

FACTORS RELATED TO THE COMPLETENESS OF BASIC IMMUNIZATION IN INFANTS IN THE WORKING AREA OF THE DUREN SERIBU HEALTH CENTER IN DEPOK CITY IN 2022

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ABSTRACT

Immunization is one of the efforts made by the government to reduce mortality in infants and toddlers. Immunization is adequate primary prevention to prevent infectious diseases that can be prevented through immunization. According to the Ministry of Health, the number of complete basic immunization coverage in 2020 will be the lowest during 2011-2020. To determine the factors in mothers related to the completeness of primary immunization for infants in the working area of the Duren Seribu Health Center, Depok City, in 2022. This study was an analytical research type with a cross-sectional design. This study uses purposive sampling with a total sample of 92 respondents. Data were collected using a questionnaire, and the data collected were analyzed using the chi-square test. Statistical results showed that 84.8% of mothers provided complete primary immunization. The results of the bivariate test with $\alpha = 0.05$ were found; there is a significant relationship between the mother's knowledge (p -value = 0.002), a number of children (p -value = 0.016), availability of health facilities (p -value = 0.003) and family support (p -value = 0.000) with the completeness of primary immunization, there is no relationship between maternal education (p -value = 0.705), mother's employment status (p -value = 1,000), family income (p -value = 0.949), affordability to health services (p -value = 0.729) and the role of health workers (p -value = 0.176) with basic immunizations. Factors related to completeness of immunization in infants are the mother's knowledge (p -value = 0.002), the number of children (p -value = 0.016), availability of health facilities (p -value = 0.003), and family support (p -value = 0.000). It is hoped that mothers will be more active in seeking information about basic immunizations that should be given to babies.

Keywords: Basic immunization, factors, baby

INTRODUCTION

The World Health Organization (WHO) notes that more than 12 million children under the age of five die each year worldwide, and about 2 million are caused by diseases preventable by immunization (WHO, 2014). PD3I is also the cause of the death of 2-3 million children annually. In addition, more than 19 million children worldwide are not immunized or immunized, which puts them at high risk of developing potentially deadly diseases. 1 in 10 children is never vaccinated and often goes undetected by the health system (Kemenkes, 2016).

The complete basic immunization coverage in Indonesia needs to meet the target of the Ministry of Health's Strategic Plan (Rienstra). In 2020, the target of full basic immunization coverage in Indonesia was 95%, while the achievement is only 82.6%. The complete introductory immunization coverage rate in 2020 was the total absolute coverage rate during 2011-2020 due to the COVID-19 pandemic (Kemenkes RI, 2021).

In addition to immunization coverage, one of the indicators of the success of the immunization program is the achievement of Universal Child Immunization (UCI). In 2020 the range of UCI villages in Indonesia was 59.2%. When viewed by province, the two areas have achieved 100% of UCI village/kelurahan coverage, namely Central Java Province and Yogyakarta D.I., while for the percentage regencies/cities that reached 80% complete primaryunization in 2020 according to province, Bali Province, D.I.Yogyakarta Province and Jambi Province are the provinces with the highest coverage, namely 100% each (Kemenkes RI, 2021).

Immunization coverage in the West Java region decreased from 2019 by 98.9% to 89.3% in 2020, with HB0 immunization coverage of 94.7%, BCGat 85.4%, DPT-HB3 93.5%, poat ,lio 95% and measles at 92.7%. Meanwhile, the UCI village/kelurahan coverage decreased from 93.7% in 2019 to 82.2% in 2020. Depok City is one of the cities in West Java that has experienced a decrease in the coverage of UCI villages/kelurahan. Based on data from the Depok City Health Office, it is known that the achievement of UCI village/kelurahan coverage in Depok City in 2019 was 100%, while in 2020, the coverage of UCI villages/kelurahan decreased to 79.4%, meaning that there are still villages/kelurahan that have not reached the UCI target (Dinkes Jawa Barat, 2020).

Based on data from the Depok City Health Office in 2020, of the 38 Health centers in the Depok City area, the complete basic immunization coverage at the Duren Seribu Health Center is still relatively low at only 65. These data show no immunization coverage meets the set of $\geq 80\%$. In addition, Duren Seribu Health Center is also the area with the lowest UCI village/kelurahan coverage; out of 3 villages/kelurahan, only one village/kelurahan can achieve the UCI target.

