



## THE RELATIONSHIP BETWEEN THE PROVISION OF BASIC IMMUNIZATION WITH THE GROWTH OF KEMBANG BALITA AT POSYANDU 07 VILLAGE SUKARAPIH

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### ABSTRACT

One of the national health development strategies is a healthy paradigm, one of its activities is prevention of disease through immunization efforts. By giving immunization, it is expected that the child is healthy so that he can grow and develop optimally. National Data for 2015 Complete Basic Immunization in Indonesia reaches 86.8%, while in 2019 the target of immunization reaches 93%. In 2015 in the village of Sukarapih there were 5 toddlers who experienced slow development and 4 people experienced slow growth. This shows there are still toddlers who experience slow growth and development, one of which is due to diseases that can be prevented by basic immunization.

This study aims to determine the relationship between basic immunization and toddler growth and development. The research method used is correlation analytic with cross sectional approach. The research sample was taken by total sampling technique which amounted to 35 respondents aged 54-60 months. Data analysis through two stages, namely univariate to see the frequency distribution and bivariate to see the relationship (chi square) and the magnitude of the relationship (OR).

The results of the two analyzes using the chi-square test obtained  $p$  value = 0,000 which is smaller than the number  $\alpha = 0.05$  and  $p$  value = 0.002 which is smaller than  $\alpha = 0.05$ . The conclusion of this study is that there is a relationship between basic immunization and the growth and development of infants.

Suggestions that can be used as information to parents who have babies about the importance of basic immunization for infants related to the growth and development of infants.

**Keywords:** Cross sectional, basic immunization, growth, development

### INTRODUCTION

Immunization is a program that deliberately introduces weak antigens to stimulate antibodies out so that the body can be resistant to certain diseases (Proverawati, 2010). The purpose of immunization is to provide immunity to infants in order to prevent illness and death of infants and children caused by diseases that often infect (Proverawati, 2010). By giving immunization, it is expected that the child is healthy so that he can grow and develop optimally.

Growth and development are very important for living things as an effort to maintain survival and preserve offspring (Yuniarti, 2015).

According to the 2015 national data the complete Basic Immunization in Indonesia reached 86.8%, and needs to be increased to reach the target of 93% by 2019. Universal Child Immunization (UCI) villages which now reach the 82.9% target need to be increased to reach 92% in 2019. At the national level, expect a complete basic immunization target of 91% and Village UCI at 84% by the end of 2015 (Ministry of Health, Republic of Indonesia, 2015).

Based on the results of a preliminary study conducted in Sukarapih Village there were 5 toddlers who experienced slow development and 4 people experienced slow growth. This shows there are still toddlers who experience slow growth and development, one of which is due to diseases that can be prevented by basic immunization.

Based on the background above, the author feels the need to conduct research "The Correlation of Basic Basic Immunization With Growth and Growth in Toddlers at Posyandu 07 Sukarapih Village The working area of the Tambelang Public Health Center in Bekasi".

### RESEARCH METHOD

The research method is correlation analytics which aims to analyze the relationship between basic immunization and infant growth. While the design used is Cross Sectional, namely the observation of the dependent variable (growth of children under five) and the independent variable (giving complete basic immunization) at the same time.

**a. Population and Research Samples**

The population in this study were toddlers in Posyandu Sukarapih as many as 197 people and toddlers aged 54-60 months as many as 35 people spread over 5 RT. The sample of the total population is 35 toddlers 54-60 months.

The inclusion criteria chosen in this study are toddlers who have received complete basic immunizations from BCG to Measles immunization. While the exclusion criteria are toddlers who do not get complete basic immunizations.

**b. Data collection technique**

The data collected is secondary data obtained by collecting KMS toddlers who have received complete basic immunizations. Primary data for obtaining growth data by measuring height and weight, while developing by administering the Developmental Pre-Screening Questionnaire (KPSP).

**c. Processing and data analysis**

Univariate analysis aims to determine the frequency distribution and proportion of the observed variables.

Bivariate analysis is done by testing the hypothesis of the independent variable and the dependent variable to see the relationship between the 2 variables, namely the independent variable (giving immunization) with the dependent variable (growth and development). Bivariate analysis was performed using the Chi Square statistical test

**RESULTS AND DISCUSSION**

**Table 1. Frequency Distribution of the Implementation of Basic Immunization in Posyandu 07 Sukarapih Village Puskesmas Tambelang Working Area in 2016**

Imunization	Frequency	Percentage (%)
complete	32	91,4
incomplete	3	8,6
Total	35	100

Based on table 1 above, it is known that of the 35 respondents, almost all of them received complete basic immunization which is 32 respondents (91.4%).

Giving a complete and scheduled immunization is not only beneficial to produce immunity against disease, but also prevents transmission of disease or epidemics (Firda & Maya, 2012).

