (1).

The results of the immunization program indicator achievement in 2023 are a big record for the Ministry of Health. Based on the results of immunization achievements in 2023 according to indicators, both infants and clowns have not reached the expected target (100%), including Complete Basic Immunization (IDL) 92.5%, Complete Baduta Immunization (IBL) 82.0% and new antigen immunization 67.9%. Likewise, the achievement of the BIAS (School Child Immunization Month) indicator of 87.3% (target 80%) and Tetanus Toxoid (T2+) status in WUS (Women of Childbearing Age) of 68.4% (target 80%) has not reached the expected target. In addition, the percentage of districts/cities that have achieved the routine immunization target has only reached 65.8% or only 338

Submitted: September-2024 Received: October-2024 Available Online: April-2025

out of 437 districts/cities targeted in 2023. In the last year of the RPJMN this time, namely 2024, the target for this indicator is 95% (488 districts/cities) (2)

Complete basic immunization plays a role in protecting children from the risk of KLB PD3I (Diseases Preventable by Immunization). Immunizations given to infants 0-11 months as complete basic immunizations are Hep-B, BCG, DPT-HB-Hib 1 – 3, Polio drops 1 – 4, IPV, PCV1-2, Measles-Rubella and JE. Before the pandemic occurred in 2020 during the COVID-19 Pandemic, coverage decreased to IDL 84.2% of the target of 93%, and 84.5 of the target of 93.6 in 2021 or only 3,638,949 of the target of 4,045,198 babies (3).

With support from WHO, UNICEF, The Global Fund, and other development partners, BIAN is a way to catch up on immunization by raising awareness among communities and local leaders on the importance of complete routine immunization. As a result, in 2022 the complete basic immunization coverage managed to reach 94.6%, even exceeding the coverage in 2019. In 2023, close collaboration between ministries, institutions, and sectors is the key to pursuing immunization for children who missed immunization in previous years. That way, we can achieve coverage of more than 95%, which is a limitation for herd immunity (4).

Based on research conducted by Baghdadi et al, parents' understanding of immunization is one of the factors that affect parents' behavior in immunization. Parents who better understand the importance of immunization for their children will try to complete their children's immunizations (5) Parents play an important role in supporting immunization activities because parents play a decision-making role for their children who are vulnerable to infectious diseases. In various literature, it has been found that mothers take a leading role in childcare and that mothers' knowledge influences mothers' decisions for their child's health problems, including immunizing their children. Sociodemographic factors, knowledge, and attitudes of mothers are related to the immunization status of their children (6)

The Bangka Belitung Islands Province continues to make efforts to protect children from diseases that can be prevented by immunization. In addition to health workers, the involvement of posyandu cadres, KPM, PKK, and other community members to socialize to increase public awareness of the importance of immunization for children. The positive response of the people of Bangka Belitung Islands Province shows good things. Based on the report of the district/city BIAN Team, the immunization coverage of Bangka Belitung Province is among the ten highest nationally.

On March 14, 2024, a suspected case of diphtheria was found in Kota Kapur Village, Mendobarat District, Bangka Regency, with a two-year-old boy patient. The patient showed symptoms of diphtheria and had incomplete immunization status because the parents refused to immunize their child. After experiencing various symptoms and being referred to Depati Hamzah Pangkalpinang Hospital, the patient died on March 16, 2024 due to shortness of breath. Epidemiological investigations showed no history of travel to diphtheria-endemic areas and close contacts of diphtheria negative. In response to Extraordinary Events (KLB), it is recommended to implement Outbreak Response Immunization (ORI) with a coverage target of at least 90%, the formation of an ORI team, complete the immunization status of DPT-HB-Hib, and the promotion of clean and healthy living behaviors (PHBS) in the community (7)

Table 1. Complete Basic Immunization Coverage for Bangka Belitung Islands Province in 2020-2023

No	Regency/City	2020	2021	2022	2023
1	Pangkal Pinang	96.4	90.7	100.4	89.4
2	Bangka	90.8	108.0	96.8	97.1
3	West Bangka	91.7	71.4	77.3	81.9
4	Central Bangka	80.6	62.1	67.3	71.9
5	South Bangka	100.5	67.4	89.1	68.1
6	Belitung	87.9	114.7	99.9	110.3
7	East Belitung	90.8	115.8	98.6	104.9
Province		91.4	87.1	89.6	86.8

