

Analysis Of Factors And Influence Of The Covid-19 Pandemic On The Completeness Of Basic Immunization In Under-Fives In The Working Area Of Cibuaya Puskesmas 2020 – 2021

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Abstract.

Background: Immunization is the most effective and efficient public health effort in preventing several dangerous diseases. History has recorded the enormous role of immunization in saving the world's people from illness, disability and even death due to diseases such as Smallpox, Polio, Tuberculosis, Hepatitis B which can result in liver cancer, Diphtheria, Measles, Rubella and Congenital Rubella Syndrome. Syndrome/CRS), Tetanus in pregnant women and newborns, Pneumonia (pneumonia), Meningitis (inflammation of the lining of the brain), to Cervical Cancer caused by Human Papilloma Virus infection. Research Objectives: to find out the Factor Analysis and Influence of the Covid-19 Pandemic on the Completeness of Basic Immunization in Toddlers in the Working Area of the Cibuaya Health Center in 2020 – 2021. Research Method : Analytical with cross sectional approach. The sample in this study at the Cibuaya Health Center in November 2022 was 75 people (total sampling). Research results: The influence of educational factors (p value = 0.021), employment factors (p value = 0.002), availability of facilities (p value = 0.000), health facility support factors (p value = 0.014), family factors (p value = 0.011) with the completeness of basic immunization on toddlers. Conclusions and Suggestions: It is hoped that the puskesmas will provide more intensive education, for example health programs through posyandu. For respondents with low education, they are not preoccupied with household work.

Keywords: Basic immunization for toddlers, education, employment and availability of health facilities.

I. INTRODUCTION

Immunization is the most effective and efficient public health effort in preventing several dangerous diseases. History has recorded the enormous role of immunization in saving the world's people from illness, disability and even death due to diseases such as Smallpox, Polio, Tuberculosis, Hepatitis B which can result in liver cancer, Diphtheria, Measles, Rubella and Congenital Rubella Syndrome. Syndrome/CRS), Tetanus in pregnant women and newborns, Pneumonia (pneumonia), Meningitis (inflammation of the lining of the brain), to Cervical Cancer caused by Human Papilloma Virus infection. In immunization there is the concept of Herd Immunity or Group Immunity. Immunity This group can only be formed if the coverage of immunization on the target is high and evenly distributed throughout the region. The immunity of most of these targets will indirectly help provide protection for other age groups, so that if there is one or a number of cases of Immunization Preventable Diseases (IPD) in the community, the disease will not spread quickly and Extraordinary Events (Extraordinary Events) outbreaks) can be prevented. This concept is proof that the immunization program is very effective as well as efficient because only by targeting vulnerable groups can the whole community be protected. From an economic standpoint, disease prevention efforts will actually be far more cost-effective, when compared to treatment efforts. Most of the diseases that can be prevented by immunization (IPD) are diseases which, if they have infected someone, will require quite high medical and care costs which will certainly burden the state, society and family. The costs incurred for the immunization program are very much lower than the total potential costs that must be incurred issued if the community is affected by IPD.

The COVID-19 pandemic, which has infected most countries, should not dampen the enthusiasm of health workers to continue to echo the importance of immunization and take important steps to ensure that every child who is a vulnerable group is protected from dangerous diseases by immunization. During the COVID-19 pandemic, immunizations must still be complete according to schedule to protect children from IPD. Immunization services during the COVID-19 pandemic were carried out according to local government policies, based on an analysis of the epidemiological situation of the spread of COVID-19, routine immunization coverage, and the epidemiological situation of IPD. Immunization services are carried out according to the principles of Infection Prevention and Control (IPC) and maintaining a safe distance of 1-2

meters. The health office must coordinate and advocate for the local government in providing immunization services during the COVID-19 pandemic. In addition, health workers are expected to be able to monitor the immunization status of each target in their working area. From this background, the researcher is interested in the problem that he wants to examine, namely the Factor Analysis and Influence of the Covid-19 Pandemic on the Completeness of Basic Immunization in Toddlers in the Work Area of the Cibuaya Health Center in 2020, only 40.0% of those interviewed wanted to be immunized, 60.0% of them do not want to be immunized at the Cibuaya Health Center, Karawang Regency.

II. METHODS

The research method uses analytic with cross sectional method. Data collection was carried out using primary data, namely data obtained from the results of distributing questionnaires. The data collection instrument used was a questionnaire. The population in this study were toddlers at the Cibuaya Health Center in November 2022 as many as 75 people, the sampling technique was total sampling. The analytical method used is univariate and bivariate analysis with the chi square test.

