



Relationship between Mother's Knowledge of Basic Immunization and Completeness of Basic Immunization in Infants

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ABSTRACT

Immunization is an effort to prevent health problems in infants. The government obliges five types of complete basic immunization which can be obtained free of charge. This study aims to determine the relationship between mother's knowledge of basic immunization and the completeness of basic immunization in infants. This step is so that children get immunity individually. At least 70% of the population in an area must be immunized. The first step, the researcher collects 20 research journals that are relevant to the topics discussed and published in the last 10 years. In the second step, the researcher began to identify the characteristics of each research journal. The results of the identification process will be displayed in a tabular form. In the next step, the researcher will analyze and look for points of similarity (resemblance) and difference (difference) from the research results of each journal and describe them in paragraph form. In the next step, researchers criticize and compare it with the research results of each journal. In the final step, the researcher summarizes the results obtained from the analysis process that has been carried out. The results of the study explain that there are eighteen variables studied. The order of these variables is based on the highest frequency, namely: mother knowledge; mother's education level; mother's manner; Family support; mother's occupation; mother's age; officer service; service distance; Mother's trust; Gender; nutritional status; Way of birth; birthweight; Order of birth; number of children; officer roles; Socio-economic; and Marital status.

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1. INTRODUCTION

Prevention (preventive) efforts are carried out from the start rather than anything against disturbances or threats, especially in the health sector. Preventive steps in the field of toddler health are immunization. Improving the immune system is done by entering the vaccine by injection or by drinking it. The purpose of this step is for the child to get immunity individually. At least 70% of the population in an area must receive immunization (PromKes, 2016). This illustrates that if an area has

infants, toddlers, or children with a population of 100, then at least 70 of them have received complete basic immunization.

The following are the types of immunization that are required by the government and can be obtained free of charge at the nearest Health Center or Posyandu:

Table 1. Basic Vaccine Compulsory for Children by the Government

Vaccine Type	Information
BCG	The BCG (Bacillus Calmette Guerin) vaccine can be given from birth. This immunization aims to provide immunity against tuberculosis (TB). If the BCG vaccine is to be given to babies over the age of 3 months, it's a good idea to do a tuberculin test first. BCG may be given if the tuberculin result is negative
Hepatitis B	The first hepatitis B vaccine should be given within 12 hours of birth, then continued at 1 month and 3 to 6 months of age. The distance between two Hepatitis B immunizations is at least 4 weeks. This immunization is to prevent Hepatitis B.
Polio	Polio immunization is given to prevent poliomyelitis which can cause paralysis.
DPT	The DPT vaccine is a combination vaccine to prevent diphtheria, pertussis (whooping cough) and tetanus. These three diseases are very easy to attack infants and children. DPT immunization is given to babies aged more than 6 weeks. The DPT vaccine can be given simultaneously with the Hepatitis B vaccine. DPT repeats are given at 18 months and 5 years of age. Age 12 years received the TT (tetanus) vaccine through the School Children's Immunization Month (BIAS) program.
Measles	The Measles-1 vaccine is given at 9 months of age, then Measles-2 at 6 years of age through the BIAS program.

According to a research source, 40% of the 100 babies/toddlers in Gang Nusantara, RT 19, Pekauman Village, Central Banjarmasin did not receive complete basic immunization (Nursery & Chrismilasari, 2020). This has not yet reached the minimum target set by the government regarding immunization. This situation is influenced by various factors, including: knowledge, education, and parental attitudes (Kharin et al., 2021).

A similar case was also found at the Social Development and Pediatric Polyclinic, Department of Pediatrics at H. Adam Malik General Hospital, Medan, where only 46 out of 113 children or 40.7% had complete basic immunization status (Tanjung et al., 2017). This is certainly very far from the government's minimum target.

Dompas (2014) in his article entitled "Description of Basic Immunization in Infants Aged 0-12 Months" explained that in the Teling Atas Health Center, Wanea District, Manado City for 3 consecutive years from 2010 to 2012 with an average of 53% of a total of 1786 infants or 947 infants aged 0-12 months who received complete immunization.

Some of the explanations above show that there are still many areas that have not reached the government's minimum target of 70% of the total babies/children in a certain place. Based on these findings the researcher wanted to measure the extent to which the mother's knowledge of immunization related to the completeness of basic immunization in infants. Therefore the researcher raised the title "Relationship of Mother's Knowledge about Basic Immunization with Completeness of Basic Immunization in Infants".

