Factors Affecting Mother's Behavior Towards Complete Basic Immunization in The Working Area of 9 November Health Center Banjarmasin

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ABSTRACT

Immunization is one of the programs under the health development sector. Based on data of complete basic immunization coverage in South Kalimantan in 2020 is 75.4 percent in 2021 it becomes 80.2 percent, and there is an increase if it was compared to 2020. The purpose of this study is to analyze the relationship between the factors that influence the mother's behavior towards basic immunization. This research is a quantitative study with a cross sectional approach. Sample size using the Slovin formula as much as 93 people. Data analysis in this study using univariate and bivariate with the Chi-square test. Based on the results of this study, there was an influence between income on the mother's behavior toward complete basic immunization because of the p-value <0.05 (0.038). Variables of education, mother's occupation, father's occupation, number of children, knowledge, and attitude did not affect the completeness of basic immunization in infants because of the p-value >0.05. Income factors are very closely related to health such as immunization in infants. An adequate family income will support the growth and development of children, so parents can provide for all the children's needs, both primary and secondary.

Keywords: Immunization, PD3I, knowledge, attitude, behavior

INTRODUCTION

Maternal and child health efforts are one of the development priorities health in Indonesia. This is because mothers and children are a vulnerable group, starting from the phases of pregnancy, childbirth and postpartum in the mother and the growth and development phase in the child.

Immunization is one of the programs under development in the health sector, in order to reduce infant mortality due to immunization-preventable diseases (PD3I). Immunization is expected to have many advantages and few disadvantages. Incomplete immunization in infants can result in the baby's body being susceptible to certain diseases, especially diseases caused by viruses and bacteria.

Immunization is one effort that can provide immunity to children by injecting vaccines into the body with the aim of forming antibodies that can prevent polio, measles, hepatitis B, tetanus, pertussis, diphtheria, pneumonia and meningitis. Immunization aims to provide immunity to the immunological system the body to form specific antibodies so that they can protect body from disease attacks.

Immunization is an adequate program effectively and efficiently prevent infectious diseases epidemic. So far immunization has demonstrated its ability to reduce extraordinary events in the community. Immunization can prevent diseases that often occur in children. Giving injections immunization for babies and toddlers, on time is important factor for baby's health. Immunization is given from birth until early childhood. The basic immunizations required for babies aged 0-9 months are BCG, Measles, DPT, Hepatitis B and Polio. Basic immunization functions to provide protection and reduce the risk of morbidity and mortality against diseases that can be prevented by immunization.

The results of the 2018 Basic Health Research Ministry of Health of the Republic of Indonesia showed that the coverage of complete basic immunization status (IDL) in children (aged 12-23 months) decreased from 59.2% (2013) to 57.9% meaning, from around 6 million children aged 12-23 months, only about 2.5 million children are fully immunized. In contrast, children who were immunized but incomplete increased from 32.1% to 32.9%
the same period.\textsuperscript{5}

Then from 2020-2021 the coverage of complete basic immunization in infants has dropped dramatically. In 2020 the immunization target is 92\% while the coverage achieved is 84\%, in 2021 immunization is targeted to be 93\% but the coverage achieved is 84\%.\textsuperscript{6}

Meanwhile, based on data on complete basic immunization coverage in South Kalimantan in 2020 it was 75.4\% and in 2021 it became 80.2\%, there was an increase in coverage when compared to 2020 data. However, these data still have not reached the national target, which is 93.6\%.\textsuperscript{7}

Whether or not the behavior of giving complete basic immunization to infants is manifested is related to various factors. Several factors, namely predisposing factors include characteristics (age, education level, occupation, number of children, knowledge, culture, traditions, community beliefs, socioeconomic level and family income) and behavior (perceptions, motivation and attitudes towards health), enabling factors include availability infrastructure, health service facilities, individual needs for health services, comfort with the condition of the facility while reinforcing factors include the role of immunization officers, the role of the husband, the role of the family, community support, environmental factors and exposure to health-related information media.\textsuperscript{2}

In addition, a positive mother's attitude can also be a predisposing factor or trigger that causes mothers to bring their babies to be immunized. Attitude is related to a behavior because it is influenced by the belief that behavior will lead to both desired and unwanted results. A person's attitude towards an object is a feeling of supporting or not supporting the object.\textsuperscript{3}

The low coverage of complete basic immunization is a problem that must be addressed immediately so that the health of mothers and children is maintained. Therefore, based on the background above, the authors are interested in conducting research with the title "Factors Influencing the Behavior of Infant Mothers Against Complete Basic Immunization in the Working Area of the 9 November Banjarmasin Health Center". The purpose of this study is to analyze the relationship between the factors that influence the mother's behavior towards basic immunization.