There are many factors why mothers do not take their children to health facilities for immunization. Based on the results of research conducted by Surury *et al.* (2021), it was found that there was an influence on knowledge, education, employment, income, maternal attitudes, and family support on maternal incompleteness in providing basic immunizations to children. Another study conducted by o related to factors that affect the provision of basic immunizations obtained the results of the influence of family support, material motivation, maternal attitudes, level of knowledge, maternal actions, and health services with primary vaccination.

Based on this background, the researcher needed to research the Factors Related to the Completeness of Basic Immunization in Infants in the Duren Seribu Health Center Working Area, Depok City in 2022.



METHOD

This study's research type is analytical descriptive research with a quantitative approach. The study design used is cross-sectional, which takes place from February-May 2021. This research was conducted in the Working Area of the Duren Seribu Health Center in Depok City. The sampling technique in this study used a non-probability sampling technique with the purposive sampling method. The sample chosen was a mother who had a baby aged 11-23 months in the work area of the Duren Seribu Health Center, with a total sample of 92 respondents based on a two-proportion difference test. Data collection was carried out using primary data from respondents through the questionnaire provided so that data were obtained from factors related to the completeness of primary immunization in the work area of the Duren Seribu Health Center.

The analysis in this study was carried out in two stages, namely univariate analysis to determine the frequency distribution of dependent variables (completeness of primary immunization) and independent variables (maternal education, maternal knowledge, maternal employment status, family income, number of children, availability of health facilities, affordability to health service places, family support, the role of health workers) which was then interpreted descriptively, and the second was the analysis of bivariate to find out the relationship between independent variables to dependent variables. This study used the chi-square test to conclude the relationship between the two variables.

The measurement of the dependent variable (completeness of immunization status) was carried out by looking at the respondent's KMS / MCH book for the variables of maternal education, maternal knowledge, maternal employment status, family income, number of children, availability of health facilities, family support and the role of health workers were measured using questionnaires. The affordability variable to health care facilities was measured by a questionnaire referring to risks in 2018.

RESULTS AND DISCUSSION

Table 1 shows that mothers who provide complete basic immunizations to babies are 84.8% and mothers who provide basic immunizations to babies incompletely as much as 15.2%.

Table 1. Frequency Distribution of Variables

Variable	n	%
Immunization Status		
Complete	78	84.8
Incomplete	14	15.2
Maternal Education		
Tall	76	82.6
Low	16	17.4
Mother's Knowledge		
Good	51	55.4
Less	41	44.6

Variable	n	%
Mother's Employment Status		
Not Working	57	62
Working	35	38
Family Income		
Tall	49	53.3
Low	43	46.7
Number of Children		
≤ two children	60	65.2
> two children	32	34.8
Availability of Health Facilities		
Available	89	96.7
Not Available	3	3.3
Affordability to Health Care Settings		
Affordable	74	80.4
Unaffordable	18	19.6
Family Support		
Support	74	80.4
Not Support	18	19.6
The Role of Health Officers		
Active	82	89.1
Inactive	10	10.9

The results of the analysis on maternal education variables are known to be as many as 82.6% of highly educated mothers, in the knowledge variables known to mothers who have good knowledge about primary immunization in babies as much as 55.4% and most mothers who are not working, namely as much as 62%. In the family income variable, 53.3% of mothers have a family income of \geq Rp. Four million three hundred seventy-seven thousand two hundred thirty-one are categorized into high incomes, and 65.2% of mothers have \leq 2 children. In addition, it can also be seen that as many as 96.7% of mothers stated the availability of health facilities, and 80.4% of mothers perceived that their health service places were affordable. The analysis also showed that 80.4% of mothers had family support to immunize their babies, and 89.1% of mothers stated that health workers had played an active role.

