PREDISPOSITION FACTORS AFFECTING COMPLETENESS OF MEASLES RUBELLA (MR) BASIC VACCINATION DURING THE COVID-19

Muhamad Iqbal Akhmalbih¹, Astri Pinilih², ^{*}Tusy Triwahyuni^{3,} Devita Febriani Putri⁴

^{1,2,3,4} Malahayati University *Correspondence email: Tusitriwahyuni@malahayati.ac.id]

ABSTRAK FAKTOR-FAKTOR PREDISPOSISI YANG MEMPENGARUHI KELENGKAPAN VAKSINASI DASAR CAMPAK RUBELLA (MR) SELAMA COVID-19

Latar belakang: Imunisasi Measles Rubella (MR) diberikan guna mencegah penyakit campak dan rubela yang dapat menimbulkan masalah bagi masyarakat. Pemberian imunisasi dasar MR dijadwalkan pada bayi yang berusia 9 bulan. Pandemi COVID-19 telah mengganggu proses pelayanan kesehatan di dunia, termasuk kepada pelayanan imunisasi. Terdapat 3 faktor yang dapat menganalisa perilaku manusia pada tingkat kesehatan, diantaranya faktor predisposisi, faktor pendukung dan faktor pendorong.

Tujuan penelitian: Untuk mengetahui faktor predisposisi yang mempengaruhi kelengkapan imunisasi dasar Measles Rubella (MR) selama masa pandemi COVID-19 di wilayah kerja Puskesmas Gedong Air tahun 2021

Metode Penelitian: Jenis penelitian ini menggunakan metode deskriptif analitik dan menggunakan kuesioner pada responden ibu yang memiliki anak usia 9-15 bulan

Hasil Penelitian: Didapatkan sebagian besar kelengkapan imunisasi dasar Measles Rubella (MR) adalah lengkap (77.0%). Terdapat hubungan yang signifikan antara pengetahuan (p-value= 0.000), sikap (p-value=0.000), tingkat pendidikan (p-value=0.000) dan pekerjaan (p-value=0.007) dengan kelengkapan imunisasi dasar Measles Rubella (MR) selama masa pandemi COVID-19 di wilayah kerja Puskesmas Gedong Air tahun 2021.

Kesimpulan: Berdasarkan uji korelasi Spearman's didapatkan ada hubungan antara pengetahuan,sikap,pendidikan, dan pekerjaan dengan kelengkapan imunisasi dasar MR, dan berdasarkan uji regresi logistic variabel yang paling berpengaruh dengan kelengkapan imunisasi dasar MR adalah variabel sikap Saran kepada petugas kesehatan khususnya yang bekerja di puskesmas untuk memberikan penyuluhan dan bimbingan kepada ibu dan masyarakat sekitar tentang manfaat imunisasi dasar agar masyarakat mengerti bahwa imunisasi itu penting. imunisasi atau kejar, serta membuat jadwal yang teratur agar imunisasi bisa lengkap. Bagi dosen dan mahasiswa diharapkan dapat melakukan pengabdian kepada masyarakat dengan mengembangkan program penyuluhan dan promosi kesehatan bagi masyarakat khususnya mengenai manfaat imunisasi dasar untuk balita.

Kata Kunci : Imunisasi MR, Pekerjaan, Pendidikan, Pengetahuan, Sikap

ABSTRACT

Background: Measles Rubella (MR) vaccination is given to prevent measles and rubella which can cause problems for the community. Stopping the transmission of measles and rubella viruses is the goal of MR vaccination. Provision of basic MR vaccination is scheduled for infants aged 9 months. There are 3 factors that can analyze human behavior at the health level, including predisposition factors, supporting factors and driving factors.

Purpose: To determine the predisposition factors that affect the completeness of Measles Rubella (MR) basic vaccination during the COVID-19 pandemic in the Gedong Air Health Center working area in 2021

Methods: This type of research uses descriptive analytic methods and uses a questionnaire on mothers who have children aged 9-15 months

Results: Most of the completeness of Measles Rubella (MR) basic vaccination was complete (77.0%). There is a significant correlation between knowledge (p-value = 0.000), attitude (p-value = 0.000), education level (p-value = 0.000) and occupation (p-value = 0.007) with the completeness of Measles Rubella (MR) basic vaccination. during the COVID-19 pandemic in the working area of the Gedong Air Public Health in 2021.

Conclusion: Based on Spearman's correlation test, it was found that there was a correlation between knowledge, attitude, education, and occupation with completeness of basic MR vaccination, and based on logistic regression test the most influential variable with completeness of basic MR vaccination was attitude variable.

Suggestion to health workers, especially those who work at the puskesmas to provide counseling and guidance to mothers and the surrounding community, about the benefits of basic immunization so that the community understands that immunization is important. It is recommended for puskesmas to carry out immunizations or catch ups, and make a regular schedule so that immunization can be complete. For lecturers and students, it is expected to be able to perform community service by developing counseling programs and health promotion for the community, especially regarding the benefits of basic immunization for toddlers.