(Source: Bangka Belitung Provincial Health Office, 2023)

Complete basic immunization coverage in Bangka Belitung Province in 2023 is 86.8%, where there is a decrease of 2.8% compared to the previous year. This figure shows the number of babies who need attention in terms of immunization. The delay in immunization in the future can pose a risk of extraordinary events (KLB) of diseases that can be prevented by immunization (PD3I). Delaying immunization can also reduce the effectiveness of immunization. Therefore, the Indonesia Pediatrician Association (IDAI) provides recommendations not to postpone child immunization (8)

Table 2. Complete Basic Immunization Coverage for Bangka Regency Health Centers in 2021-2023

No	Phc	2021	2022	2023
1	Sungailiat	85.5	81.1	103.7
2	Sinar Baru	104.1	100.5	91.2
3	Kenanga	85.4	89.4	89.3
4	Belinyu	95.5	104.1	81.6
5	Gunung Muda	91.5	88.5	100.5
6	Baturusa	88.5	101.8	101.3
7	Petaling	92.3	106.7	87.2
8	Penagan	81.4	93.5	82.8
9	Pemali	87.3	102.6	82.4
10	Bakam	100.0	100.9	89.0
11	Riau Silip	86.3	105.1	87.5
12	Large Pudding	100.3	84.2	91.0
Total		90.7	97.0	90.3

(Source: Bangka Year Regency Health Office, 2023)

Sinar Baru is one of the villages located in Sungai Liat sub-district, Bangka regency, Bangka Belitung Islands province. This village has an area of 11.78 km², with a population of 2,880 people (2020) and a density of 245 people/km². The Sinar Baru Health Center has 12 posyandu with an implementation schedule, each posyandu is carried out routinely once every 1 month. Based on data on the percentage decline in infant complete basic immunization coverage from 2021 to 2023. At the end of 2023, complete basic immunization coverage reached 91.2% with 197 babies, a significant decrease from 100.5% in 2022 with 215 babies, and 104.1% in 2021 with 226 babies, indicating that

there is a fundamental problem in maternal knowledge and attitudes regarding immunization. This decrease in coverage can result in an increased risk of spreading diseases that can be prevented by immunization, so this study is very relevant.

Immunization is not included in one of the assessments in the Minimum Service Standards (SPM), but immunization is one of the indicators of the 4th SPM, namely complete visits for toddlers aged 0-59 months with an annual target of 100%.

Table 3. Complete Coverage of Baby Visits at the Sinar Baru Health Center in 2023

No	Neighborhoods	Goal	Access	Percentage
1	Sinar Jaya	103	82	79,61
2	Mattress	63	54	85,71
3	Sinar Baru	50	55	110,00
Total		216	191	88,43

(Source: Profile of the Sinar Baru Health Center, 2023)

The Sinar Baru Health Center in Bangka Regency was chosen as the location for the study, although it is not a health center and district with the lowest complete basic immunization coverage for infants, based on several strategic and related considerations. First, there has been no similar research on complete basic immunization at the Sinar Baru Health Center. Second, Sinar Baru is a working area with three villages where the area is close to the district city, so the mother's educational background and the level of knowledge about immunization should be better. Data shows a decrease in the percentage of complete basic immunization coverage from 2021 to 2023 and the Sinar Baru Health Center as the only health center in Bangka Regency that has experienced a decline in the last three years, which indicates that there are problems that require intervention.

The results of the research at the Sinar Baru Health Center are expected to provide relevant results and can be applied in other areas with similar characteristics, so that the contribution of this research has a wider impact in efforts to increase the coverage of complete basic immunization of infants in various regions. Thus, the selection of the Sinar Baru Health Center as the research location is a strategic step to obtain rich and valid data and provide effective recommendations for improving public health. Based on this background, the author is interested in finding out the relationship between maternal behavior and the completeness of basic infant immunization in the Sinar Baru Health Center area.

Method

This study uses a quantitative method with a cross-sectional design, aiming to analyze the relationship between mothers' knowledge, attitudes, and actions towards the completeness of infant basic immunization at the Sinar Baru Health Center, Bangka Regency. The study population is infants born between January 1 and June 8, 2023, totaling 98 babies. The entire population was sampled using the census technique. Primary data was collected through questionnaires that included aspects of demographics, knowledge, attitudes, and actions of mothers regarding immunization. Secondary data was obtained from KIA books and posyandu cadres. Data processing was carried out through editing, coding, data entry, and tabulation, followed by univariate analysis to describe the characteristics of variables and bivariate analysis with the chi-square test to test the relationship between variables. The research took place from June to August 2024 in the Sinar Baru Health Center area.