\textbf{METHOD}

This research is a quantitative study with a cross sectional approach. This research was conducted in the working area of the 9 November Public Health Center in Banjarmasin in September - October 2022. The population in this study were mothers who had babies and toddlers with a total population of 1263 people. The sample in this study were mothers of babies under five who visited the posyandu in the working area of the November 9 Health Center. The sampling technique was carried out by probability sampling. The inclusion criteria for this study were mothers who had babies and toddlers who visited the posyandu and were willing to be used as samples. Calculation of sample size using the Slovin formula so that a minimum sample size of 93 people is obtained. To avoid sample dropout (data incompleteness), the sample size is increased by 20\% of the minimum sample size so that the total sample is 113 people.

The variables in this study consisted of independent variables, namely education, income, mother's occupation, husband's occupation, number of children, knowledge, and attitudes. While the dependent variable is immunization behavior. The research instrument for knowledge and attitude variables uses a questionnaire.

Variable data collection was carried out by conducting interviews with mothers of babies under five who visited the posyandu using a questionnaire. Data analysis was performed using univariate and bivariate analysis with the Chi-Square test.

\textbf{RESULT AND DISCUSSION}

\textbf{Univariate Analysis}

The number of respondents in this research was 113 mothers. The following is univariate analysis for the results of this study which can be seen in table 1.

| Table 1. Frequency Distribution of Factors Affecting the Behavior of Mothers and Babies Against Complete Basic Immunization |
|-------------------------------------------------------------|----------------|----------------|
| Variables                                   | n   | Percent |
| Education                                   |     |         |
| Didn't finish high school                    | 46  | 40.7    |
| Graduated from high school                   | 67  | 59.3    |
Table 1 shows that the majority of mothers have graduated from high school as many as 67 people (59.3%) and the rest have not graduated from high school as many as 46 people (40.7%), the majority of mothers earn below the UMR as many as 80 people (70.8%) and the rest are above the UMR as many as 33 people (29.2%), the majority of mothers do not work as many as 91 people (80.5%) and the majority of mothers have husbands who work as many as 105 people (92.9%) and the rest had husbands who did not work as many as 8 people (7.1%), the majority of mothers had children less than or equal to 2 as many as 87 people (77.0%) and the rest had more than 2 children 26 people (23.0%). Then for the knowledge variable, the majority of mothers had good knowledge as many as 60 people (53.1%) and the rest had less knowledge as many as 53 people (46.9%). In the attitude variable, the majority of mothers had a poor attitude, namely as many as 110 people (97.3%) and the rest had a good attitude as many as 3 people (2.7%). In the basic immunization behavior variable, the majority of mothers had good behavior, namely as many as 67 people (59.3%) and the rest had poor behavior, as many as 46 people (40.7%).

### Bivariate analysis

The following are the results of the bivariate analysis of this research, which can be seen in table 2.
Table 2. Factors Associated with the Behavior of Mothers and Babies Against Complete Basic Immunization