Keywords: Attitude, Education, Knowledge, MR Immunization, Occupation

INTRODUCTION

Children in good health is one of the goals of the WHO program on sustainable development called the Sustainable Develop**m**ent Goals (SDGs). The goal of the 3rd SDGs by 2030 is expected to end the deaths of toddlers and infants from preventable diseases (Yekti, 2020). One method to reduce mortality in toddlers is to improve immunization status in toddlers (Kowaas & Lolong, 2017). Immunization is one of the health interventions that are very cheap and effective, because it is tested to avoid and reduce pain, disability and death every year (Sari et al., 2018).

Immunization is taken from the word immune, which has the meaning of immune or resistant. Children who are immunized, means given immunity to a certain disease. Children who are given an immunization will be resistant or immune to a disease, but not necessarily immune to other diseases (Ministry of Health, 2019) The goal of immunization is to prevent and reduce pain rates, disability rates, and mortality by PD3I (Felicia & Suarca, 2020).

Complete basic immunization is a government program in an effort to fulfill the goals of the SDGs with the aim that babies can avoid infectious diseases (Ministry of Health, 2019). Complete basic immunizations include Polio, Hepatitis B, DPT, BCG, and Measles Rubella (MR). The five immunisai are commonly referred to as the Five Complete Basic Immunizations (LIL) which is an immunization program that must be given to infants under the age of 1 year (Rahmawati & Umbul, 2017).

Immunization data from the Ministry of Health of the Republic of Indonesia shows that immunization in January to August 2020 has decreased compared to 2019. For example, DPT-HB-HIB immunization coverage in 2019 was 98.6% and in 2020 it fell to 51.0%. MR immunization coverage in 2019 was 98.7% and in 2020 it was only 55.7%. IPV immunization also experienced a very significant decrease, from 97.3% in 2019 to 23.2% in 2020 (Mukhi & Medise, 2021).

Measles Rubella (MR) immunization is one of the immunizations given in the complete basic

immunization program (Ministry of Health of the Republic of Indonesia, 2017). MR immunization is given to prevent measles and rubella which can cause health problems and harm to the community. Stopping the transmission of measles and rubella viruses is the goal of MR immunization by using one type of vaccine that has benefits against two diseases at once (Ministry of Health, 2018). Basic MR immunization is scheduled for 9-month-old infants (IDAI, 2019).

Measles / measles is one of the infectious diseases that can be transmitted, caused by a virus and generally affects children and measles is an endemic disease in many countries in the world (Giarsawan, 2012). Measles can be transmitted from person to person through saliva splashes or can also spread in the airborne air borne as a nucleus droplet aerosol (Giarsawan, 2012). Symptoms of measles are characterized by fever, skin eruptions in the form of round patches on the skin that can cause death at a young age as well as individuals whose immune system is not strong enough (WHO, 2021).

Rubella is an infectious disease caused by the genus Morbillivirus virus. Symptoms of rubella appear about 10 days after infection. Symptoms of rubella disease include high fever, reddish patches on the skin (rash) can be accompanied by cough and or cold or conjunctivitis and can cause death if there are concomitant complications such as pneumonia, diarrhea, and meningitis. Rubella is a health problem that has various clinical impacts and can have adverse effects in the form of both mortality and morbidity. Rubella is included in minor diseases in children, but can have a bad impact if it occurs in first trimester pregnant women, namely miscarriage or disability in babies often called Congenital Rubella Syndrome (CRS) such as heart and eye abnormalities, deafness and developmental delays (Pratiwi et al., 2021).

According to WHO data, there were about 87 thousand cases of measles infection in the world in 2019, with the death toll reaching 200 thousand deaths. This figure represents an increase in the death rate of up to 50% since 2016 (WHO, 2020). Global rubella cases occurred in 2016 estimated at

22,361 people with babies born CRS from rubella disease (World Health Organization, 2012).

The prevalence of measles cases per 100 thousand people in Indonesia in 2011 to 2015 tends to decrease, from 9.2 to 5.6 cases per 100 thousand population. However, the prevalence of measles cases tends to increase from 2015 to 2017, from 3.2 to 5.6 cases per 100 thousand population. (Statistics, Central Intelligence Agency, 2020)

According to the Central Statistics Agency of Lampung Province, the percentage of toddlers who received measles immunization in 2012-2015 tended to decrease, in 2012 by 80.64%, in 2013 it was 81.15%, in 2014 it was 80.68% and in 2015 it was 77.76%. Meanwhile, measles immunization coverage in Bandar Lampung City increased slightly in 2012 by 77.88%, in 2013 by 75.49%, in 2014 by 77.38% and in 2015 78.50% (Statistics, Central Statistics Agency, 2020).