III. RESEARCH RESULT

Table 1 Distribution of the characteristics of the respondents according to age, education, Jobs at the Cibuaya Karawang Health Center in 2020-2021

Characteristics of Respondents	Frequency (n)	Percentage (%)
Mother's Age		
17 - 25 Years	9	12,0
26 - 35 Years	55	73,8
36 - 45 Years	11	14,7
Level of education		
No school	0	0
Elementary school	0	0
Junior high school	13	17,3
Senior High School	29	38,7
Diploma/ bachelor	33	44,0
Job		
Government employees	12	16,0
Private	18	24,0
Self-employed	11	14,7
Housewife	34	45,3
Other	0	0,0

Table 1. shows that the most age of mothers is 26-35 years as many as 55 respondents (73.3%), the level of education is mostly D3/Higher Education totaling 33 respondents (44%), and the majority of mothers as housewives totaling 34 respondents (45.3%). Table 2 Relationship between age and completeness of basic immunization status during a pandemic at the Cibuaya Karawang Health Center in 2020-2021

Age		Basic immunization kit			P value
		Good	Not Enough	Total	
17-25 Years	N	6	3	9	0,010
	%	8,0%	4,0%	12,0%	
26-35 Years	N	43	12	55	
	%	57,3%	16,0%	73,3%	
26-45 Years	N	1	10	11	
	%	1,3%	13,3%	14,7%	
Total	N	50	25	75	
	%	66,7%	33,3%	100,0%	

The results of the bivariate test for the relationship between age and basic immunization completeness status during the pandemic found that at most 17-25 years of age with good basic immunization completeness were 6 respondents (8.0%), with basic immunization completeness status during the pandemic it was found that the most with the age of 26-35 years with good completeness of basic immunization as many as 43 respondents (57.3%), with the status of completeness of basic immunization

during a pandemic it was found that at most aged 26-45 years with good completeness of basic immunization as much as 1 respondent (1, 3%). The results of the research test obtained a p-value of $0.010 < 0.05$ so that the hypothesis stating age with completeness of basic immunization status during a pandemic is accepted, which means that age with completeness of basic immunization status during a pandemic has a significant relationship.

Table 3. Relationship between education and basic immunization completeness status during a pandemic at the Cibuaya Karawang Health Center in 2020-2021

Level of education		Completeness of Basic Immunization			P value
		Good	Not Enough	Total	
Junior high school	N	9	4	13	0,021
	%	12,0%	5,3%	17,3%	
Senior High School	N	25	4	29	
	%	33,3%	5,3%	38,7%	
Diploma/ bachelor	N	16	17	33	
	%	21,3%	22,7%	44,0%	
Total	N	50	25	75	
	%	66,7%	33,3%	100,0%	

The results of the bivariate test on the relationship between education and the completeness of basic immunization status during the pandemic found that most of them had high school education with good completeness of basic immunization, as many as 25 respondents (33.3%). The results of the research test obtained a p-value of $0.021 < 0.05$ so the hypothesis stating that education with complete basic immunization status during a pandemic is accepted, which means that education with complete basic immunization status during a pandemic has a significant relationship.

Table 4. Relationship between work and basic immunization completeness status during a pandemic at the Cibuaya Karawang Health Center in 2020-2021

Job		Completeness of Basic Immunization			P value
		Good	Not Enough	Total	
Government employees	N	10	2	12	0,002
	%	13,3%	2,7%	16,0%	
Private	N	14	4	18	
	%	18,7%	5,3%	24,0%	
Self-employed	N	10	1	11	
	%	13,3%	1,3%	14,7%	
Housewife	N	16	18	34	
	%	21,3%	24,0%	45,3%	
Total	N	50	25	75	
	%	66,7%	33,3%	100,0%	

The results of the bivariate test on the relationship between work and the completeness of basic immunization status during the pandemic found that most of the IRT jobs with less completeness of basic immunization were 18 respondents (24%). The results of the research test obtained a p-value of $0.002 < 0.05$ so that the hypothesis stating that jobs with complete basic immunization status during a pandemic is accepted, which means that jobs with complete basic immunization status during a pandemic have a significant relationship.