<table>
<thead>
<tr>
<th>Variables</th>
<th>Complete Basic Immunization Behavior</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not complete (%)</td>
<td>Complete (%)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Didn't finish high school</td>
<td>50</td>
<td>34.4</td>
</tr>
<tr>
<td>Graduated from high school</td>
<td>50</td>
<td>65.7</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under UMR</td>
<td>82.6</td>
<td>62.7</td>
</tr>
<tr>
<td>Above UMR</td>
<td>17.4</td>
<td>37.3</td>
</tr>
<tr>
<td>Mother's job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doesn't work</td>
<td>89.1</td>
<td>74.6</td>
</tr>
<tr>
<td>Work</td>
<td>10.9</td>
<td>25.4</td>
</tr>
<tr>
<td>Husband's job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doesn't work</td>
<td>6.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Work</td>
<td>93.5</td>
<td>92.5</td>
</tr>
<tr>
<td>Number of children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;2</td>
<td>28.3</td>
<td>19.4</td>
</tr>
<tr>
<td>≤ 2</td>
<td>71.7</td>
<td>80.6</td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough</td>
<td>47.8</td>
<td>46.3</td>
</tr>
<tr>
<td>Good</td>
<td>52.2</td>
<td>53.7</td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough</td>
<td>4.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Good</td>
<td>95.7</td>
<td>98.5</td>
</tr>
</tbody>
</table>

Source: Primary Data, 2022

Based on Table 2, shows the relationship between the independent variables and the dependent variable complete basic immunization behavior. In the education variable, a p-value >0.05 (0.141) is obtained, which means that H0 is rejected or there is no significant relationship between education and immunization behavior in mothers. In the income variable, a p-value >0.05 (0.038) is obtained, which means that H0 is accepted or there is a significant relationship between income and immunization behavior.

In the mother’s job variable, a p-value > 0.05 (0.095) was obtained, which means that H0 is accepted or there is no significant relationship between mother’s work and immunization behavior in mothers. In the husband's occupation variable, a p-value > 0.05 (1.000) was obtained, which means that H0 is accepted or there is no significant relationship between the husband's occupation and the immunization behavior.

In the number of children variable, a p-value > 0.05 (0.383) was obtained, which means that H0 was rejected or there was no significant relationship between the number of children and immunization behavior in mothers. In the knowledge variable, a p-value > 0.05 (1.000) is obtained, which means H0 is rejected or there is no significant relationship between knowledge and immunization behavior in mothers. In the attitude variable, a
p-value > 0.05 (0.566) is obtained, which means that H0 is rejected or there is no significant relationship between attitudes and immunization behavior.

**Relationship between education and mother's behavior towards complete basic immunization**

Based on the results of the study it was found that there was no significant relationship between education and the behavior of the mother of the baby on complete basic immunization at the 9 November Health Center in Banjarmasin. This is in line with research by Riza et al (2018) in the working area of the Cempaka Banjarmasin Health Center which stated that there was no relationship between education level and completeness of basic immunization. Likewise with research by Mardianti and Farida (2020) which states that there is no relationship between education and immunization status.

The results of this study are different from the research of Jayanti et al (2017) which states that there is a significant relationship between education level and immunization behavior. This is because it is easy for mothers from various educational backgrounds to access information on the internet due to technological advances. In addition, the level of education has no effect on the completeness of immunization, this is also related to the level of knowledge of the mother because there is a lot of health promotion about immunization carried out by the puskesmas and also posyandu cadres in reducing infant/toddler mortality.

**Relationship between income and mother's behavior towards complete basic immunization**

Based on the results of the study it is known that there is a significant relationship between income and the behavior of the mother of the baby towards complete basic immunization at the 9 November Health Center in Banjarmasin. This is in line with the research of Hayyudini et al (2017) which states that there is a significant relationship between economic status or income and the basic immunization status of children. Likewise with Carolin et al's research (2021) at RSIA Family Pluit which stated that there was a significant relationship between parental income and the completeness of additional immunizations in infants aged 2-24 months.

Income or income factors are very closely related to health such as immunization in infants aged 2 - 24 months. Adequate family income will support the growth and development of children, because parents can provide all the needs of children, both primary and secondary.

A person's economic status will affect a person's ability to finance health services. The level of opinion does not necessarily stand alone as one of the factors that can allow for completeness of immunization to occur, one that can allow for completeness of immunization for infants or toddlers, namely the employment status of a mother whether the mother is working or not working and only as a housewife.

**Relationship between mother's occupation and mother's behavior towards complete basic immunization**

Based on the results of the study it was found that there was no significant relationship between the mother's occupation and the behavior of the infant's mother towards complete basic immunization at the 9 November Health Center in Banjarmasin. This is in line with research by Arda et al (2021) at several Gorontalo District Health Centers which stated that there was no significant relationship between mother's work and the completeness of basic immunization in infants. Likewise with research by Mardianti and Farida (2020) which states that there is no relationship between work and immunization status.