In the maternal education variable, the results of the bivariate test showed that there was no significant relationship between maternal education and the completeness of primary immunization in infants, namely $p = 0.705$ ($p > 0.05$) with an odds ratio (OR) value = 1.364, if the odd ratio value is calculated into an opportunity, an opportunity value of 57.7% is obtained, which means that mothers with a higher education level have a 57.7% chance of providing complete primary immunization to their babies compared to mothers who have a low level of education. The results of statistical tests on maternal knowledge variables show that there is a significant relationship between maternal knowledge and the completeness of primary immunization in babies, namely $p = 0.002$ ($p < 0.05$) with an odds ratio (OR) value = 10.138 if the odds ratio value is calculated into an opportunity, an opportunity value of 91% is obtained, which means

that mothers with a good level of knowledge have a 91% chance of providing a complete primary immunization to their babies compared to mothers who have a less level of expertise.

In the maternal employment status variable, it was found that there was no significant relationship between the mother's employment status and the completeness of primary immunization in the baby, namely $p = 1,000$ ($p > 0.05$) with an odds ratio (OR) value = 0.889, if the odds ratio value is calculated into an opportunity, an opportunity value of 47% is obtained, which means that mothers with unemployed status have a 47% chance of providing complete primary immunization to their babies compared to mothers with working status. The results of statistical tests on the family income variable showed that there was no significant relationship between family income and the completeness of primary immunization in infants, namely $p = 0.949$ ($p > 0.05$) with an odds ratio (OR) value = 1.299, if the odds ratio value is calculated into an opportunity, an opportunity value of 55.1% is obtained, which means that mothers with a high level of family income have a chance of 55.1% to provide a complete primary immunization to their babies— Compared to mothers with low family income levels.

In the variable number of children, the results were obtained that there was a significant relationship between the number of children and the completeness of primary immunization in infants, namely $p = 0.016$ ($p < 0.05$) with an odds ratio (OR) value = 4.304, if the odds ratio value is calculated into an opportunity, an opportunity value of 81.1% is obtained, which means that mothers with the number of children ≤ 2 have a chance of 88.1% to provide complete basic immunizations to their babies compared to mothers with the number of children > 2 . The results of statistical tests on the variable availability of health facilities show a significant relationship between the availability of health facilities and the completeness of primary immunization in infants, namely $p = 0.003$ ($p < 0.05$).

In the affordability variable to health care places, results were obtained that there was no significant relationship between affordability to health care places and the completeness of primary immunization in infants, namely $p = 0.729$ ($p > 0.05$) and odds ratio (OR) values = 0.646, if the odds ratio value is calculated into an opportunity, an opportunity value of 39.2% is obtained, which means that mothers whose health services are affordable have a chance of 39.2% to provide basic immunizations in total in their babies compared to mothers whose health care is not reasonable. The results of statistical tests on family support variables show that there is a significant relationship between family support and the completeness of primary immunization in infants, namely $p = 0.000$ ($p < 0.05$) with an odds ratio (OR) value = 13,800 if the odds ratio value is calculated into an opportunity, an opportunity value of 93.2% is obtained, which means that mothers who get family support have a 93.2% chance of providing complete primary immunization to their babies compared to mothers who do not bring family support.

In the variable role of health workers, it was found that there was no significant relationship between the part of health workers and the completeness of primary immunization in infants with $p=0.176$ ($p<0.05$) with an odds ratio (OR) value = 2.766, if the odds ratio value is calculated into an opportunity, an opportunity value of 73.4% is obtained, which means that mothers who state that health workers play an active role have a 73.4% chance of providing complete basic immunizations to their babies compared to mothers who say that health workers play a passive position.

Table 2. Bivariate Analysis of Basic Immunization Completeness Factors in Infants