Table 5. The relationship between the availability of health facilities and the complete status of basic immunization during the pandemic at the Cibuaya Karawang Health Center in 2020-2021

Medical facility		Completeness of Basic Immunization			P value
		Good	Not Enough	Total	
Good	N	46	14	60	0,000
	%	61,3%	18,7%	80,0%	
Not Enough	N	4	11	15	
	%	5,3%	14,7%	20,0%	
Total	N	50	25	75	
	%	66,7%	33,3%	100,0%	

The results of the bivariate test on the relationship between the availability of health facilities and the completeness of basic immunization status during the pandemic found that the most with the availability of good health facilities and the completeness of basic immunization were good, as many as 46 respondents (61.3%). The results of the research test obtained a p-value of $0.000 < 0.05$ so that the hypothesis stating the availability of health facilities with basic immunization completeness status during the pandemic is accepted, which means that the availability of health facilities with basic immunization completeness status during the pandemic has a significant relationship.

Table 6. The relationship between the support of health workers and the complete status of basic immunization during the pandemic at the Cibuaya Karawang Health Center in 2020-2021

Health Officer Support		Completeness of Basic Immunization			P value
		Good	Not Enough	Total	
Good	N	49	20	69	0,014
	%	65,3%	26,7%	92,0%	
Not Enough	N	1	5	6	
	%	1,3%	6,7%	8,0%	
Total	N	50	25	75	
	%	66,7%	33,3%	100,0%	

The results of the bivariate test of the relationship between the support of health workers and the completeness of basic immunization status during the pandemic found that 49 respondents (65.3%) had the most support from good health workers and the completeness of basic immunization. The results of the research test obtained a p-value of $0.014 < 0.05$ so that the hypothesis stating that health workers support with basic immunization completeness status during a pandemic is accepted, which means that the support of health workers with basic immunization completeness status during a pandemic has a significant relationship.

Table 7. Relationship between family support and basic immunization completeness status during the pandemic at the Cibuaya Karawang Health Center in 2020-2021

Family support		Completeness of Basic Immunization			P value
		Good	Not Enough	Total	
Good	N	45	16	61	0,011
	%	60,0%	21,3%	81,3%	
Not Enough	N	5	9	14	
	%	6,7%	12,0%	18,7%	
Total	N	50	25	75	
	%	66,7%	33,3%	100,0%	

The results of a bivariate test on the relationship between family support and completeness of basic immunization status during the pandemic found that 45 respondents (60%) had good family support and good completeness of basic immunization. The results of the research test obtained a p-value of $0.011 < 0.05$ so that the hypothesis stating family support with basic immunization completeness status during a pandemic is accepted, which means that family support with basic immunization completeness status during a pandemic has a significant relationship.

IV. DISCUSSION

Basic Immunization Behavior in toddlers

Based on the distribution of the characteristics of the respondents, it shows that the highest number of mothers is 26-35 years, 55 respondents (73.3%), the education level is mostly D3/Higher Education, 33 respondents (44%), and most of the mothers are housewives. 34 respondents (45.3%).

Relationship between age and completeness of basic immunization status during a pandemic

The results of the bivariate test for the relationship between age and basic immunization completeness status during the pandemic found that at most 17-25 years of age with good basic immunization completeness were 6 respondents (8.0%), with basic immunization completeness status during the pandemic it was found that the most with the age of 26-35 years with good completeness of basic immunization as many as 43 respondents (57.3%), with the status of completeness of basic immunization

during a pandemic it was found that at most aged 26-45 years with good completeness of basic immunization as much as 1 respondent (1, 3%). The results of the research test obtained a p-value of $0.010 < 0.05$ so that the hypothesis stating age with completeness of basic immunization status during a pandemic is accepted, which means that age with completeness of basic immunization status during a pandemic has a significant relationship. The results of this study are in line with Dwi Kartini in 2021, out of 73 respondents aged 26 years and over, most of them had good completeness of basic immunization, 42 (57.5%) of respondents, some of the completeness of basic immunization was not good, 31 (42.5%). Therefore age affects mother's knowledge about the importance of immunization in toddlers.