According to Lawrence Green's theory, there are 3 factors that can analyze human behavior at the health level, including predisposing factors that include knowledge, attitudes, education levels, work, and values. Enabling factors that include the availability of health facilities, or health facilities. Reinforcing Factors that include the attitudes and behavior of health workers or other officers who are a reference group of community behavior (Nisa, 2018).

The COVID-19 pandemic has disrupted the health service process in the world, including immunization services (Kirmani & Saleem, 2021). Many health facilities and health workers are assigned to provide services in COVID-19 cases so that other essential health services, such as immunizations become neglected (Roberton et al., 2020).

In this era of the COVID-19 pandemic. immunization implementation must be completed according to the schedule. It aims to protect the child. The provision of immunization services in the era of the COVID-19 pandemic was carried out following local government policies, based on the results of epidemiological analysis of the spread of COVID-19. Routine immunization coverage, and the epidemiological situation of PD3I, during the COVID-19 pandemic era showed that private clinics and hospitals became the main places to get immunization services for children and infants (Ministry of Health of the Republic of Indonesia, 2020).

Based on the results of research conducted (Putri et al., 2021) on the differences in the implementation of immunization services during the COVID-19 pandemic and non-COVID-19 pandemic at the Massenga Polewali Mandar Health Center, it can be concluded that there are differences in the coverage of basic immunization services during the pandemic and before the COVID-19 pandemic at the Massenga Polewali Mandar Health Center.

Based on other research conducted by (Nurhasanah, 2021) obtained results related to the provision of basic immunization services during the COVID-19 pandemic decreased and affected the number of immunizations. Factors that can affect this are the main goals of health services in the case of COVID-19, the implementation of lockdowns, physical-social distancing, self-isolation and inhibition of vaccine dose distribution.

Puskesmas Gedong Air is a Puskesmas located in Tanjung Karang Barat district, Bandar Lampung City. Based on data from the recapitulation table of immunization coverage of the Bandar Lampung City Health Office, MR basic immunization coverage at gedong air health center in 2020 decreased by 5.9%, from 96.2% in 2019, to 90.3% in 2020.

Based on the facts and descriptions above, researchers want to know the predisposing factors that affect the completeness of MR basic immunization during the COVID-19 pandemic in the Gedong Air health center work area in 2021.

RESEARCH METHODOLOGY

This research uses descriptive analytical methods and research design using a Cross Sectional approach.

Sampling using the Total Sampling technique. The sample is taken by taking the entire population. The sample in this study was mothers who had babies aged 9-15 months in the Gedong Air health center work area as many as 61 people in accordance with the criteria of inclusion and exclusion.

Criteria inclusion in this study, namely, responden is willing to be the object of research, mothers who has a child immunization record (KMS / immunization card / other card that records immunization data), mothers who have children aged 9-15 months, mothers who live in the work area of Gedong Air Health Center. Exclusion criteria in this study are respondents (mothers) who work as health workers and mothers with physical limitations such as illiteracy, deafness, and mental disorders.

This research instrument uses a questionnaire consisting of a knowledge questionnaire taken from the study (Irmatiffani A, 2015) as many as 20 questions and an attitude questionnaire taken from the study (Bella Rena Safira, 2013) as many as 15 questions. The

questionnaire was conducted a validity test with a r hitung value of > an r table value (0.361) and a knowledge rehabilitation test of 0.951>0.60 and an attitude of 0.906>0.60 and this study also used the book KMS (Card towards Healthy) to see the completeness status of childhood immunization.

Independent variables in the study were maternal knowledge, maternal attitudes, maternal education and maternal employment. Meanwhile, dependent variables, namely the completeness of basic polio immunization during the COVID-19 pandemic obtained by the interview method using questionnaires.

The bivariate data analysis used in this study

is Spearman's correlation test, and the multivariate analysis in this study is a logistic regression test.

RESEARCH RESULT

This research was carried out in the working area of Gedong Air Health Center, in February 2022. This data was obtained by recording the basic MR immunization data at the Gedong Air health center and then researchers came to the respondents' homes by conducting interviews through the distribution of knowledge and attitude questionnaires, and looking at the KMS book to assess the completeness of basic MR immunization.

 Table 1.