**Table 2. Distribution of frequency of implementation of Growth and development in Posyandu 07 Sukarapih Village Work Area Tambelang Health Center in 2016**

Growth	Frequency	Percentage (%)
Normal	30	85,7
thin	2	5,7
fat	3	8,6
<b>Total</b>	<b>35</b>	<b>100</b>
Growth Development		
Appropriate	30	85,7
Suspect	5	14,3
<b>Total</b>	<b>35</b>	<b>100</b>

Based on table 2. It is known that of the 35 respondents, almost all respondents had normal growth of 30 respondents (85.7%), very few toddlers who experienced thin weight 2 (5.7%) and fat weight 3 (8.6 %). And almost all respondents under five years of development according to their age, as many as 30 respondents (85.7%), very few respondents doubted the development of 5 toddlers (14.3%).

According to Azis (2011) one of the factors that influence the growth and development of children is one of them is the provision of basic immunizations to prevent infectious diseases that can be prevented by immunization.

**Table 3. Correlation between Basic Basic Immunization and Toddler Growth in Posyandu 07 Sukarapih Village Puskesmas**

Imunization	Growth						Total	P Value
	thin		Normal		fat			
	N	%	n	%	n	%	n	%
incomplete	2	66,7	1	33,3	0	0	3	100
complete	0	0	29	90,6	3	9,4	32	100
<b>Total</b>	<b>2</b>	<b>5,7</b>	<b>30</b>	<b>85,7</b>	<b>3</b>	<b>8,6</b>	<b>35</b>	<b>100</b>

Based on table 3, it was found that of the 3 toddlers who did not receive complete immunization, 2 people (66.7%) and 1 person (33.3%), while of the 32 toddlers who received complete basic immunization, almost all experienced normal weight growth that is, 29 (90.6%) and very few are obese, namely 3 infants (9.4%). Statistical test results obtained p value <0,000, a value of 0.05 thus H0 is rejected, which means there is a significant relationship between the provision of complete basic immunization with the growth of infants. From the observation there is 1 respondent who received incomplete basic immunization but experienced normal growth. Based on interviews with mothers of children under five who do not get complete immunization but have normal growth, influenced by mothers who provide exclusive breastfeeding. According to Chomaria (2015), there are other factors that can determine the status of growth is said to be normal is a mother who is diligent in breastfeeding (ASI) because babies in prime breast milk intake are proven to have very different abilities compared to children whose breast milk intake is not exists at all.

The results of this study are in line with the results of Vidya's study (2012) with the research title "The Relationship of Completeness of Immunization with Growth in Toddlers 1-5 Years in Watonea Village, Katobu Community Health Center, Muna Regency" known from 44 respondents with complete immunization, there were 28 respondents (40, 0%) who had normal growth and 16 respondents (22.9%) who had thin growth. Of the 26 respondents (37.1%) with incomplete immunization, there were 2 respondents (2.9%) who had normal growth and 24 respondents (34.3%) who had thin growth.

The results of this research that support this research are Melisa Citra Kaunang (2016) which states that there is a relationship between Basic Immunization and Growth and Growth in Infants (0-1 years) at the Kembes Health Center, Tombulu District, Minahasa Regency, it can be concluded from the results of this study, the value of p value = 0,000 which is smaller than  $\alpha = 0.05$ , i.e. there is a relationship in providing basic immunization with infant growth and there is a relationship in providing basic immunization with infant development.

**Table 4. Relationship between the provision of complete basic immunization and the development of children under five in Posyandu 07 Sukarapih village Puskesmas**

Imunization	Growth				Total	P Value	OR (CI 95%)
	Suspect		Appropriate				
	N	%	n	%	n	%	
incomplete	3	100	0	0	3	100	
Complete	2	6,3	30	93,8	32	100	
<b>Total</b>	<b>5</b>	<b>14,3</b>	<b>30</b>	<b>95,7</b>	<b>35</b>	<b>100</b>	

Based on table 4 above, it is known that of the 3 toddlers who did not get complete immunization, all toddlers experienced dubious development, namely as many as 3 (100%), while of 32 toddlers who received complete basic immunization, almost all respondents experienced appropriate development of as many 30 toddlers (93.8), and very few toddlers who received doubts in the development of 2 toddlers (6.3%). Statistical test results obtained p value  $\neg = 0.002 < a$  value of 0.05

thus H0 is rejected, which means there is a significant relationship between complete basic immunization with the development of infants. In the analysis of the relationship between the two variables, it is obtained OR = 16,000, meaning that the provision of complete basic immunization has 16 times the chance to get the appropriate development compared to the administration of incomplete immunization.

From the observations found 2 toddlers (6.3%) with complete basic immunization but experiencing dubious development. Based on the results of interviews with mothers of toddlers who are almost very few respondents experienced a doubtful development influenced by family factors that lack interaction with children due to busyness.

According to Soetjningsih (2012) one example of giving immunization that is very influential on development is the administration of polio immunization that aims to prevent poliomyelitis in children which can cause paralysis. Factors that affect the development of a child is composed of factors inside and outside factors. In internal factors, family (genetic) is very influential in children's development because a child has a tendency to have a tall, short, fat and thin body in accordance with the conditions of parents and family (Fida & Maya, 2012).

