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# CONNECTION KNOWLEDGE MOTHER WITH GIVING COMPLETE BASIC IMMUNIZATION FOR INFANTS

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## ABSTRAK : HUBUNGAN PENGETAHUAN IBU DENGAN PEMBERIAN IMUNISASI DASAR LENGKAP PADA BAYI

Imunisasi dasar merupakan vaksin yang diberikan kepada berusia 0-11 bulan 29 hari, dengan tujuan meningkatkan kekebalan secara aktif pada bayi terhadap suatu penyakit, sehingga apabila suatu saat terpapar dengan penyakit tersebut tidak akan sakit atau hanya mengalami sakit ringan. Menurut data WHO 2021, sebanyak 4,9 juta anak didunia tidak mendapatkan imunisasi lengkap. Penyebab ketidak lengkapan imunisasi yaitu pandemik covid tahun 2019, membuat cakupan imunisasi ditingkat global mengalami penurunan yaitu dari 86% menjadi 81% pada tahun 2021. Dampak dari ketidak lengkapan imunisasi yaitu resiko kesakitan, kecacatan, bahkan kematian. Penelitian ini secara umum bertujuan untuk mengetahui adanya hubungan pengetahuan ibu dengan pemberian imunisasi dasar lengkap pada bayi di Puskesmas Ganjar Agung Kota Metro.

Penelitian ini merupakan penelitian kuantitatif dengan *pendekatan cross sectional*. Teknik pengambilan sampel menggunakan *non-probability sampling* dengan metode *total sampling*. Sampel dalam penelitian adalah ibu yang memiliki bayi berusia 11 bulan yang berkunjung ke Puskesmas atau Posyandu di Wilayah Kerja Puskesmas Ganjar Agung, Kota Metro pada bulan Januari sampai dengan Mei 2024 sejumlah 51 responden. Pengambilan data menggunakan kuesioner dan analisis data menggunakan uji *chi square*.

Hasil penelitian didapatkan ibu dengan pengetahuan pada kategori cukup sebesar 78,4% dan kelengkapan imunisasi dasar pada bayi 82.4%. Hasil uji statistik *p value* = 0,667.

Kesimpulan penelitian bahwa tidak ada hubungan yang signifikan antara pengetahuan ibu dengan kelengkapan imunisasi dasar pada bayi. Hasil penelitian diharapkan dapat menjadi pertimbangan bagi instansi kesehatan agar dapat meningkatkan promosi tentang imunisasi dasar lengkap pada bayi.

Kata Kunci : Imunisasi dasar, pengetahuan ibu.

### **ABSTRACT**

Background Basic immunization is a vaccine given to children aged 0-11 months 29 days. The aim is to actively increase immunity in infants against a disease, so that if one day they are exposed to the disease they will not get sick or only experience mild illness. According to WHO data in 2021, as many as 4.9 million children in the world did not receive complete immunization. The cause of incomplete immunization, namely the 2019 Covid pandemic, caused global immunization coverage to decrease from 86% to 81% in 2021. The impact of incomplete immunization is the risk of illness, disability, and even death. This study generally aims to determine the relationship between maternal knowledge and the provision of complete basic immunization to infants at the Ganjar Agung Health Center, Metro City.

Method is a quantitative study with a cross-sectional approach . The sampling technique uses non-probability sampling with the total sampling method . The sample in the study were mothers who had babies aged 11 months who visited the Health Center or Posyandu in the Ganjar Agung Health Center Working Area , Metro City from January to May 2024, totaling 51 respondents. Data collection using a questionnaire and data analysis using the *chi square test* .

The results of the study showed that mothers with knowledge in the sufficient category were 78.4% and the completeness of basic immunization in infants was 82.4%. The results of the statistical test *p* value = 0.667.

The conclusion of the study is that there is no significant relationship between maternal knowledge and the completeness of basic immunization in infants. The results of the study are expected to be a consideration for health institutions to increase promotion of complete basic immunization in infants.

Keywords: Basic immunization, maternal knowledge

## INTRODUCTION

Basic immunization is a vaccination given as an effort to actively increase immunity in infants aged 0-11 months 29 days against diseases caused by viruses and bacteria, so that if at some point they are exposed to a disease that can be prevented by immunization, they will not get sick or will only experience mild illness. Basic immunization is immunization that is completely obtained by infants aged 0-11 months consisting of BCG, DPT-HB-Hib 1, DPT-HB-Hib 2, DPT-HB-Hib 3, polio 1, polio 2, polio 3, and polio 4 and measles (Ministry of Health, 2017).

WHO data 2021, shows that as many as 5.9 million children out of 25 million children in the world do not receive complete immunization at the global level. The 2019 Covid pandemic caused global immunization coverage to decline, from 86% (2019) to 81% (2021).