2. RESEARCH METHOD

This type of research is a literature review research. The research method used is the SLR (Systematic Literature Review) method. This study uses the identification of similarities (resemblance), differences (difference), provide criticism (criticize), compare (compare), and summarize (summarie). The first step, the context of this research collects 20 research journals that are relevant to the topics discussed and published in the last 10 years. The second step, the researcher began to identify the characteristics

of each research journal. The results of the identification process will be displayed in tabular form. The next step, the researcher will analyze and look for points of similarity (resemblance) and difference (difference) from the research results of each journal and describe them in paragraph form. The next step, researchers provide criticism (criticize) and compare it (compare) between the research results of each journal. The final step, the researcher summarizes the results obtained from the analysis process that has been carried out.

3. RESULTS AND DISCUSSIONS

Table 1. Characteristics of 20 studies obtained from search and search results

Article Title	Author, Year	Publisher's Journal	Research Place	Sample	Method	Research result
Education on the Importance of Basic Immunization in Children for Mothers Residents of Gang Nusantara RT 19 Pekauman Village, Central Banjarmasin, South Kalimantan	(Nursery & Chrismilasari, 2020)	Journal of Insan Serving Sanctuary (JSIM)	Alley Nusantara RT 19, Pekauman Village, Central Banjarmasin	37 mothers	Health education or education	There has been an increase in the understanding and understanding of parents who have participated in counseling activities so that parents understand the importance of complete basic immunization and carry it out according to a predetermined schedule by looking at the results of the recording from the MCH handbook the following month.
Knowledge, Education, and Attitudes of Mothers towards Complete Basic Immunization in Bogor District	(Kharin et al., 2021)	Journal of Public Health Service (Pengmaskemas)	Cipambuan Village, Babakan Madang District, Bogor Regency	The mother who has a clown	Situation analysis, problem priority, instrument development through questionnaires, surveys, implementation of interventions, evaluations, media posters and power point slides, post-test stage.	Mothers who do not provide complete basic immunization are not only caused by a lack of knowledge, but are also influenced by the level of education and attitudes towards the importance of complete

Completeness of Basic Immunizations for Infants Aged 9-12 Months and Determinant Factors in Randusari Village, Semarang City in 2017	(Sulistyoningrum & Suharyo, 2018)	VisiKes Journal of Public Health	Randusari Sub-District is the working area of the Pandanaran Health Center in Semarang City	30 mothers who have babies 9-12 months.	<i>observational</i> , cross sectional, nonprobability sampling, saturated sampling, primary data, interviews, questionnaires, secondary data, profile data of Semarang City Health Office and Pandanaran Health Center, patient data at Pandanaran Health Center Semarang City, Chi Square test.	basic immunization . One reason is that Cipambuan village does not yet have community institutions related to health. There is no relationship between the level of knowledge of the mother and the completeness of immunization with a p-value = 0.360. There is no relationship between the mother's attitude and the completeness of immunization with a p-value = 0.378. There is no relationship between officers' services and the completeness of immunization with a p-value = 0.641. There is no relationship between family support and completeness of immunization with a p-value = 1,000. There is a relationship between education, work, knowledge and (p-value <0.05) the distance
Correlation between Mother's Characteristics and Health Service Distance with Completeness of Basic	(Libunelo et al., 2018)	Gorontalo Journal of Public Health	The working area of the Dulukapa Public Health Center, North Gorontalo Regency	150 babies aged 9-12 months	<i>Surveys</i> analytics, cross sectional study, exhaustive sampling, primary data, questionnaire interviews, secondary data, reports from the	There is a relationship between education, work, knowledge and (p-value <0.05) the distance

Immunization at Dulukapa Health Center					Health Service and the Dulukapa Health Center, Statistical Package For The Sciences (SPSS) program, narrated tables and univariate and bivariate analysis, Chi Square test.	between health services and the completeness of basic immunization for infants in the working area of the Dulukapa Community Health Center, North Gorontalo Regency in 2016. Likewise the results of research by Rizki et al. (2022) showed a relationship between mother's age with a p-value < 0.046, mother's education with a p-value < 0.025, mother's knowledge with a p-value < 0.017, family support for immunization success with a p-value < 0.037.
Factors Affecting the Success of Basic Immunization in Newborns in the RSU Baby Room. Bina Kasih Medan Sunggal Year 2021	(Rizki et al., 2022)	Journal of Healthcare Technology and Medicine	RSU. Bina Kasih Medan Sunggal	38 mothers of newborns	Analytic, cross sectional. total sampling, univariate, bivariate analysis, Chi Square test	There is a relationship between mother's age with p-value <0.046, mother's education with p-value <0.025, mother's knowledge with p-value <0.017, family support for successful immunization with p-value <0.037.
Determinants of Incomplete Immunization in Infants: Empirical	(Latumahina et al., 2021)	JOURNAL OF HUMAN HEALTH	Negeri Oma, Haruku Island District, Central	4 mothers who have children aged 0-11 months	Descriptive qualitative, observation, interviews, purposive	The determinants of incomplete immunization for infants in