The results of this study are in line with Moonik's study (2015) conducted in the Passi Timur District area of Bolaang Mongondow Regency with the research title "Factors Affecting Child Development Delay" he found based on research to 94 respondents that 53 respondents experienced normal development with complete immunization and 16 respondents were not given complete immunizations. While developmental delays are experienced by 23 children with complete immunization and 7 children not given complete immunization.

## **CONCLUSION AND RECOMMENDATION**

Almost all respondents who received complete basic immunization had a development that was appropriate to their age, which was 30 (85.7%). There is a significant relationship between the provision of complete basic immunization with the development of children under five with the statistical test results obtained p value <0.002, a value 0.05.

Nearly all respondents who received the basic immunization of the fellas experienced normal growth of 29 (90.6%). There is a significant relationship between giving complete basic immunization with the growth of children under five with the statistical test results obtained p value  $\alpha = 0,000 < \alpha$  value of 0.05.

Recommended: Mothers of infants and toddlers to provide complete basic immunization of their children. Health workers should motivate the community to conduct immunization visits and detection of children's growth and development to

the posyandu.

## **REFERENCES**

- Adriana, D. (2011). *Tumbuh kembang dan Terapi Bermain pada Anak*. Jakarta. Salemba Medika.
- Arikunto, Suharsimi (2010). *Manajemen Penelitian (edisi revisi)*. Jakarta : Rineka Cipta
- Boerhan Hidayat, Purnamawati S Pujiarto. 2008. *Hepatitis B. Dalam I.G.N. Ranuh, Hariyono Suyitno, Sri Rezeki S Hadinegoro, Cissy B. Kartasasmita, Ismoedijanto, Soedjatmiko: Pedoman imunisasi di indonesia. Edisi ketiga*. Jakarta: Ikatan Dokter Anak Indonesia.
- Chomaria. (2015) *Panduan Terlengkap Tumbuh Kembang Anak Usia 0 – 5 Tahun*. Menebar Cinta Menuai Hikmah : Surakarta
- Depkes 2010, *Tumbuh Kembang Balita*, Depkes RI, Jakarta
- Depkes RI (2014). *AKI dan AKB di Indonesia*. Jakarta : Depkes RI
- Depkes RI (2015). *Profil Kesehatan Indonesia*. Jakarta : Depkes RI
- Fida & Maya. (2012). *Pengantar Ilmu Kesehatan Anak. D-Medika* : Yogyakarta.
- Hariyono Suyitno. 2008. *Poliomielitis. Dalam I.G.N. Ranuh, Hariyono Suyitno, Sri Rezeki S Hadinegoro, Cissy B. Kartasasmita, Ismoedijanto, Soedjatmiko: Pedoman imunisasi di indonesia. Edisi ketiga*. Jakarta: Ikatan Dokter Anak Indonesia
- Hidayat Aziz, (2008). *Pengantar Ilmu Kesehatan Anak untuk Pendidikan Kebidanan*. Jakarta. Salemba Medika
- <http://www.depkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/profil-kesehatan-indonesia-2014.pdf>
- Menkes RI, (2011). *Pengukuran Antropometri Anak*. Jakarta
- Moonik. (2015). *Faktor – Faktor Yang Mempengaruhi Keterlambatan Perkembangan Anak Taman Kanak-Kanak*. Manado : Universitas Sam Ratulangi.
- Nia Kania. SpA.MKes,2006.Materi Seminar Stimulasi Tumbuh Kembang Anak.Bandung,2006,Stimulasi Tumbuh Kembang Anak untuk Mencapai Tumbuh Kembang yang Optimal. Ngastiyah.2005.Perawatan Anak Sakit,edisi 2.Jakarta: Penerbit Buku Kedokteran EGC
- Notoatmodjo (2010). *Metodologi Penelitian Kesehatan, Edisi Revisi*. Jakarta: Rineka Cipta.

Profil Kesehatan Prov. Jabar, (2013). Kesehatan Propinsi Jawa Barat, Dinas Kesehatan Propinsi Jawa Barat

Proverawati, Atikah. 2010. Imunisasi dan Vaksinasi. Jakarta: Nuha Offset

Ranuh, Hariyono Suyitno, Sri Rezeki S Hadinegoro, Cissy B. Kartasmita, Ismoedijanto, Soedjatmiko ( 2008) *Difteria, tetanus, pertusis*. Dalam I.G.N.: Pedoman imunisasi di

Indonesia. Edisi ketiga. Jakarta: Ikatan Dokter Anak Indonesia.

Soetjiningsih. (2012). Tumbuh kembang anak. Jakarta : Penerbit Buku Kedokteran EGC

Wong(2009). Buku ajar keperawatan pediatrik Wong (Volume 2, Ed 6, Andry Hartono, Penerjemah.). Jakarta : EGC.

Yuniarti (2015). Asuhan neonatus, bayi-bayi dan balita dan anak pra-sekolah. Bandung : Refika Aditama