The relationship between education and the complete status of basic immunization during a pandemic

The results of a bivariate test on the relationship between education and the completeness of basic immunization status during the pandemic found that most of them had high school education with good completeness of basic immunization, as many as 25 respondents (33.3%). The results of the research test obtained a p-value of $0.021 < 0.05$ so that the hypothesis stating that education with complete basic immunization status during a pandemic is accepted, which means that education with complete basic immunization status during a pandemic has a significant relationship. The results of this study are in line with Fitri Ekasari 2021, it is known that out of 73 respondents, most of them have a high level of education as many as 42 (57.5%) respondents, most of the respondents with low education are 31 (42.5%), most of the respondents with positive norms are 41 (67.5%), most of the respondents with positive behavior control were 39 (53.4%), most of the respondents with proper immunization were 50 (68.5%).

Relationship between work and completeness of basic immunization status during a pandemic

The results of the bivariate test on the relationship between work and the completeness of basic immunization status during the pandemic found that most of the IRT jobs with less completeness of basic immunization were 18 respondents (24%). The results of the research test obtained a p-value of $0.002 < 0.05$ so that the hypothesis stating that jobs with complete basic immunization status during a pandemic is accepted, which means that jobs with complete basic immunization status during a pandemic have a significant relationship. The results of this study are in line with Dwi Kartini in 2021. It is known that from 73 respondents, the majority of respondents worked, 50 respondents (68.5%), and 23 IRT (31.5%). The more mothers work outside the home, the wider the knowledge of adding insight. Knowledge is the result of knowing and this is after people have sensed certain objects. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch. Most of human knowledge is obtained through the eyes and ears.

The relationship between health facilities and the complete status of basic immunization during a pandemic

The results of the bivariate test on the relationship between the availability of health facilities and the completeness of basic immunization status during the pandemic found that the most with the availability of good health facilities and the completeness of basic immunization were good, as many as 46 respondents (61.3%). The results of the research test obtained a p-value of $0.000 < 0.05$ so that the hypothesis stating the availability of health facilities with basic immunization completeness status during a pandemic is accepted, which means that the availability of health facilities with basic immunization completeness status during a pandemic has a significant relationship. Shows that health facilities that provide immunization services during the COVID-19 pandemic are still well available, namely 86.7%. The results of the research conducted found that the posyandu under the working area of the Cibuyaya Health Center, Karawang Regency was closed during the COVID-19 pandemic and to get immunization services, mothers had to come directly to the puskesmas. Supported by research that has been conducted, it was found that health service facilities serving immunization programs during the COVID-19 pandemic at puskesmas and hospitals did not experience significant disruption. usually come to the posyandu to get immunizations while during the COVID-19 pandemic all posyandu were closed and transferred to the nearest health center.

The relationship between health workers and the completeness status of basic immunization during a pandemic

The support of health workers with the completeness of basic immunization status during the pandemic was found to be the most supported by good health workers and the completeness of basic immunization was good, as many as 49 respondents (65.3%). The results of the research test obtained a p-value of $0.014 < 0.05$ so that the hypothesis stating that health workers support with basic immunization completeness status during a pandemic is accepted, which means that the support of health workers with basic immunization completeness status during a pandemic has a significant relationship. These results are in line with research in line with Fitri Ekasari, it is known that out of 39 respondents with controlled health worker support, as many as 32 (82.1%) respondents carried out basic immunization properly and as many as 7 (17.9%) respondents carried out basic immunization in an inappropriate manner. appropriate. Of the 34 respondents with negative behavior control, as many as 18 (52.9%) respondents carried out basic immunization correctly, and as many as 16 (47.1%) respondents carried out basic immunization incorrectly. Statistical test results obtained p-value = 0.016, which means p-value $< \alpha$ (0.05).

V. CONCLUSION

Frequency distribution of basic immunization for toddlers Of the 75 respondents who were mostly mothers aged 26-35 years with good completeness of basic immunization, there were 43 respondents (57.3%). The results of the research test obtained a p-value of $0.010 < 0.05$ so that the hypothesis stating age with basic immunization completeness status during a pandemic failed to be rejected which means that age with basic immunization completeness status during a pandemic has a significant relationship. Effect of basic immunization on toddlers based on education during the pandemic (p value = 0.021). The effect of work with complete basic immunization status during a pandemic was obtained (p value of 0.002). Availability of facilities with basic immunization completeness status during a pandemic obtained a p value of 0.000 so that the hypothesis has a significant relationship. The support of health workers with basic immunization completeness status during a pandemic has a p-value of 0.014 so that the support of health workers with basic immunization completeness status during a pandemic has a significant relationship. Family support with completeness of basic immunization status during a pandemic was found to be the most with good family support and completeness of basic immunization (p value of $0.011 < 0.05$).

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