Evidence in the Country of Oma-Maluku			Maluku Regency	and 2 health workers.	sampling, triangulation techniques to test the validity of the data.	the country of oma-divided into 5 namely (1) lack of knowledge of parents about the importance of immunization, (2) non-compliance of mothers in administering immunizations, (3) not optimal counseling about immunization from health workers, (4) attitude of health workers is not good in immunization services, (5) lack of availability of health facilities and infrastructure
Analysis of Implementation of the Complete Basic Immunization Program (IDL) for Infants at the Health Center in Semarang City	(Khomariah et al., 2018)	JOURNAL OF PUBLIC HEALTH	Kedungmundu Health Center and Candilama Health Center	2 midwives holding immunizations, 2 heads of health centers, 1 immunization program holder from DKK Semarang and 2 mothers of toddlers	Qualitative, descriptive analytic, data collection, in-depth interviews, purposive sampling, systems theory approach, namely input aspects including personnel, funds, facilities, policies and SOPs; process aspects include planning, organizing, implementing, and evaluating; and environmental aspects in the form of family and community support.	The state of PHC with low coverage is almost the same as PHC with high coverage. All midwives in the two puskesmas have not received special training on immunization, the funds needed for immunization come from the City Government, proper facilities and infrastructure in the two puskesmas, the organization is cross-sectoral, but the role of

Mother's Behavior in Complete Basic Immunization at Gayam Health Center, Sumenep Regency	(Hudhah & Hidajah, 2017)	Promkes Journal	The working areas of the Gayam Health Center are Gayam Village, Pancor Village, East Gendang Village, Karang Tengah Village, Tarebung Village and West Gendang Village	Mothers who have toddlers aged 12-24 and have KMS/MCH books and are willing to be interviewed with a total of 144 mothers.	Cross-sectional, simple random sampling, primary data, bivariate Chi-Square analysis questionnaire	BPM in puskesmas with low coverage is still lacking in terms of reporting. Variables related to achieving complete basic immunization were mother's education level (p=0.020), mother's knowledge level (p=0.000), mother's belief (p=0.000) and mother's attitude (p=0.000). Meanwhile, the variable mother's age and mother's occupation were not related to achieving complete basic immunization because the p value was > 0.05.
Factor Analysis of Providing Complete Basic Immunization to Infants at the Tamalate Makassar Health Center Complete Basic Immunization Coverage and Affecting Factors	(Talib & Albar, 2021)	Healthcare Nursing Journal	Makassar Tamalate Public Health Center	122 mothers who visited the Tamalate Pamekasan health center	Descriptive, Cross Sectional Study, Chi-Square, Fisher Exact Test, questionnaire instrument	There is a significant relationship between the level of knowledge and complete basic immunization in infants.
	(Tanjung et al., 2017)	Sari Pediatrics	Social Development and Pediatrics Polyclinic, Department of Child Health, H. Adam Malik General Hospital, Medan	113 children aged 0-60 months	Analytical descriptive, cross sectional, randomized, collecting data from patient medical records, descriptive statistical analysis and presented in the form of a frequency	Gender, nutritional status, method of birth, birth weight, mother's education, mother's occupation, birth order, number of children and