Results

1. Characteristics Responden

Table 4. Karakteristik Responden berdasarkan Usia, Pekerjaan Pendidikan dan Penghasilan

Category	Sum (N)	Percentage (%)
Age		
1. <20 Years	22	22,4%
2. 20-35 Years	70	71,4
3. >30 years	6	6,1%
Total	**98**	**100%**
Work		
1. PNS	10	10,2%
2. Entrepreneurial	11	11,2%
3. Laborer	4	4,1%
4. Private employees	29	29,6%
5. Housewives	44	44,9%
Total	**98**	**100%**
Education		
1. No School	6	6,1%
2. Elementary or Junior High School	40	40,8%
3. SMA	44	44,9%
4. College	8	8,2%
Total	**98**	**100%**
Income		
1. < 3.498.497	55	56,1%
2. > 3.498.497	43	43,9%
Total	**98**	**100%**

(Source: Primary data 2024)

Based on the table data, the frequency distribution of respondents shows that the majority are in the age range of 20-35 years with a total of 70 people (71.4%). Most of the respondents worked as housewives, which was 44 people (44.9%). In terms of education, the most dominant level of education is high school, with the same number of 44 people (44.9%). Meanwhile, the frequency distribution based on income showed that the majority of respondents had an income below Rp 3,498,497, as many as 55 people (56.1%).

2. Univariate Test Results

Table 5. Univariate Test Results of Distribution of Completeness of Children's Basic Immunization, Mother's Knowledge, Mother's Attitude Mother's Actions Regarding Complete Basic Immunization for Children in the Working Area of the Sinar Baru Health Center in 2024

Category	Sum (N)	Percentage (%)
Immunization Completeness		
1. Complete	43	43,9%
2. Incomplete	55	56,1%
Total	**94**	**100%**
Knowledge		
1. Tall	56	57,1%
2. Low	42	42,9%
Total	**98**	**100%**
Attitude		
1. Good	54	55,1%
2. Not Good	44	44,9%
Total	**98**	**100%**
Attitude		
1. Appropriate	57	58,2%
2. Not Suitable	41	41,8%
Total	**98**	**100%**

Based on the table, the distribution of basic immunization completeness in children shows that as many as 43 children (43.9%) have complete basic immunization status, which is less than children with incomplete immunization. The distribution of maternal knowledge about complete basic immunization showed that 56 mothers (57.1%) had high knowledge, more than those with low knowledge. The distribution of maternal attitudes towards complete basic immunization showed that 54 mothers (55.1%) had a good attitude, higher than those who had a bad attitude. The distribution of maternal actions regarding complete basic immunization showed that 57 mothers (58.2%) acted in accordance with immunization recommendations, more than those who did not.

3. Bivariate Test Results

Table 6. Bivariate Test Results with *chi square*

		KelengkapanImunisasiDasar				Total	Nilai p	POR (95% CI)
		Lengkap		Tidak Lengkap				
		n	%	N	%	%		
Knowledge	Tall	33	33,7	23	23,5	57,1	0,001	4,591
	Low	10	10,2	32	32,7	42,9		(1,890-11,152)
	Total	**43**	**43,9**	**55**	**56,1**	**100**		
Attitude	Good	30	30,6	24	24,5	55,1	0,014	2,981
	Not Good	13	13,3	31	31,6	44,9		(1,285-6,912)
	Total	**43**	**43,9**	**55**	**56,1**	**100**		
Action	Appropriate	32	32,7	25	25,5	58,2	0,004	3,491
	Not Suitable	11	26,8	30	30,6	41,8		(1,468-8,304)
	Total	**43**	**43,9**	**55**	**56,1**	**100**		

Based on the table above, it is known that:

1. Mothers who had babies with complete basic immunizations were 33 (33.7%) more likely to have high knowledge compared to low knowledge. Meanwhile, in mothers with low knowledge in incomplete basic immunization, 32 (32.7%) were greater than those of respondents with high knowledge. The results of *the Chi Square test* obtained a p value of 0.001 < 0.05, then H0 was rejected and Ha was accepted, which means that there is a meaningful relationship between

maternal knowledge and the administration of complete basic immunization. The *Prevalences Odds Ratio* value was obtained at 4.591 which means that mothers with high knowledge have a 4.591 times greater tendency to carry out complete basic immunization than mothers with low knowledge.