Variable	Category	Immunization Status		p-value	OR (95% CI)
		Complete	Incomplete		
Maternal Education	Tall	65 (85.5%)	11 (14.5%)	0.705	Maternal
	Low	13 (81.3%)	3 (18.8%)		
Maternal Knowledge	Good	49 (96.1%)	2 (3.9%)	0.002	10.138 (2.118-48.525)
	Less	29 (70.7%)	12 (29.3%)		
Mother's Employment Status	Not Working	48 (84.2%)	9 (15.8%)	1.000	0.889 (0.272-2.906)
	Work	30 (85.7%)	5 (14.3%)		
Family Income	Tall	43 (86%)	7 (14%)	0.949	1.229 (0.393-3.836)
	Low	35 (83.3%)	7 (16.7%)		
Number of Children	≤ 2 children	55 (91.7%)	5 (8.3%)	0.016	4.304 (1.301-14.243)
	> two children	23 (71.9)	9 (28.1%)		
Availability of health facilities	Available	78 (87.6%)	11 (12.4%)	0.003	-
	Not Available	0 (0%)	3 (100%)		
Affordability to health care settings	Affordable	62 (83.8%)	12 (16.2%)	0.729	0.646 (1.231-3.182)
	Unaffordable	16 (88.9%)	2 (11.1%)		
Family Support	Support	69 (93.2%)	5 (6.8%)	0.000	13.800 (3.779-50.395)
	Not Supportive	9 (50%)	9 (50%)		
The role of health workers	Active	71 (86.6%)	11 (13.4%)	0.176	2.766 (0.621-12.326)
	Inactive	7 (70%)	3 (30%)		

The bivariate test analysis showed no significant relationship between maternal education and the completeness of primary immunization in infants in the Duren Seribu Health Center working area in Depok City ($p>0.05$). The results of this study are in line with the research conducted by (Rakhmawati, Utami, and Mustikarani, 2020) on mothers who have babies aged 12-18 months; it was found that out of 25 mothers, there were 13 mothers (52%) who had a higher education level. Based on the results of statistical tests using the chi-square test conducted, a p-value of 0.775 ($\alpha > 0.05$) was obtained, and it can be concluded that there is no significant relationship between the mother's education level and the completeness of the baby's primary immunization at Kalinggaga Banyuanyar Surakarta Toddler Posyandu. Riza, Norway, and Mirnawati also conducted another study with the same results obtaining a p-value of 1,000, which means that there is no relationship between maternal education and the completeness of primary immunization in toddlers.

Meanwhile, a study conducted by Antono Dwi, Mediawati, and Nurhatisah (2019) on 74 mothers who had babies aged 13-24 months in Bangkok Village, Gurah Health Center Working Area. Based on the results of statistical tests using the chi-square test, $p\text{-value} = p\text{-value} \alpha < 0.05$), a significant relationship exists between the mother's education level and prior immunization status in Bangkok Village, Gurah Health Center Working Area, Kediri Regency. Based on these results, maternal education level plays a role in providing basic immunizations; this is due to the completeness status of basic immunizations in children. Mothers with a higher level of education tend to be more receptive to information about immunizations provided by health workers, and vice versa, mothers with low education levels will find it challenging to receive current details, so mothers will not understand the completeness of immunizations (Sukriani and A'La, 2018).

Tanuwidjaja (2019) also stated that the level of maternal education is one of the factors that play a vital role in the complete status of their children's immunizations. The completeness of immunization status will increase in line with the mother's education level. This is by Notoatmodjo's (2005) opinion that education can add insight, and a high level of education will have a broader understanding compared to a low level of education. The ability to understand will make mothers feel more confident to make the best decisions for their families, especially regarding health, one of which is about the completeness of immunization which is one of the efforts to prevent disease.

The results of the bivariate test analysis showed a significant relationship between maternal knowledge and the completeness of primary immunization in babies in the working area of the Duren Seribu Health Center in Depok City ($p < 0.05$). This study is in line with the research conducted by Alhaddad (2020) on 148 mothers who have babies aged 11-24 months; it was found that 41 mothers had a good level of knowledge, and of these, the majority of mothers provided complete basic immunizations, namely 31 mothers (75.6%). Based on the results of statistical tests using the chi-square test, a $p\text{-value} (\alpha < 0.05)$ was obtained, so there was a significant relationship between the level of maternal knowledge and the completeness of immunization at the Ternate Lotus Posyandu in North Maluku.

This is also in line with Rikianto, Raharjo, and Fitriangga's (2016) research. It was found that mothers with good knowledge about immunization will provide a complete primary vaccination, which is 60.3%. Based on the results of statistical tests using the chi-square test, a $p\text{-value} \text{ of } 0.001 (\alpha < 0.05)$ was obtained, which means a significant relationship exists between maternal knowledge and the completeness of primary immunization in babies. Based on these results, the mother's level of expertise is a critical domain for forming a person's actions.