 Distribution of Respondent Characteristic Frequency in the working area of Gedong Air Health Center in 2021

Characteristics of Respondents	Sum (n)	Percentage (%)
Child's Age	, ,	
9 months	12	19.7%
10 months	8	13.1%
11 months	10	16.4%
12 months	15	24.6%
13 months	4	6.6%
14 months	7	11.5%
15 months	5	8.2%
Child Gender		
Man	31	50.8%
Woman	30	49.2%
Mother's Age*		
Young age (<20 years old)	0	0.0%
Ideal Age (20 – 35 years)	56	91.8%
Old Age (> 35 years old)	5	8.2%
Total	61	100%

*(Anggraini, D, 2021)

Based on table 1 above of 61 respondents, most mothers are ideally aged (20-35 years) as many as 56 (91. 8%) people. The age category of children is mostly 12 months old as many as 15 people (24. 6%) and the sex category of children are mostly men as many as 31 people (50.8%)

Based on Table 2 above of the 61 respondents based on the completeness of the most basic MR immunization is complete as many as 47 people (77. 0%) people and incomplete as many as 14 people (23.0%)

Table 2. Distribution of Respondent Frequency Based on MR Basic Immunization Completeness

MR Immunization Completeness	Sum (n)	Percentage (%)
Incomplete	14	23.0%
Complete	47	77.0%

Table 3. Distribution of Respondent Frequency Based on Maternal Knowledge

Knowledge	Sum	Percentage

	(n)	(%)
Less	4	6.6%
Enough	15	24.6%
Good	42	68.9%
Sum	61	100%

Based on Table 3 above of the 61 respondents have the most good knowledge as many as 44 people (68. 9%), enough knowledge as many as 15 people (24. 6%) and less knowledge as many as 4 people (6.6%).

Table 4.

Distribution of Respondent Frequency Based on Attitude

Attitude	Sum (n)	Percentage (%)
Bad	10	16.4%
Good	51	83.6%
Sum	61	100%

Based on Table 4 above the table above of the 61 respondents most have a good attitude as many as 51 people (83. 6%) people and bad attitudes as many as 10 people (16. 4%).

Table 5
Distribution of Respondent Frequency By Education Level

Education Level	Sum (n)	Percentage (%)
Low (SD, TS)	20	32.8%
Medium (Junior High School, High School, Vocational School)	35	57.4%
High (PT)	6	9.8%
Sum	61	100%

Based on Table 5 above of 61 respondents have the highest level of secondary education (junior high school, high school, vocational school) as many as 35 people (57.4%), low education (SD, TS) as many as 20 people (32.8%), and education high (PT) as many as 6 people (9.8%).

Based on Table 6 above, the 61 respondents did not work as many as 44 people (72). 1%), and worked as many as 17 people (27.9%).

Table 6
Distribution of Respondent Frequency By
Occupation

Work	Sum (n)	Percentage (%)
Not Working	44	72.1%
Work	17	27.9%
Sum	61	100%

Та	bl	е	7
		•	

Maternal Knowledge Relationship with Basic MR Immunization Completeness During the COVID-19 Pandemic in the Gedong Air Health Center Work Area in 2021

Knowledge	Basic Immunization Completeness (MR)			_			
	Not yet		yet Complete Total	p- value	r		
	n	%	n	%	-		
Not good enough	3	75.0	1	25.0	4		
Enough	7	46.7	8	53.5	15	0.000 0.49	0.492
Good	4	9.5	38	90.5	42		

Based on Table 7 obtained the results of the analysis there is a significant relationship between knowledge with the completeness of basic measles rubella (MR) immunization with obtained a value of p-value = 0.000 and also displays a correlation value of 0.492. This value shows the relationship between knowledge and completeness of basic measles rubella (MR) immunization that is of positive value with moderate level of fatigue.

Table 8
Relationship of Maternal Attitudes with MR Basic Immunization Completeness During the COVID-19
Pandemic in the Gedong Air Health Center Work Area in 2021

		Basic Immunization Completeness (MR)					
Attitude	No	ot yet	Con	nplete	Total	p- value	r
	n	%	n	%	-		
Bad	8	80.0	2	20.0	10	0.000	0.601
Good	6	11.8	45	88.2	51	0.000	0.601

Based on Table 8 obtained the results of the analysis there is a significant relationship between attitude with the completeness of basic measles rubella immunization (MR) with obtained a value of p-value = 0.000 and also displays a correlation value of 0.601. This value shows the relationship between

attitude and completeness of basic measles rubella (MR) immunization of positive value with a strong level of strength. From the above results, it can be interpreted that the better the attitude of respondents, the more it improves the completeness of basic MR immunization.

 Table 9

 Maternal Education Relationship With MR Basic Immunization Completeness During the COVID-19

 Pandemic in the Gedong Air Health Center Work Area in 2021

Education		Basic Imm Complete					
	No	Not yet		nplete	Total	p- value	r
	n	%	Ν	%	_		
Low	10	50.0	10	50.0	20		
Intermediate	4	11.4	31	88.6	35	0.000	0.445
Tall	0	0.0	6	100.0	6		

Based on table 9 above obtained the results of the analysis there is a significant relationship between the level of education with the completeness of basic immunization Measles Rubella (MR) with obtained a value of p-value = 0.000 and also displays a correlation value of 0.445. This value shows the relationship between the level of education and the completeness of the basic measles rubella (MR) immunization that is of positive value with the level of moderate fatigue.

Table 10.