2. Mothers who had babies with complete basic immunizations had a good attitude by 30 (30.6%) compared to a bad attitude. Meanwhile, in mothers who have a bad attitude on incomplete basic immunization, 31 (31.6%) are greater than mothers who have a good attitude. The results of *the Chi Square test* obtained a p value of 0.014 < 0.05, then H0 was rejected and Ha was accepted, which means that there is a meaningful relationship between the mother's attitude towards the administration of complete basic immunization. The *Prevalences Odds Ratio* value was obtained of 2.981 which means that mothers with a good attitude have a 2.981 times greater tendency to carry out complete basic immunization than mothers who have a bad attitude.
3. showed that mothers who had babies with complete basic immunization on appropriate measures were 32 (32.7%) greater than those who did not take appropriate measures. Meanwhile, in mothers who have inappropriate measures in incomplete basic immunization, 30 (30.6%) are greater than mothers who have inappropriate actions. The results of *the Chi Square test* obtained a p value of 0.004 < 0.05, then H0 was rejected and Ha was accepted, which means that there is a meaningful relationship between the mother's actions and the administration of complete virgin immunization. The *Prevalences Odds Ratio value* was obtained of 3.491 which means that mothers with appropriate measures have a 3.491 times greater tendency to carry out complete basic immunization than mothers who have inappropriate actions

Discussion

1. The Relationship between Mother's Knowledge About Immunization and the Completeness of Basic Child Immunization

The results of the study show that most mothers have high knowledge, which is 57.1% and low knowledge as much as 42.9%. The results of *the Chi Square test* obtained a p value of 0.001 < 0.05, then H0 was rejected and Ha was accepted, which means that there is a meaningful relationship between maternal knowledge and the administration of complete basic immunization.

Knowledge is divided into positive and negative aspects towards objects or good and bad knowledge which then affects attitudes. The higher the positive aspect towards the object, the higher the positive attitude towards the object and vice versa, if the negative aspect is higher, the higher the negative attitude towards the object will be higher (10).

This knowledge variable is related to the mother's understanding of the child's basic immunization given to the child from birth to before the age of one year. The knowledge researched in this study includes knowledge about the meaning of immunization, the benefits of immunization, diseases that can be prevented by immunization (PD3I), types and methods of immunization, the exact schedule of immunization, the effects of immunization and its treatment, and the place of immunization services. The questions asked in the immunization knowledge questionnaire consisted of 11 negative and positive questions and respondents answered correctly or incorrectly according to their understanding.

This study is in line with research from Pademme D, Mansoben (11) which shows the results of statistical tests using chi-square with a significance level of $\alpha = 0.05$ obtained p value = 0.000 indicating that there is a relationship between knowledge and basic immunization.

The information that the researcher obtained in the field, most of the respondents in this study knew about immunization in general but the specifics about immunization were not known by some parents. Respondents know general things about immunization that immunization is an effort to

prevent infectious diseases, about the ways of giving immunization, namely by injection and dripping into the mouth.

Respondents also know what kind of situation the child should not be immunized. As stated in the statement that if the child has a high fever, he should not be immunized. In addition, respondents also knew normal symptoms after being immunized. The specifics of immunization are unknown to some respondents. Some respondents did not know the specific type of immunization given to their children in terms of the timing of administration, the method of administration, and the function of several types of immunizations. Respondents did not know how to administer polio immunization. Respondents did not know that there were several types of immunizations that were given repeatedly, such as DPT immunization, and did not know the timing of giving certain types of immunization. Almost half of the respondents also did not know about certain PD3I and the type of immunization. In addition, respondents also did not know what to do if a child had a fever after being immunized. This is because some parents only follow the existing immunization schedule without knowing what type of immunization is given. According to the researcher, it is important to increase parents' understanding of immunization so that parents understand the importance of immunization that can prevent PD3I in children. Increasing knowledge about immunizations will help mothers make informed decisions for their children's health.