A mother's knowledge about the importance of primary immunization for babies can be obtained from various sources such as mass media, electronic media, and counseling provided by health workers



(Hasanah, Lubis, and Syahleman, 2021). The more the mother obtains complete primary immunization, the better her knowledge will make the contrary; the less information about full primary immunization is received, the less ability will be (Sitanggang, Simaremare, and Simorangkir, 2019).

According to Pakpahan and Silalah (2021), one of the factors that affect the completeness of primary immunization is the level of maternal knowledge; the better the knowledge possessed by a mother will make mothers look for information about the benefits of vaccination for their babies, besides that a good level of expertise can also affect the mother's behavior patterns to bring her baby a complete primary vaccination and pay attention to when is the right time to provide the vaccine.

In this study, it was found that there was no significant relationship between the mother's employment status and the completeness of primary immunization in infants in the work area of the Duren Seribu Health Center ($p > 0.05$). This is in line with research by Aswan and Simamora (2020) found that out of 40 mothers, as many as 16 mothers (40%) did not work with complete child immunization status. Based on the results of statistical tests using the chi-square test, a p-value of 0.739 was obtained, meaning that there was no relationship between the mother's employment status and the primary immunization status of the baby, then supported by the research of Mardianti and Farida (2020) it was found that there was no relationship between the mother's work status and the completeness of primary immunization in the baby.

Research conducted by Rakhmawati, Utami, and Mustikarani (2020) found that a non-working mother is more likely to immunize her baby than a working mother. Mothers or parents who are not working tend to have much free time at home, so there is no reason not to take their baby to a health facility for immunization.

The results of this study are certainly not by the theory proposed by Pandji Anoraga (2005: 120) in Istriyati (2011), which states that the more, the wider the employment opportunities, the more women are encouraged to work, especially in the private sector. This certainly has a positive impact on income generation, but unfortunately, on the other hand, this negatively impacts the development and maintenance of children. Sari (2020) revealed that the reason for the low number of complete basic immunization coverage is the mother's forgetting of the baby's immunization schedule; this is due to the mother's busy life with her work; besides that, working mothers will find it challenging to take time for their children to be unified.

There is no significant relationship between family income and the completeness of primary immunization in infants in the working area of puskesmas Duren Seribu Kota Depok ($p > 0.05$). This research is supported by the results of a study conducted by Isnayni (2017) on 46 mothers who had babies aged 9-12 months; it was found that out of 46 mothers, as many as 22 mothers (81.8%) whose family

income was high whose immunization status was complete with a p -value = 0.725, meaning that there was no relationship between family income and the completeness of primary immunization in babies.

The research of Lubis also supports this, which resulted in the absence of a meaningful relationship between family income and the completeness of prior immunization status in infants with a p -value = 0.096. Although the payment of parents is in the middle and high category, it does not have a meaningful relationship; this is because there are still many mothers who think that whether they are immunized or not, their babies are still sick and need costs for the baby's treatment.

Another study with different results was conducted by (Rakhmanindra and Puspitasari (2019), where the family income factor is a factor related to the completeness of primary immunization. Using the chi-square test, a p -value of 0.018 was p -valued on statistical tests. An excellent economic status is characterized by a person's high-income level, which will affect a person's access to health facilities. Access to readily available health facilities will affect a person's health status, including getting essential immunization services for babies.

Primary immunization is a free-cost national program that aims to improve health and reduce the spread of PD31. So that the family income factor should not be a barrier for babies to be fully immunized. The presence of babies who are not fully vaccinated in families with low-income levels can occur due to lack of information, lack of family support, and other things (Sukriani and A'La, 2018)

This study proves that the number of children affects the completeness of the primary immunization of a baby in the work area of the Duren Seribu Health Center in Depok City ($p < 0.05$). This study's results align with research conducted by Rhossela, Parellangi, and Nurachma (2018) on 104 respondents in the Samarinda Puskesmas Working Area. It was found that there was a meaningful relationship between the number of children and the complete basic immunization coverage at the Samarinda City Health Center. Likewise, a study conducted by Mappadang, Langi, and Pinontoan (2020) regarding determinants of primary immunization status in children under five 12-59 months in Indonesia. Statistical tests show a relationship between the number of children owned and the completeness of prior immunization status with a p -value = 0.001.