Maternal Employment Relations With MR Basic Immunization Completeness During the COVID-19 Pandemic in the Gedong Air Health Center Work Area in 2021

Work		Basic Imm Complete		Total			
	Not yet		Complete		Total	p- value	ſ
	n	%	n	%	-		
Not working	14	31.8	30	68.2	44	0.007	0 220
Work	0	0.0	17	100.0	17	0.007	0.339

Based on table 10 above obtained the results of the analysis there is a significant relationship between work with the completeness of basic measles rubella (MR) immunization with obtained a value of p-value = 0.007. This value shows the relationship between work and the completeness of basic measles rubella (MR) immunization that is of positive value with moderate fatigue levels.

Table 11.
Regression Test Results To find out The Variables Most Related To MR Basic Immunization
Completeness

Verieble	n voluo	OR	95% C.I For Exp (B)		
Variable	p-value	Adjusted	Lower	Upper	
Education	.524	1.845	200		
Knowledge	.009	11.376	.280 1.813	12.160 71.380	
Attitude	.036	12.200			
Work	.998	7.628	1.170	127.175	
Constant	.008	.005	.000		

Based on the data of table 11 above obtained the results of knowledge and attitude is a variable that affects the provision of MR immunization in toddlers at the Gedong Air Health Center, and attitude has the largest OR value among other variables of 12.20 which means that the mother's attitude is the dominant factor for the completeness of basic MR immunization in children aged 9-15 months in the Gedong Air Health Center Work Area in 2021

DISCUSSION

The Relationship of Maternal Knowledge With The Completeness of Basic IMMUNIZATION MR

From the results of the above study obtained from the 61 respondents who have the most good knowledge as many as 42 people (68.9%). Based on the results of the above research obtained the results of the analysis there is a significant relationship between knowledge with the completeness of basic measles rubella (MR) immunization with obtained a value of p-value = 0.000 and also displays a correlation value of 0.492. This value shows the relationship between knowledge and completeness of basic measles rubella (MR) immunization that is of positive value with moderate level of fatigue.

The results of this study are in line with the study (Amilia Astuti S, 2019) which shows knowledge has a relationship with the immunization of MR in toddlers in the work area of Pusekesmas Pijorkoling (p-value = 0.003). The results of this study are also in line with the research (Mathica Naibaho, 2021) obtained results that there is a meaningful relationship between knowledge and the immunisation of MR (p-value 0.001).

In line with Green's theory in (Notoatmodjo, 2018) that knowledge is one of the predisposing factors (predisposing factors) to the occurrence of behavior changes. Knowledge is a very important domain for the formation of a person's actions, because from experience it turns out that knowledge-

based behavior will be more lasting than behavior that is not based on knowledge.

According to Sunaryo, knowledge or cognitive becomes an important domain in shaping a person's actions or behavior. The level of knowledge in the cognitive domain includes six levels, including knowing, understanding, applying, analyzing, synthesizing, and evaluating (Sunaryo, 2004).

From the results of the above research, researchers argue that someone who already knows about a certain information, then he will be able to determine and make decisions about how he should deal with it. In other words, Knowledge about basic immunisance MR has important role, because mothers who have good knowledge about basic MR immunization will influence their behavior in giving MR base immunization to their children. Still the discovery of rejection of MR immunization in the community is caused by the mother's poor knowledge of MR immunization. This is due to the new MR immunization program and rubella disease that is not familiar to the mother. The emergence of negative news about MR immunization also greatly affects the perception of mothers about MR immunization.

Relationship of Mother's Attitude With The Completeness of Basic IMMUNIZATION MR

From the results of the above study obtained from 61 respondents have the most good attitudes as many as 51 people (83.6%). Based on the results of the above research obtained the results of the analysis there is a significant relationship between attitudes with the completeness of basic measles rubella (MR) immunization with obtained a value of p-value = 0.000 and also displays a correlation value of 0.601. This value shows the relationship between attitude and completeness of basic measles rubella (MR) immunization of positive value with a strong level of strength.

The results of this study are in line with the study (Amilia Astuti S, 2019) which shows attitudes

related to the immunization of MR in toddlers in the Pusekesmas Pijorkoling work area (p-value = 0.003). The results of this study are also in line with the study (Keswara et al., 2020) obtained that there is a meaningful relationship between attitudes and the immunisation of MR (p-value 0.020).

Attitude is a closed response that involves opinion and emotion factors towards a certain object (stimulus). Attitudes also involve thoughts, feelings, concerns, and other psychological symptoms. Attitude is something that describes a person's likes or dislikes towards objects. Attitudes are obtained from one's own experience or from others. Attitude is how the opinion or assessment of people or respondents on matters related to Tan's health. Positive and negative attitudes towards health values do not always manifest in a real action (Notoatmodjo, 2018).

Manifestations of attitudes cannot be seen directly but can only be interpreted in advance from closed behavior. Attitude clearly indicates the connotation of the conformity of reactions to certain stimuli that in everyday life are emotional reactions to social stimuli (Notoatmodjo, 2018).