					distribution, analysis using logistic regression test	mother's age did not affect the completeness of the child's basic immunization
Factors Associated with Giving Basic Immunization to Toddlers in Purwajaya Village, Karangampel District, Indramayu Regency in 2019	(Sukuriyah et al., 2019)	Affiliation: Journal of Public Health	Purwajaya Village, Krangkeng District, Indramayu Regency	78 mothers	Quantitative, analytic, cross sectional, accidental sampling, interviews and observations, univariate and bivariate.	The results of the bivariate analysis obtained that the p-value of education (0.704) did not have a significant relationship, while knowledge (0.000) and family support (0.000) had a significant relationship with basic immunization for toddlers.
Correlation between Mother's Level of Knowledge About Side Effects of BCG Immunization and Mother's Attitude about Complete Basic Immunization at Ngesrep Health Center Semarang	(Ni'mah et al., 2013)	Midwifery Journal	Ngesrep Health Center which consists of 3 Villages namely Ngesrep Village, Sumurboto Village, Tinjomoyo Village	48 mothers who have babies aged 2-12 months	correlation analysis, cross sectional, observation, probability sampling, simple random sampling, questionnaires, surveys, interviews, questionnaires, univariate, displayed in the form of frequency distribution and bivariate using the chi square test	There is a relationship between the level of mother's knowledge about the side effects of immunization with the mother's attitude about complete basic immunization with a p-value: 0.024.
Relationship between Family Support and Completeness of Basic Immunization	(Igiyany, 2019)	Periodic Journal of Public Health Sciences (JIKeMB)	Posyandu Dahlia	38 mothers who are willing to be respondents, have babies, have a Towards Healthy Card (KMS) book, are registered as participants at Posyanyu Dahlia	Analytic descriptive, cross sectional, purposive sampling, questionnaire, univariate and bivariate analysis	There is a significant relationship between family support and completeness of basic immunization, with a p-value of 0.004.

Factors Associated with Provision of Basic Immunizations to Infants in the Work Area of the PAAL X Health Center, Jambi City	(P. Sari et al., 2022)	Jambi Public Health Journal (JKMJ)	The working area of the Paal X Public Health Center, Jambi City	79 mothers who have babies aged 9-12 months	Quantitative, Cross Sectional, Random Sampling, questionnaires, univariate analysis presented in the form of frequency tables, bivariate analysis using chi-square test	There is a relationship between the variable knowledge with a p-value of 0.009 (p <0.05), family support with a p-value of 0.007 (p <0.05) and the role of officers with a p-value of 0.001 (p <0.05) towards basic immunization of infants in the work area of the Paal X Health Center, Jambi City.
Factors Affecting Completeness of Basic Immunization at Health Center X Palembang City	(Wulandari et al., 2022)	Journal of Nurses	Health Center X Palembang city	74 mothers who have babies aged 10-24 months	Quantitative, descriptive correlation, cross sectional, random sampling, questionnaire, univariate analysis, bivariate chi-square and multivariate multiple logistic regression	There is a relationship between the level of knowledge and the completeness of basic immunization at Health Center X Palembang city with p-value = 0.003.
Description of Basic Immunizations for Infants Aged 0-12 Months	(Dompas, 2014)	JIDAN Scientific Journal of Midwives	Teling Atas Community Health Center, Wanea District, Manado City	All babies who were immunized at the age of 0-12 months in January to December 2010 A total of 639 babies, January to December 2011 as many as 605 babies and January to December 2012 as many as 542 babies 124 mothers	Descriptive, retrospective, checklist, secondary data	For 3 consecutive years from 2010 to 2012 with an average of 47% of a total of 1786 babies or 839 babies aged 0-12 months who have not received complete immunization .
The Relationship Between Internal Factors in Mothers and Implementation of	(Sismanto & Rochmah, 2016)	CENDEKIA UTAMA Journal of Nursing and Public Health	Plumbagan Village, Gabus District, Pati Regency		Analytic descriptive, cross sectional, proportional random sampling, bivariate	The relationship between knowledge about immunization and the implementation of

<p>Complete Basic Immunization in Toddlers in Plumbung Village, Gabus District, Pati Regency</p>					<p>analysis, Chi Square test</p>	<p>on of immunization obtained a p-value = 0.014 meaning that Ho was rejected which showed a relationship, attitudes about immunization with the implementation of immunization obtained a p-value = 0.015 meaning that Ho was rejected which showed a relationship, level of education with the implementation of immunization obtained a p-value = 0.013 meaning that Ho was rejected which showed there was a relationship, socioeconomic and implementation of immunization obtained a p-value = 0.023 meaning Ho was rejected which showed a relationship.</p>
<p>Determinant Factors of Complete Basic Immunization Status in Infants at the Konang and Geger Health Centers</p>	<p>(Hafid et al., 2016)</p>	<p>Wiyata Journal</p>	<p>Working area of Konang and Geger Public Health Centers</p>	<p>275 babies</p>	<p>Observational with cross sectional research design, simple random sampling, simple logistic regression analysis for bivariate tests, and multiple logistic regression tests for multivariate tests</p>	<p>The variables of mother's attitude (p=0.000) and family support (p=0.000) have a very strong influence on complete basic immunization status in infants.</p>