In 2019, Indonesia experienced a decline in basic immunization coverage, namely from 93.7% to 84.5% in 2021. The decline in basic immunization coverage was caused by many Posyandu and Puskesmas as the main immunization facilities limiting and some even closing routine immunization services during the Covid-19 pandemic, as well as the focus of health workers on handling the pandemic in order to reduce the transmission of Covid-19, thus causing immunization coverage to decline.

In 2022, Indonesia is trying to catch up on routine immunization by issuing guidelines for immunization during the pandemic, accelerating monitoring of immunization programs, and the national child immunization month (BIAN) in August-December 2022. Indonesia is facing several challenges in implementing efforts to catch up through BIAN activities, one of which is the lack of knowledge among mothers about awareness and understanding of the importance of immunization (Ministry of Health, 2023).

The routine immunization coverage of Lampung province in the last five years has reached the national target of >80% with the immunization coverage indicators, namely measles immunization and *drop out rate* (DO) below the national <5%. *Drop out* is a target who is not present in the following month to continue the provision of follow-up immunization. *Drop out* occurs due to various factors, namely sick children, moving house, and forgetting to follow-up immunization (Lampung Health Office, 2022).

Data on infant immunization coverage per Metro City Health Center in 2022, there are several health centers that have not reached the target of <80%, including the Ganjar Agung Health Center with the immunization target that has not been achieved is DPT-HB3 immunization with a figure of 77.7% (Metro City Health Office, 2022).

Knowledge is the result of knowing and forms a mother's action. It occurs after a person senses an object. Sensing is obtained through the five human senses, such as the senses of sight, hearing, smell, touch, and taste (Notoatmodjo, 2003). One of the causal factors that can influence incomplete basic immunization is knowledge. The importance of maternal knowledge in implementing complete basic immunization for infants, such as knowledge about immunization includes knowing what immunization is, diseases that can be prevented through immunization, benefits of immunization, immunization service locations, time of immunization, and types of immunization. Through sufficient maternal knowledge, it can influence the mother's actions in providing complete immunization to her baby (Budiman, and Agus, 2013).

Based on previous research conducted by Mas Saleha, Angela Ditauli Lubis, and Rukmini Syshleman (2021) "The Relationship between the Level of Knowledge About Basic Immunization and Compliance with Providing Basic Immunization to Infants" which was conducted on 73 respondents. Shows a relationship between the level of maternal knowledge about basic immunization and compliance with providing basic immunization to infants at the Madurejo Pangkalan Bun Health Center.

### **RESEARCH METHODS**

Research with cross-sectional design using a measuring instrument in the form of a questionnaire sheet. The sampling technique was non-probability sampling with the total sampling method in the working area of the Ganjar Agung Health Center, Metro City.

The population in this study were all mothers who had babies aged 11 months who were domiciled in the working area of the Ganjar Agung Health Center, Metro City. The number of samples in this study was 51 samples using *non-probability* sampling with the total sampling method. The inclusion and exclusion criteria were mothers who had babies aged 11 months in January-May 2024. Domiciled in the working area of the Ganjar Agung Health Center. Willing become respondents. Exclusion criteria are mothers who have babies aged 11 months but live outside the working area of Ganjar Agung Health Center. Not willing become a respondent. The study was conducted in the Ganjar

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Agung Health Center Working Area, Metro City . Univariate analysis is an analysis used on each table that only produces the distribution and percentage of each variable. Univariate analysis aims to see the proportion of the frequency of the research variables, namely maternal knowledge and immunization of infants. Bivariate analysis using *Chi square test* 

### **RESEARCH RESULT**

The characteristics of respondents found by researchers in the work area of the Ganjar Agung Health Center, Metro City, were 51. mothers (respondents) who have babies aged 11 months, in January-May 2024. The following is a table of characteristics that have been processed:

Table 1
Respondent Characteristics

Respondent Characteristics	Amount	%
	Amount	/0
Age		
18-25 Years (early adulthood)	22	43.1
26-45 Years (adult)	18	35.3
46-55 Years (late adulthood)	11	21.6
Last education		
SD	1	2.0
JUNIOR HIGH SCHOOL	2	3.9
High School/Vocational School	32	62.7
College	16	31.4
Work		
Doesn't work	40	78.4
Work	11	21.6

Based on table 1, it shows that of the 51 respondents, the majority of the respondents' age characteristics are 18-25 years with a total of 22 people (43.1%), the characteristics of the respondents' last education are high school/vocational school 62.7% (32 people), and respondents with occupational characteristics are not working totaling 78.4 (40 people).

## Univariate Analysis Frequency Distribution of Mothers' Knowledge in the Working Area of Ganjar Agung Health

Center, Metro City.

Table 2
Respondent Knowledge

Knowledge	Amount	%
Not enough	1	2.0%
Enough	40	78.4%
Good	10	19.6%

Based on table 2 Regarding respondents' knowledge , the results showed that out of 51 respondents , 2.0% (1 person) had insufficient knowledge.