From the results of the study above, researchers argue that respondents who are proven to have a good attitude still have respondents who do not provide MR immunization to toddlers. This also happened to respondents who had a bad attitude, but there were still respondents who gave MR immunization to toddlers. The attitude of respondents who do not agree to provide MR immunization is caused by the child's fear of fever after immunization and the presence of negative information about MR immunization for health, such as MR immunization can cause a person to experience paralysis and death so that respondents are less accepting of the implementation of MR immunization, as well as respondents' doubts about the halalness of the MR vaccine religiously so that respondents are afraid to give MR immunization.

Relationship of Maternal Education Level With Basic Immunization Completeness of MR

From the results of the above study obtained from 61 respondents have the highest level of secondary education as many as 35 people (57.4%). Based on the results of the above research obtained by the results of the analysis there is a significant relationship between the level of education and the completeness of basic measles rubella (MR) immunization with obtained a value of p-value = 0.000 and also displays a correlation value of 0.445. This value shows the relationship between the level of education and the completeness of the basic measles rubella (MR) immunization that is of positive value with the level of moderate fatigue. The results of this study are in line with research by (Yuliani, 2019) where the results obtained there is a meaningful relationship between the level of education and measles rubella (MR) immunization coverage with obtained a value of p-value = 0.021.

Education is essentially aimed at changing the behavior of educational targets. The new behavior (the result of the change) is formulated in an educational objective (educational objective), so that the purpose of education is basically a description of the knowledge, attitudes, actions, appearances and so on that are expected to be possessed by educational targets during the period. certain (Triana, 2017).

Not having a degree of education obtained by someone from formal school can affect one's knowledge. Health education can help mothers or community groups in addition to increasing knowledge also to improve their behavior to achieve optimal health degrees. The level of education and knowledge of mothers greatly affects the implementation of child/infant immunization activities, both formal and non-formal education (Rahmawati & Umbul, 2017).

From the results of the above research, researchers argue that a mother's level of education will affect the mother's willingness to give her baby complete immunization, because if a person has a higher education then most likely the mother has good knowledge or understanding of something, but not all low-educated mothers do not provide complete immunization to the baby, Vice versa, not all highly educated mothers provide complete immunizations to their babies. Mothers who are highly educated will automatically have better insight so that with good insight they will contribute to their behavior in coming to health facilities to obtain rubella measles immunization for their babies.

Mother's Work Relationship With Basic Immunization Completeness of MR

From the results of the above study obtained from 61 respondents mostly did not work as many as 44 people (72.1%). Based on the results of the above research obtained the results of the analysis there is a significant relationship between work with the completeness of basic measles rubella (MR) immunization with obtained a value of p-value = 0.007 and also displays a correlation value of 0.339. This value shows the relationship between work and the completeness of basic measles rubella (MR) immunization that is of positive value with moderate fatigue levels.

The results of this study are in line with the study (Gustina et al., 2020) where the results were obtained there was a relationship between the mother's employment status and the completeness of complete basic immunization in children under five (p-value = 0.001). The results of the study (Azis et al., 2020) with the title Factors related to the coverage of complete basic immunization in children in the pattingalloang Health Center work area. Chi-Square test results showed a relationship between the mother's work and complete basic immunization coverage in infants (p=0.020).

The mother's employment status is related to the opportunity to immunize her child. A mother who does not work will have the opportunity to immunize her child compared to a working mother. Mothers who work outside the home often do not have the opportunity to come to the immunization service because it is possible that when the immunization service is carried out, the mother is still working at her work place.

From the results of the above research , researchers argue that the mother's employment status is related to the opportunity to immunize her child. In addition , not all working mothers have incomplete immunizations in their babies, but the results of the researchers' research also show that working mothers also have a great opportunity to get complete basic immunizations in their babies, this is influenced by the level of willpower and knowledge of the mother is good.

Multivariate Test

Based on the results of the above research, it can be known that from the results of multivariate modeling obtained the results of knowledge and attitude are variables that affect the provision of MR immunization in toddlers at the Gedong Air Health Center, and also the attitude has the largest OR value among other variables of 12.20 which means that the mother's attitude is the dominant factor for the completeness of basic MR immunization in children aged 9-15 months in the Gedong Air Center Working Area year. 2021.

The results of the multivariate analysis above are different from the study (Keswara et al., 2020), where the variables related to the provision of MR immunization are knowledge variables. Similarly, research conducted by (Triana, 2017) where the most influential variable is a motivational variable.

From the results of the above research, researchers argue that there is a difference in the dominant factors to the completeness of basic immunization in children due to differences in predisposing factors (predisposing factors) from each respondent from each researcher that are manifested in knowledge, attitudes, beliefs, beliefs, values, traditions, and other elements. In addition, strengthening factors / environment (number of children in the household, the role of immunization officers, the role of friends, the role of husbands and families, the role of village shamans in childbirth and treatment services, the role of religious leaders , community support, environmental factors, community culture and the provision of information related to immunization.