Research conducted by Simatupang (2020) states that the availability of time for mothers to seek immunization services is one factor that influences the mother's decision to visit an immunization service post to immunize her child. Therefore, the number of children can determine whether the mother has time to leave home so that the mother can provide a complete primary immunization to her child. Many children require mothers to care for them, so the mother's time to visit the immunization service post is not much. The greater the number of children in the family, the more likely it will cause incomplete provision of basic immunizations to children Prayogo *et al.* (2016).

The results of the bivariate test showed a significant relationship between the availability of health facilities and the completeness of primary immunization in infants in the working area of the Duren Seribu Health Center in Depok City ($p < 0.05$). The results of this study are in line with the research of Agustina, Dewi, and Nurainih (2022) on 108 mothers who have babies under two in Rw 14 Pagelaran Village, Ciomas District, Bogor Regency, that of the 72 mothers who stated the availability of immunization facilities, there were 52 mothers (72.2%) who provided complete basic immunizations. Based on the results of statistical tests using the chi-square test, a p-value of 0.009 was obtained, which means a significant relationship exists between the availability of health facilities and the implementation of complete primary immunization in babies under two.

Another study with different results conducted by Hafid, Martini, and Devy (2016) on 275 mothers in the Konang Health Center Working Area, Konang District, Bangkalan Regency, found that there was no significant relationship between the availability of health facilities and the completeness of primary immunization in infants with a p-value = 0.583. Likewise, with the research conducted by Erlinawati (2021), it was found that there was no significant relationship between the availability of immunization service facilities and the use of complete essential immunization services with a p-value = 0.357.

Laurence Green's theory in Notoatmodjo (2005) states that in addition to the attitudes and behaviors of health workers towards health, a person's behavior can also be determined by the availability of health facilities that will support and strengthen the formation of behavior.

Health facilities such as puskesmas, hospitals, polyclinics, posyandu, policies, doctor's practices, village midwife practices, and so on essentially support and enable the achievement of health behaviors, such as maternal behavior in immunizing their babies. The lack of adequate health facilities will also make immunization services inadequate. In addition, health facilities also influence the absence of maternal interest in providing complete basic immunizations for their babies. Mothers who want to offer immunizations to their children not only because mothers know and are aware of the benefits of vaccination but mothers can already find a place to immunize their children (Latumahina, Kasmirah, and Kurniasari, 2021).

In this study, the results were obtained that there was no significant relationship between the affordability of health care places and the completeness of primary immunization in infants in the work area of the Duren Seribu Health Center in Depok City ($p > 0.05$). This research is in line with Safitri and Andika's (2017) study on 42 mothers who have toddlers in Ujung Bawang Aceh Singkil Village. Of the 23 mothers distanced to close health care, 14 mothers (60.9%) provided complete basic immunizations to toddlers. Based on the results of statistical tests, a p-value = 0.354 was obtained, meaning that there was no relationship between the affordability of health care facilities and the completeness of immunization in

toddlers. The absence of a connection between the affordability of the health service place and the entirety of immunization in toddlers can be based on the high knowledge of the mother and the positive attitude of the mother so that mothers no longer need to worry about the long distance traveled to get to the place of health services.

In contrast to the research conducted by Kartina (2020) on 69 mothers in the work area of the Dark Health Center, Lingga Regency, it was found that there was a relationship between the affordability of health service places in providing complete basic immunizations with a p-value of 0.001.

According to Agustina, Dewi, and Nurainih (2022) in her research stated that mothers who are far from home to close health care places could be seen based on the time it takes to get to the immunization service place and the number of costs incurred by mothers on the way to the immunization service place. The longer it takes to get to the immunization service place, coupled with the expenses that exceed the predetermined standard, the more difficult it will be for mothers to reach it. However, even though the distance between the residence and the place of immunization service is far away, if it is easily accessible to the mother, immunization can still be done.