2. The Relationship between Mother's Attitude Regarding Immunization and the Completeness of Basic Child Immunization

The results of the study showed that most mothers had a good attitude towards immunization, which was 55.1%. The results of *the Chi Square test* obtained a p value of 0.014 < 0.05, then H0 was rejected and Ha was accepted, which means that there is a meaningful relationship between the mother's attitude towards the administration of complete basic immunization.

Attitude is a closed response to stimuli and a tendency to do or not do something (12) Attitudes that are commonly studied in research are also called affective domains. This affective domain focuses on factors such as feelings, motivations, attitudes, perceptions, and values that shape thoughts and behaviors. This goes beyond activities ranging from listening to others, participating in discussions, to doing things independently. A person not only gathers information but also responds to what is learned, assesses, organizes, and even characterizes oneself (13)

The attitude studied in this study is the attitude of parents related to the immunization of their children which includes attitudes regarding the importance of immunization according to the respondents and how parents behave if faced with possibilities that can affect whether or not immunization is carried out for their children such as side effects of immunization, distance from the location of immunization, cost, and what to do if the child experiences side effects of immunization.

The results of this study are in line with research from Pademme D, Mansoben (11) which shows that the results of the statistical test using *chi-square* with a significance level of $\alpha = 0.05$ obtained p value = 0.000, which means that there is a relationship between attitude and basic immunization completeness.

Based on the information obtained by the researcher in the field, the respondents will still immunize their children even if they are faced with certain circumstances, the respondents agree that they will continue to immunize their children even if they hear the side effects of immunization from others. In addition, respondents will also continue to immunize their children on the next immunization schedule even if the child has a fever after being immunized. Then the respondent will continue to immunize his child even though the cost of immunization is expensive and will continue to immunize his child even though the distance to the immunization service site is long.

According to the researchers, it can be said that most respondents believe that immunization is important for children's health and will continue to immunize their children in various situations and conditions. Therefore, it is important to maintain and improve the attitude of parents who are already good towards immunization and it is necessary to increase awareness of parents who have an attitude that is less exposed to immunization because attitude is one of the things that can affect behavior in immunization.

3. The Relationship between Mother's Action Regarding Immunization and the Completeness of Basic Child Immunization

The results of the study showed that mothers who had complete basic immunization on appropriate measures were 32 (32.7%) greater than those who did not take appropriate measures. The results of the Chi Square test obtained a p value of 0.004 < 0.05, then H0 was rejected and Ha was accepted, which means that there is a meaningful relationship between the mother's actions and the administration of complete basic immunization.

Respondents' actions towards complete basic immunization of infants are influenced by a variety of factors including knowledge, attitudes, access to health services, and social and cultural influences. Health behavioral theory explains that health decisions, including immunization, are strongly influenced by an individual's perception of the benefits and risks associated with such actions (14). Respondents who have a good understanding of the importance of immunization tend to be more compliant with the immunization schedule that has been set. This understanding is often obtained through education from health workers, public campaigns, and credible sources of information. Studies show that increased parental knowledge about immunization is closely related to increased adherence to immunization programs (3). Social and cultural influences also play a significant role in shaping respondents' actions. According to social norm theory, individual behavior is influenced by what they believe to be an accepted or expected action in their community. Support from family, friends, and community leaders can increase participation in immunization programs. Conversely, fear and misinformation spreading within the community can reduce trust in immunization, which in turn lowers compliance rates. Access to health services is also an important factor that affects respondents' actions towards immunization. Those who live in areas with easy access to health facilities tend to be more regular in completing their infants' basic immunizations. However, for those living in remote areas, barriers such as distance and cost can reduce participation in immunization programs. In addition, respondents who had adequate information on how to handle immunization side effects, such as fever or swelling at the injection site, tended to be calmer and did not hesitate to continue immunization as scheduled. Lack of information and support after immunization often leads to excessive concern or even rejection of follow-up immunization.

This study is in line with research from Riza WM (15) which shows that the results of the Chi Square Test statistical test are known to be p-value = 0.000 < α (0.05), so this shows that Ho is rejected, that there is a relationship between maternal compliance and basic immunization completeness.

According to the researchers, respondents' actions towards complete basic immunization of infants are influenced by the complex interaction between knowledge, attitudes, access to health services, and social and cultural influences. This is in line with as many as 58.2% of respondents' actions were appropriate and only 41.8% of respondents' actions were inappropriate. Efforts to improve immunization compliance need to include education strategies, community empowerment, and increased access to health services.