CONCLUSION

There is a significant relationship between knowledge (p-value = 0.000), attitude (p-value = 0.000), education level (p-value = 0.000) and employment (p-value = 0.007) with the completeness of measles rubella (MR) basic immunization during the COVID-19 pandemic in the gedong Air Health Center work area in 2021.

SUGGESTION

It is recommended to health workers, especially those who work at the puskesmas to provide counseling and guidance to mothers and the surrounding community, about the benefits of basic immunization so that the community understands that immunization is important. It is recommended for puskesmas to carry out immunizations or catch ups, and make a regular schedule so that immunization can be complete. For lecturers and students, it is expected to be able to perform community service by developing counseling programs and health promotion for the community, especially regarding the benefits of basic immunization for toddlers.

It is hoped that researchers can further continue the same research by involving different risk factors that can affect the completeness of basic MR immunization in children.

REFERENCE

- Amilia Astuti S. (2019). Faktor Yang Berhubungan Dengan Pemberian Imunisasi Measles Rubella (Mr) Pada Balita Di Wilayah Kerja Puskesmas Pijorkoling Kota Padangsidimpuan Tahun 2019. https://repositori.usu.ac.id/bitstream/handle/1 23456789/24337/151000043.pdf?sequence= 1&isAllowed=y
- Anggraini, D, F. (2021). Faktor-faktor yang memengaruhi kelengkapan imunisasi dasar pada anak dari ibu pekerja buruh di wilayah kerja uptd puskesmas suka damai musi banyuasin.

Azis, A., Nurbaya, S., & Sari, A. P. (2020). Faktor

yang berhubungan dengan cakupan pemberian imunisasi dasar lengkap pada anak di wilayah kerja Puskesmas Pattingalloang. 15, 168–174.

- Depkes. (2019). Kementerian Kesehatan Republik Indonesia. In Kementerian Kesehatan RI. https://www.depkes.go.id/article/view/190201 00003/hari-kanker-sedunia-2019.html
- Felicia, F. V., & Suarca, I. K. (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.

https://doi.org/10.14238/sp22.3.2020.139-45

- Giarsawan, N. I. W. S. A. A. E. Y. (2012). Campak Di Wilayah Puskesmas Tejakula I Kecamatan Tejakula Kabupaten Buleleng Tahun 2012. Jurnal Kesehatan Lingkungan, 4(2), 140–145.
- Gustina, L., Wardani, P. K., & Maesaroh, S. (2020). Faktor-faktor yang berhubungan dengan kelengkapan pemberian imunisasi dasar lengkap pada balita usia 9-18 bulan. Wellness And Healthy Magazine, 2(2), 337–347. https://doi.org/10.30604/well.022.82000112
- IDAI. (2019). IDAI | Apakah Infeksi Campak? https://www.idai.or.id/artikel/seputarkesehatan-anak/apakah-infeksi-campak
- Irawati, N. A. V. (2020). Imunisasi Dasar dalam Masa Pandemi COVID-19. Jurnal Kedokteran Unila, 4(2), 205–210.
- Kemenkes RI. (2017). Petunjuk Teknis Kampanye Imunisasi Measles Rubella (MR). Petunjuk Teknis Kampanye Imunisasi Measles Rubella (MR), 208.
- Kementerian Kesehatan Republik Indonesia. (2017). Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/Menkes/117/2017 tentang Pelaksanaan kampanye dan introduksi imunisasi Japanese encephalitis di Provinsi Bali. 1–5.
- Kementerian Kesehatan RI. (2018). Sayangi buah hati Anda dengan Imunisasi (MR). Kementerian Kesehatan Republik Indonesia, 6.
- Kementrian Kesehatan Republik Indonesia. (2020). Petunjuk Teknis Pelayanan Imunisasi Pada Masa Pandemi COVID-19. https://infeksiemerging.kemkes.go.id/downlo ad/Final_Juknis_Pelayanan_Imunisasi_pada _Masa_Pandemi_COVID-19.pdf
- Keswara, U. R., Eriyani, E., & Adinata, S. (2020). Tingkat pengetahuan, sikap dan perilaku ibu dalam pemberian imunisasi MR (Measles

Rubella) pada anak usia 9 bulan–5 tahun. Holistik Jurnal Kesehatan, 14(1), 67–73. https://doi.org/10.33024/hjk.v14i1.1615