Determinants of Complete Basic Immunization Coverage for Recipients of the Family Hope Program	(W. Sari & Nadjib, 2019)	Journal of Indonesian Health Economics	34 provinces	9,205 respondents	cross sectional, secondary data, socio-demographic determinants, univariate, bivariate and multivariate (probit regression)	The variables of age and marital status are positively related and have a significant effect. The variables of education and work are significantly but negatively related to basic immunization coverage.
Analysis of Incomplete Basic Immunization Risk Factors in Infants in the Jember Region	(Masrifah, 2022)	Medical Journal of Al-Qodiri	Jember Region	170 mothers with babies aged 9-24 months	Observational analytic, cross sectional, purposive sampling	The variables of knowledge, education, employment, family income, and mother's attitudes have a relationship with immunization incompleteness, but there is no relationship with the affordability of service places.

Nursery & Chrismilasari (2020) in their article entitled "Education Regarding the Importance of Basic Immunization in Children for Mothers Residents of Gang Nusantara RT 19 Pekauman Village, Central Banjarmasin, South Kalimantan" conducted health counseling which was attended by 37 mothers. This is based on the fact that in that area 40% of 100 infants/toddlers or 40 infants/children have not been fully immunized. The implementation strategies prepared by the proposing team are made based on each problem that has been analyzed. The ultimate goal of this community service activity is to change the behavior of mothers who have babies/toddlers through increasing knowledge of the importance of basic immunization for babies/toddlers first.

Implementation of immunization counseling was also carried out by Kharin et al. (2021) in Cipambuan Village, Babakan Madang District, Bogor Regency, but in a different way, namely: providing screenshots of immunization material and posters of immunization myths and facts via WhatsApp and then showing educational PowerPoint slides to participating mothers who have toddlers. In the next stage, an assessment was carried out through a post-test to measure the level of community knowledge after the intervention was carried out. The results showed that mothers who did not provide complete basic immunization were not only caused by a lack of knowledge, but were also influenced by the level of education and attitudes towards the importance of complete basic immunization. One reason is that Cipambuan village does not yet have community institutions related to health.

Different results were found in the research area in the Randusari Subdistrict, the working area of the Pandanaran Public Health Center, Semarang City. Sulistyoningrum & Suharyo (2018) in their research by including a sample of 30 mothers resulted that the proportion of complete basic immunizations for infants in Randusari Village, Pandanaran Health Center, Semarang City in 2017 was

80.0%, while incomplete basic immunizations were 20.0%. This has reached the limit set by the government with a percentage of 70%. (PromKes, 2016).