4. Completeness of Basic Immunization for Children

Based on the data of the results, the distribution of basic immunization completeness in children was obtained as a result of 43 (43.9%) having a complete basic immunization status, less than incomplete basic immunization.

Basic immunization is carried out by introducing vaccines into the body to provide immunity against certain infections (Centers for Disease Control and Prevention, 2018). The completeness of basic immunization in this study is categorized into two, namely complete and incomplete. Complete means that the child has received all the basic immunizations required by the government according to the schedule before the age of 1 year which includes one hepatitis B immunization, one BCG immunization, three DPT-HB-HiB immunizations, 4 polio immunizations, and one measles immunization (3)

Children who do not receive one or more basic immunizations are categorized as incomplete in the basic immunization completeness variable. The results of the research on the basic immunization completeness variable were obtained based on data on the KMS (Card Towards Health) owned or based on the mother's memory.

Based on the information obtained by researchers in the field, not all mothers immunize their children completely.

The status of basic immunization completeness in this study, which is only 43.9% of 96 samples that complete immunization, illustrates that the immunization program is not optimal when compared to the strategic plan target of immunization coverage, while the immunization target is 95%. Therefore, it is important to increase the coverage of basic immunization by implementing programs that can increase public awareness of immunization.

Conclusion

From the results of the study, it was found that there was a meaningful relationship between maternal knowledge and the provision of complete basic immunization with a p value of 0.001. In addition, there was a significant relationship between maternal attitudes towards the administration of complete basic immunization with a p value of 0.014. A meaningful relationship was also found between maternal actions in providing complete basic immunization, with a p-value of 0.004. This shows that mothers' knowledge, attitudes, and actions play an important role in the completeness of basic immunization in children.

References

[1] World Health Organization. Global Reference List of 100 Core Health Indicators (plus health-related SDGs). 2018;1:123–7.

[2] P2P. Imunisasi Menjadi Program Prioritas Transformasi Layanan Kesehatan Primer. 2024.

[3] Wahab S, Idrus I, Muliana H, Azzahra N. Regulations for Organizing Immunizations in Indonesia. Soepra. 2023;9(1):9–20.

[4] WHO. World Immunization Week 2023 [Internet]. 2023. Available from: https://www.who.int/indonesia/news/events/world-immunization-week/2023

[5] Baghdadi LR, Younis A, Al Suwaidan HI, Hassounah MM, Al Khalifah R. Impact of the COVID-19 Pandemic Lockdown on Routine Childhood Immunization: A Saudi Nationwide Cross-Sectional Study. 2021;9:692877.

[6] Ali AHM, Abdullah MA, Saad FM, Mohamed HAA. Immunisation of children under 5 years: mothers' knowledge, attitude and practice in Alseir locality, Northern State, Sudan. 2020;20(2):152–62.

[7] Surveilans Dinkes Kabupaten Bangka. Kasus Difteri Di Desa Kota Kapur Kecamatan Mendobarat. 2024.

[8] IDAI. Pedoman Imunisasi di Indonesia. 6th ed. Badan Penerbit Ikatan Dokter Anak Indonesia; 2017.

[9] Kemenkes RI. Peraturan Menteri Kesehatan Republik Indonesia Nomor 12 Tahun 2017 tentang Penyelenggaraan Imunisasi. 2017.

[10] Notoatmodjo S. Metodologi Penelitian Kesehatan. 3rd ed. Jakarta: Rineka Cipta; 2018.

[11] Pademme D, Mansoben N. Hubungan Pengetahuan Dan Sikap Ibu Dengan Kelengkapan Imunisasi Dasar Pada Bayi Di Posyandu Asoka Wilayah Kerja Uptd Puskesmas Waisai Kabupaten Raja Ampat. 2020;7(2):78–86.

[12] Notoatmodjo S. Ilmu Perilaku Kesehatan. 2nd ed. Jakarta: Rineka Cipta; 2014.

[13] Cullinane A. Bloom's Taxonomy and its Use in Classroom Assessment. NCE-MSTL. 2015 Mar;

[14] Glanz, K., Rimer, B. K., & Viswanath K. Health Behavior: Theory, Research, and Practice (5th ed.). Jossey-Bass; 2015.

[15] Riza WM. Program studi ilmu kesehatan masyarakat stikes aufa royhan padangsidimpuan 2018 1. 2018;