Frequency Distribution of Completeness of Basic Immunization in Infants in the Working Area of Ganjar Agung Health Center, Metro City.

Table 3
Completeness of Basic Immunization for Babies

Basic Immunization Completeness	Amount	Presentation
Incomplete	9	17.6%
Complete	42	82.4%

Based on table 3, it shows that of the 51 respondents regarding the completeness of basic immunization, there were 17.6 % ( 9 people) with incomplete basic immunization.

Based on the research results, it was shown that respondents who had less knowledge, with incomplete immunization, were 7.2% (8 people), while respondents who had good knowledge, but also with incomplete immunization, were 1.8% (1 person).

Based on table 4, the results of the chi square test obtained a p value = 0.667, which means that there is no relationship between maternal knowledge and the provision of complete basic immunization to infants in the work area of the Ganjar Agung Health Center, Metro City".

Table 4
Relationship between Mother's Knowledge and Completeness of Immunization Basics In Babies

	Basic Immunization			Total			
Knowledge	Incomplete		Complete		Total		P value
	n	%	n	%	n	%	
Not Enough (> 56%)	8	7.2	33	33.8	4 1	41.0	0.667
Good (≤ 56%)	1	1.8	9	8.2	10	10.0	

#### DISCUSSION

The results of the study conducted at the Ganjar Agung Health Center, Metro City showed that there was no relationship between maternal knowledge and the provision of complete basic immunization in infants ( *p-value* = 0.667). The results of the analysis showed that 1.8% (1 person) of mothers had good knowledge with incomplete immunization, 8.2% (9 people) of mothers had good knowledge with complete immunization, 7.2% (8 people) with poor knowledge with incomplete immunization, and 33.8% (33 people) of mothers had poor knowledge with complete immunization.

The results of this study are also in line with the research conducted by Erna Herawati and Fitnaningsih Endang Cahyawati in 2023 with the title of the relationship between maternal knowledge and the completeness of basic immunization in infants at the Candiroto Health Center, Temanggung Regency, with the results that there was no relationship between maternal knowledge and the completeness of basic immunization in infants, with a p value of 0.849.

Based on the study, there is no relationship between maternal knowledge and the provision of complete basic immunization, because there are 1.8% (1 person) of mothers with good knowledge but with incomplete basic immunization, 33.8% (33 people) of mothers with less knowledge with complete basic immunization, and 7.2% (8 people) with less knowledge with incomplete immunization. Incomplete provision of basic immunization to infants is due to several factors including when the baby is sick during the immunization schedule and until the immunization deadline the mother forgets to take the baby to the Health Center, the baby is born prematurely, then until the immunization deadline the baby's weight is below normal, the unavailability of vaccines, and mothers who do not know the immunization schedule. Mothers with less knowledge with complete basic immunization are due to the majority of mothers with work characteristics, namely not working, totaling 40 people (78.4%). Mothers who do not work (IRT) have more free time than mothers who work, so work has an impact on mothers to immunize their children completely (Surbakti, et all 2021). Immunization is also a government program that is indeed required for someone as part of society to protect individuals, people around them, and diseases that can be prevented by immunization, so that whether the mother's knowledge is good or lacking, she will still immunize her baby. The type of knowledge is divided into 2, namely implicit and explicit, so that mothers with good knowledge but do not immunize their babies because the mother's knowledge is still closed (implicit). Therefore, it is necessary to strengthen efforts to achieve basic immunization in babies by providing breast milk as often as possible for premature babies which is beneficial for baby growth and increasing baby weight, increasing mother's knowledge about the limits allowed for babies to get immunization if the baby is sick when the schedule is supposed to be, also a catch-up immunization program to catch up on baby immunizations that are left behind

## **CONCLUSION**

The proportion of maternal knowledge about basic immunization in infants in the work area of the Ganjar Agung Health Center, Metro City in 2024 is sufficient with 40 respondents or 78.4%. The proportion of complete basic immunization in infants in the work area of the Ganjar Agung Health Center, Metro City in 2024 is complete with 42 respondents or 82.4%. Infants with complete basic immunization status are 42 people (82.4%), and maternal knowledge in the sufficient category is 40 people (78.4%), where p 1,000 (p>0.05) Ho is accepted, which means there is no relationship between maternal knowledge and the provision of complete basic immunization in infants in the work area of the Ganjar Agung Health Center, Metro City in 2024.

## **SUGGESTION**

It is expected that this research can be information and reference for students or prospective midwives and other health workers. The latest empirical data generated from this study on maternal knowledge related to providing complete basic immunization to infants can be used as a strong scientific basis. Thus, students and health

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workers can better understand and apply this knowledge in professional practice, as well as improve the quality of education and research in the field of Health. It is expected that this research can be a source of reference information for students regarding knowledge related to providing basic immunization and can be the basis for further research for subsequent students.

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