Research by Sulistyoningrum & Suharyo (2018) showed that there was no relationship between the level of knowledge of the mother and the completeness of immunization with a p-value = 0.360. There is no relationship between the mother's attitude and the completeness of immunization with a p-value = 0.378. There is no relationship between officers' services and the completeness of immunization with a p-value = 0.641. There is no relationship between family support and completeness of immunization with a p-value = 1,000. In the research results of Libunelo et al. (2018) explained that there was a relationship between education, work, knowledge and (p-value <0.05) the distance between health services and the completeness of basic immunization for infants in the working area of the Dulukapa Community Health Center, North Gorontalo Regency in 2016. Likewise the results of research by Rizki et al. (2022) showed a relationship between mother's age with a p-value < 0.046, mother's education with a p-value < 0.025, mother's knowledge with a p-value < 0.017, family support for immunization success with a p-value < 0.037. Research conducted in Negeri Oma, Pulau Haruku District, Central Maluku Regency by Latumahina et al. (2021) who examined the determinants of incomplete immunization in infants concluded that there were 5 influencing factors, namely: (1) lack of knowledge of parents about the importance of immunization, (2) non-compliance of mothers in administering immunizations, (3) not optimal counseling about immunization from health workers, (4) the attitude of health workers was not good in immunization services, (5) lack of availability of health facilities and infrastructure. mother's education with p-value <0.025, mother's knowledge with p-value <0.017, family support for successful immunization with p-value <0.037. Research conducted in Negeri Oma, Pulau Haruku District, Central Maluku Regency by Latumahina et al. (2021) who examined the determinants of incomplete immunization in infants concluded that there were 5 influencing factors, namely: (1) lack of knowledge of parents about the importance of immunization, (2) non-compliance of mothers in administering immunizations, (3) not optimal counseling about immunization from health workers, (4) the attitude of health workers was not good in immunization services, (5) lack of availability of health facilities and infrastructure. mother's education with p-value <0.025, mother's knowledge with p-value <0.017, family support for successful immunization with p-value <0.037. Research conducted in Negeri Oma, Pulau Haruku District, Central Maluku Regency by Latumahina et al. (2021) who examined the determinants of incomplete immunization in infants concluded that there were 5 influencing factors, namely: (1) lack of knowledge of parents about the importance of immunization, (2) non-compliance of mothers in administering immunizations, (3) not optimal counseling about immunization from health workers, (4) the attitude of health workers was not good in immunization services, (5) lack of availability of health facilities and infrastructure. family support on the success of immunization with a p-value <0.037. Research conducted in Negeri Oma, Pulau Haruku District, Central Maluku Regency by Latumahina et al. (2021) who examined the determinants of incomplete immunization in infants concluded that there were 5 influencing factors, namely: (1) lack of knowledge of parents about the importance of immunization, (2) non-compliance of mothers in administering immunizations, (3) not optimal counseling about immunization from health workers, (4) the attitude of health workers was not good in immunization services, (5) lack of availability of health facilities and infrastructure. family support on the success of immunization with a p-value <0.037. Research conducted in Negeri Oma, Pulau Haruku District, Central Maluku Regency by Latumahina et al. (2021) who examined the determinants of incomplete immunization in infants concluded that there were 5 influencing factors, namely: (1) lack of knowledge of parents about the importance of immunization, (2) non-compliance of mothers in administering immunizations, (3) not optimal counseling about immunization from health workers, (4) the attitude of health workers was not good in immunization services, (5) lack of availability of health facilities and infrastructure.

Hudhah & Hidajah's research (2017) explained that the independent variables used in this study were mother's age, mother's education level, mother's occupation, mother's level of knowledge, mother's beliefs and mother's attitude. The results showed that the variables related to achieving complete basic immunization were the mother's education level (p=0.020), mother's knowledge level

($p=0.000$), mother's belief ($p=0.000$) and mother's attitude ($p=0.000$). Meanwhile, the variable mother's age and mother's occupation were not related to achieving complete basic immunization because the p value was > 0.05 . Research conducted by Talib & Albar (2021) at the Tamalate Makassar Health Center shows that there is a significant relationship between the level of knowledge and the provision of complete basic immunizations to infants. The conclusion is that the higher the level of one's knowledge, the more complete the immunization will be given to the child. There is a relationship between attitude and basic immunization in infants. The better the mother's attitude about immunization, the better her behavior in terms of immunization.

Cape et al. (2017) in his research conducted at the Social Development and Pediatric Polyclinic, Department of Pediatrics at H. Adam Malik General Hospital, Medan, on 113 research samples, 46 children (40.7%) had complete basic immunization status. The factor that influenced the completeness of basic immunization was exclusive breastfeeding ($p=0.017$). Gender, nutritional status, method of birth, birth weight, mother's education, mother's occupation, birth order, number of children and mother's age did not affect the completeness of a child's basic immunization. Research conducted by Syukuriah et al. (2019) explained the results of the bivariate analysis obtained that the p -value of education (0.704) did not have a significant relationship, while knowledge (0.000) and family support (0.000) had a significant relationship with basic immunization for toddlers.

Research conducted by Ni'mah et al. (2013) stated that there was a relationship between the level of mother's knowledge about the side effects of immunization and the mother's attitude about complete basic immunization with a p -value: 0.024. The results of the study by Igianny (2019) show that based on the completeness of basic immunization, it is known that out of 35 research respondents, 74% had a history of complete immunization, while based on family support, it was known that 54% of respondents with high family support had a history of complete immunization. Based on data analysis using the Chi Square test, it was found that there was a significant relationship between family support and completeness of basic immunization, with a p -value of 0.004. The results of research conducted by P. Sari et al. (2022) showed that there was a relationship between knowledge and a p -value of 0.009 ($p < 0.05$),

Wulandari et al. (2022) in his research showed that there was a relationship between the level of knowledge and the completeness of basic immunization at Puskesmas X in Palembang with a p -value = 0.003. Likewise, research conducted by Dompas, (2014) showed data for 2010, the number of babies who received complete immunization was 370 babies (57.9%) of 639 babies. In 2011, the number of babies who received complete immunization was 275 babies (45.5%) out of 605 babies, and in 2012 with a total of 542 babies, the number of babies who received complete immunization was 302 babies (55.7%). Sismanto & Rochmah's research (2016) shows that there is a relationship between knowledge about immunization and immunization implementation with a p -value = 0.014, meaning that H_0 is rejected, which indicates a relationship, attitudes about immunization with immunization implementation, with a p -value = 0.