- Kirmani, S., & Saleem, A. (2021). Impact of COVID-19 pandemic on paediatric services at a referral centre in Pakistan: lessons from a low-income and middle-income country setting. 106(7). https://doi.org/10.1136/archdischild-2020-319424
- Kowaas, I. N., & Lolong, J. (2017). Status Imunisasi Dengan Kelengkapan Imunisasi Dasar. 5.
- Marmi, S. S., & Kukuh, R. (2018). Asuhan neonatus,bayi,balita dan anak prasekolah (J. Yuniarto (ed.)). PUSTAKA PELAJAR.
- Mathica Naibaho, E. (2021). Hubungan faktor-faktor yang memengaruhi kelengkapan imunisasi dengan kepatuhan imunisasi MR (Measles Rubella) lanjutan di wilayah kerja Puskesmas Air Rami Kabupaten Muko-muko Bengkulu. Tarumanagara Medical Journal, 4(1), 85–92.
- Mukhi, S., & Medise, B. E. (2021). Faktor yang Memengaruhi Penurunan Cakupan Imunisasi pada Masa Pandemi Covid-19 di Jakarta. Sari Pediatri, 22(6), 336. https://doi.org/10.14238/sp22.6.2021.336-42
- Nisa, N. K. (2018). ... Reminder Berbasis Short Message Service Dengan Pendekatan Teori Lawrence Green Terhadap Peningkatan Kualitas Hidup Klien
- Notoatmodjo. (2018). Metodologi Penelitian Kesehatan. PT RINEKA CIPTA.
- Nurhasanah, I. (2021). Pelayanan Imunisasi Di Masa Pandemi Covid-19 : Literatur. Jurnal Ilmu Keperawatan Dan Kebidanan, 12(1), 104– 108.
- Pratiwi, D., Rumini, R., & Hajar, S. (2021). Faktor yang Memengaruhi Keikutsertaan Ibu yang Memiliki Anak Umur >9 Bulan-5 Tahun untuk Imunisasi MR (Measles Rubella) di Lingkungan 1 Kelurahan Bingai Kabupaten Langkat. Jurnal Bidan Komunitas, 4(2), 71– 81. https://doi.org/10.33085/jbk.v4i2.4849
- Putri, A. M., Saharuddin, S., & Fitriani, R. (2021). Perbandingan Pelaksanaan Imunisasi pada Masa Pandemi dan Non Pandemi Covid-19 di Puskesmas Massenga Polewali Mandar. UMI Medical Journal, 6(1), 10–19. https://doi.org/10.33096/umj.v6i1.127
- Rahmawati, A. I., & Umbul, C. (2017). Faktor Yang Mempengaruhi Kelengkapan Imunisasi Dasar Di Kelurahan Krembangan Utara. 35(3), 158– 172.
- Roberton, T., Carter, E. D., Chou, V. B., Stegmuller, A. R., Jackson, B. D., Tam, Y., Sawadogo-

Lewis, T., & Walker, N. (2020). Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. The Lancet. Global Health, 8(7), e901. https://doi.org/10.1016/S2214-109X(20)30229-1

- Sari, R. M., Effendi, S., & Dewi, E. M. (2018). Faktor– Faktor Yang Berhubungan Dengan Pemberian Imunisasi Campak Pada Bayi Di Wilayah Kerja Puskesmas Sawah Lebar Kota Bengkulu Tahun 2017. Jurnal Ilmiah Ar-Rum Salatiga, Vol.3(No.1).
- Statistik, Badan PusatStatistik, B. P. (2020). B. P. S. https://www. bps. go. id/indicator/30/211/1/persentase-balita-yangpernah-mendapat-imunisasi-campak. htm. (2020). Badan Pusat Statistik. https://www.bps.go.id/indicator/30/211/1/pers entase-balita-yang-pernah-mendapatimunisasi-campak.html
- Triana, V. (2017). Faktor Yang Berhubungan Dengan Pemberian Imunisasi Dasar Lengkap Pada Bayi Tahun 2015. Jurnal Kesehatan

Masyarakat Andalas, 10(2), 123. https://doi.org/10.24893/jkma.v10i2.196

- WHO. (2020). Worldwide measles deaths climb 50% from 2016 to 2019 claiming over 207 500 lives in 2019. https://www.who.int/news/item/12-11-2020-worldwide-measles-deaths-climb-50-from-2016-to-2019-claiming-over-207-500-lives-in-2019
- WHO. (2021). MODUL 1 Sejarah pengembangan vaksin - Dasar Keamanan Vaksin WHO. https://in.vaccine-safety-training.org/historyof-vaccine-development.html
- World Health Organization. (2012). Global Measles & Rubella Strategic Plan. Dcp-3.Org, 1–44. http://www.who.int/about/licensing/copyright_ form/en/index.html
- Yekti, R. (2020). SDGs (Sustainable Development Goals) Dan 1000 Hari Pertama Kehidupan.
- Yuliani, Y. (2019). Beberapa Faktor yang Mempengaruhi Cakupan Imunisasi Campak Rubella (MR) pada Bayi Usia 24 Bulan. Jurnal Ilmiah Kebidanan Indonesia, 9(01), 1–11. https://doi.org/10.33221/jiki.v9i01.208