However, the results of this study are different from the research of Meilani et al (2020) in the Working Area of the Kamepohno Health Center, Baubau City, which states that there is a significant correlation between work and immunization of infants. Likewise with the theory of the Ministry of National Education (2002) which states that working mothers reduce their time and attention to bringing their babies for immunization. This happens because currently there are many health service places that provide immunization services in the afternoon and at night so that working mothers can still give their babies complete basic immunizations.

**Relationship between husband's work and mother's behavior towards complete basic immunization**

Based on the results of the study it was found that there was no significant relationship between the husband's occupation and the mother's behavior towards complete basic immunization at the 9 November Health Center in Banjarmasin. In a study by Winarsih et al (2013) regarding the role of fathers in the completeness of immunization, it showed that 55.3% of the majority of fathers were included in the bad role category by providing complete basic immunization. There are factors that
cause fathers to fall into the bad role category, including the father's busyness at work as an effort to make a living, which is one of the reasons why fathers are not involved in giving basic immunizations to babies.

The assumption of the researchers is that the average respondent is a housewife so they can visit the posyandu to get immunization services for their children. In addition, the number of Posyandu which is quite large and located in a strategic location can be a reason for mothers to visit the Posyandu regularly. This is included in the enabling factors which were not examined in this study. As for what is included in the enabling factors in the formation of a person's behavior, namely the physical environment and the distance to health facilities. The results of research conducted by Darmawan (2017) showed an OR value of 1.841, which means that parents whose homes are close to the Posyandu have a 1.841 chance of utilizing Posyandu services better than parents whose homes are far from the Posyandu. The proximity of the posyandu can encourage someone's interest to take advantage of the health services available at the posyandu.

Other factors that support the mother's behavior in providing complete basic immunization are reinforcing factors, namely the support of the family and local community leaders. Cadres are one of the community leaders who have an important role as community mobilizers and motivate them to attend and play an active role in the use of posyandu. Cadres are also an extension of health workers so that cadres can provide health information to the public.14

**The relationship between the number of children and the mother's behavior towards complete basic immunization**

Based on the results of the study it was found that there was no significant relationship between the number of children and the mother's behavior towards complete basic immunization at the 9 November Health Center in Banjarmasrin. This is in line with research by Mardianti and Farida (2020) which states that there is no relationship between attitudes and immunization status. This happened because it was significant because the education of the respondents was mostly low.8

However, the results of this study are different from the research of Yeni Riza et al (2018) with the title factor analysis of the completeness of basic immunization in toddlers in the working area of the Cempaka Health Center, Banjarmasrin, a significant relationship was found between knowledge and the completeness of basic immunization in toddlers.4 Health knowledge includes what a person knows about ways to maintain health. Health behavior for a healthy life, namely all activities or activities of people in order to maintain health, such as actions on factors related to and or influencing health and actions to prevent disease, including including bringing the baby to get complete immunization.9

**Correlation between attitude and mother's behavior towards complete basic immunization**

Based on the results of the study it was found that there was no significant relationship between attitudes and behavior of the mother of
the baby towards complete basic immunization at the 9 November Health Center in Banjarmasin. This is in line with research by Mardianti and Farida (2020) which states that there is no relationship between knowledge and immunization status. This happened because it was significant because the education of the respondents was mostly low. 

However, the results of this study are different from the research by Arda et al (2018) at several Gorontalo District Health Centers which stated that there was a significant relationship between the mother's attitude and the completeness of basic immunization in infants. 

This difference occurred because in this study, the majority of respondents (97.3%) had a good attitude so that they had good behavior towards complete basic immunization. This can be influenced by good knowledge and support from people who are considered important, for example family, mass media information, and experience about immunization.

CONCLUSION

Based on the results of the study, it was found that there was an influence between income on the mother's behavior towards complete basic immunization. Meanwhile, education, mother’s occupation, husband's occupation, number of children, knowledge, and attitudes had no effect on the completeness of basic immunization in infants because the value of p> 0.05.

REFERENCES