Research by Hafid et al. (2016) explained that based on the results of multivariate analysis it was found that the variable mother's attitude ($p=0.000$) and family support ($p=0.000$) had a very strong influence on complete basic immunization status in infants. W. Sari & Nadjib's research (2019) showed that complete basic immunization was 97.34% and 2.66% incomplete. The results showed that the variables age and marital status were positively related and had a significant effect. The variables of education and work are significantly but negatively related to basic immunization coverage. Furthermore, Masrifah's research (2022) shows that the variables of knowledge, education, work, family income, and mother's attitude have a relationship with incomplete immunization,

Based on the above data presentation, it can be concluded that as a whole there are 18 variables used in the measurement related to the relationship between a variable and the completeness of basic immunization. These variables include: 1). Mother knowledge; 2). mother's education level; 3). mother's attitude; 4). Family support; 5). mother's occupation; 6). mother's age; 7). officer service; 8). service distance; 9). Mother's trust; 10). Gender; 11). nutritional status; 12). Way of birth; 13). birth

weight; 14). Order of birth; 15). Number of children; 16). officer role; 17). Socio-economic; and 18). Marital status.

There were 11 studies which stated that the mother's knowledge variable had an effect on complete basic immunization, namely: Libunelo et al. (2018), Rizki et al. (2022), Latumahina et al. (2021), Hudhah & Hidajah (2017), Talib & Albar (2021), Gratitude et al. (2019), Ni'mah et al. (2013), P. Sari et al. (2022), Wulandari et al. (2022), Sismanto & Rochmah (2016), Masrifah (2022). One study stated that the relationship between mother's knowledge variable did not affect the fulfillment of complete basic immunization, namely: Research by Sulistyoningrum & Suharyo (2018). The relationship between the variable mother's education level was stated to be influential by 6 studies, namely: Libunelo et al. (2018), Rizki et al. (2022), Hudhah & Hidajah (2017), Sismanto & Rochmah (2016), Sismanto & Rochmah (2016), and Masrifah (2022). While two studies, namely: Cape et al. (2017) and Syukuriyah et al. (2019) stated that there was no relationship between the mother's educational level variable and the completeness of basic immunization. The relationship between the mother's attitude variable was stated 6 times, namely: Hudhah & Hidajah (2017), Talib & Albar (2021), Ni'mah et al. (2013), Sismanto & Rochmah (2016), Hafid et al. (2016), and Masrifah (2022). There is no relationship between the attitude variable stated by the research of Sulistyoningrum & Suharyo (2018). The existence of a relationship with family support variables was stated by 5 studies, namely: Rizki et al. (2022), Gratitude et al. (2019), Igiyany (2019), P. Sari et al. (2022), and Hafid et al. (2016). The absence of a relationship with family support variables was stated by the research of Sulistyoningrum & Suharyo (2018). The two variables of work and mother's age were mentioned in a balanced manner 2 times each stated that there was a relationship and 2 times it was stated that there was no relationship. The remaining twelve variables were examined only once.

4. CONCLUSION

Based on the results and discussion, it can be concluded that there are a total of 18 variables studied. The order of these variables is based on the highest frequency, namely: 1). Mother knowledge; 2). mother's education level; 3). mother's attitude; 4). Family support; 5). mother's occupation; 6). mother's age; 7). officer service; 8). service distance; 9). Mother's trust; 10). Gender; 11). nutritional status; 12). Way of birth; 13). birth weight; 14). Order of birth; 15). Number of children; 16). officer role; 17). Socio-economic; and 18). Marital status. The mother's level of knowledge variable is the variable that is most in demand for research. Eleven of the 12 studies stated that there was a relationship between the mother's knowledge level and the provision of complete basic immunization. Differences in the results of several studies with the same topic may occur.

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