The results of this study stated that there was a significant relationship between family support and the completeness of primary immunization in infants in the work area of the Duren Seribu Health Center in Depok City ($p < 0.05$). This research is in line with Sari, Sayuti, and Andri (2022) on 79 mothers in the Paal X Health Center work area in Jambi City. The results of 79 mothers, 30 mothers received family support, and 18 mothers (60%) of whom provided complete basic immunizations. The results of statistical tests using the chi-square test obtained a p-value = 0.007, meaning there is a significant relationship between family support and prior immunization status. Some efforts that can be made to increase family support for the provision of immunization to mothers include, namely, by providing an understanding of the benefits of vaccination; with the increase in family support provided, the condition of immunizations to babies will also be better.

Meanwhile, previous research conducted by Sulistyoningrum and Suharyo (2017) showed different results, that there was no significant relationship between family support and completeness of immunization in Randusari Village, Semarang City, with a p-value = 1,000.

According to Astuti (2021), support from family members such as husbands, siblings, parents, and in-laws will provide respondents for mothers, namely mothers will feel like individuals who are being cared for, valued, and get help from the closest people and have close family ties. In other words, mothers who get support tend to pay attention to their baby's health and immunize their baby.

The results of this study next are that the role of health workers is not related to the completeness of primary immunization in infants in the work area of the Duren Seribu Health Center in Depok City

($p > 0.05$). This study is in line with research conducted by Mariana, Lorian, and Mustaming (2018); results were obtained from 49 mothers who stated that they received support from health workers, and there were 36 mothers (63.16%) who gave complete basic immunizations, and of the eight mothers who indicated that they did not have the support of health workers, there were three mothers (5.26%) who provided complete basic immunizations. Based on the results of statistical tests obtained p value = 0.094, H_0 was accepted, which means there is no significant relationship between the support of health workers and maternal behavior in the provision of complete primary immunization. Health workers should be able to explain the importance of vaccination, carry out immunization schedules regularly, encourage mothers to vaccinate their children, and carry out equalization and approaches to immunization services in all puskesmas work areas, which can increase the coverage of Universal Child Immunization (UCI).

In contrast to research conducted in Situmbaga Village, East Halongonan District, Padang Lawas Utara Regency by Harahap, Suroyo, and Silaen (2020), it was stated that there was a significant relationship between the role of health workers and the provision of basic immunizations to infants with a p -value = 0.046. The implementation of vaccination cannot be separated from the part of health workers who are directly related to the community and infrastructure. This is because health workers are at the forefront of the community in implementing immunization. Likewise, the research conducted by Juwita (2018) with a p -value of 0.006 means that there is a relationship between the role of health workers and the status of providing primary immunization to babies in Sungai Air Putih Village, Sungai Lala District, Indragiri Hulu Regency. Mothers who feel the activeness of health workers are more likely to provide complete immunizations than mothers who do not think the activeness of health workers.

According to Maulana (2018), health workers have an essential role in improving the quality of health services for the community so that the community can increase awareness, willingness, and ability to live a healthy life to achieve a high degree of health as an investment in the development of human resources (Human Resources) that are economically and socially productive, as well as one of the elements of the general welfare. In providing infant immunization, the role of health workers is one of the factors that can increase maternal participation if these health workers have an essential part in the health sector, including as motivators, denominators, innovators, and facilitators.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the study, it can be concluded that the picture of most mothers providing complete primary immunization to babies (84.8%) compared to mothers who provide incomplete basic immunizations (15.2%). The results of statistical tests show that there is a significant relationship between maternal knowledge, the number of children, the availability of health facilities, and family support with

essential immunization completeness, while maternal education, maternal employment status, family income, affordability to health service places, and the role of health workers are not significant factors for the completeness of primary immunization in infants in the Duren Seribu Health Center work area.

With this research, it is hoped that health workers will be able to increase public knowledge, especially for mothers who have babies and their families, both individuals and groups, by conducting counseling and disseminating information about the importance of providing complete basic immunizations and can improve guidance to cadres to be more proactive to mothers who do not bring their babies to be immunized to posyandu by visiting the mother's house before implementation or if it does not come in posyandu activities.

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