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OVERVIEW OF MOTHERS' KNOWLEDGE AND EDUCATION REGARDING IMMUNIZATION

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ABSTRACT

This study aims to determine the description of mothers' knowledge and education regarding immunization. This study uses a quantitative descriptive research design using descriptive methods. The results of the study showed that mothers' knowledge about immunization was the highest at 69 (67.0%). The majority of mothers' education was 72 respondents (69.9%). The study concludes that mothers' knowledge and education affect immunization.

Keywords: Toddlers, Immunization, Education, Knowledge

INTRODUCTION

Children experience a golden growth period during toddlerhood (babies under two years old). During this period, the brain develops very rapidly so that it is very susceptible to environmental influences that can interfere with the cognitive abilities and brain structure of children (Dewi et al., 2024; Gunardi, 2021). Immunization is a health intervention that has been proven effective in preventing various infectious diseases in children, such as measles, polio, and diphtheria. The immunization program initiated by the Indonesian Ministry of Health (Kemenkes) continues to develop, although challenges such as lack of knowledge, concerns about side effects, and uncertainty about information remain. Data from the Ministry of Health and UNICEF in 2020 showed that the COVID-19 pandemic added new obstacles, with many parents reluctant to bring their children for immunization due to concerns about infection. (Unicef, 2022).

Factors causing low coverage of complete basic immunization with various reasons mothers do not bring their toddlers for immunization, including because the location is far away, and the services are incomplete even though free facilities have been provided by the government. This is due to various reasons such as mothers' lack of knowledge about immunization and low awareness of mothers to bring their children to the health center to get complete immunization because they are afraid that their children will get sick, and some feel that immunization is not necessary for their babies, lack of information/explanation from health workers about the benefits of immunization and other obstacles (Oktalina et al., 2021).

The results of research from Karmila et al., (2022) the inhibiting factors for the implementation of basic immunization are false rumors about immunization, the public believes that immunization causes their children to become sick, disabled or even die, the public's understanding, especially parents, is still lacking about immunization, and parents' motivation to provide immunization to their children is still low.

Mothers' knowledge plays a central role in ensuring the completeness of children's immunization. Several studies have shown that mothers with higher levels of education tend to understand the importance of immunization better than those with lower education. However, although many mothers have secondary to higher education, lack of in-depth understanding remains an obstacle (Antono et al., 2021). A study in Makassar, for example, found that 50% of mothers had good knowledge about immunization, but there were still 22.5% who had insufficient knowledge. (Nurdiana et al., 2022).

Maternal education, age, and employment status are also factors that influence the decision to provide complete immunization to children (Nisa et al., 2023). Recent studies indicate that mothers who have better knowledge tend to be more compliant in following the immunization schedule. However, in some cases, factors such as family support and perceptions of the surrounding community also influence the level of participation in immunization (Sudradjat & Mantu, 2023).

Toddlers are infants and children whose growth and development have different characteristics. Toddler growth will develop according to age. The older they get, the more their activities and appearance will be very different compared to when they were just born. During growth and development, children aged 12 to 18 months will experience growth in weight and height. In children aged 18 to 24 months, growth tends to be almost the same, only their activity will increase. At the age of 2 to 3 years, physical growth has begun to be clearly visible (Siloam Hospital Medical Team, 2024).

Health problems that are often encountered in toddler development include diarrhea, fever, febrile seizures, chickenpox, tuberculosis, acute respiratory infection, dengue fever, etc. One way to prevent disease or outbreaks in toddlers is through an immunization program that is used to reduce morbidity, mortality and disability in infants and toddlers. This immunization is very useful for toddlers who are still vulnerable to disease (Rahmawati, 2023). Immunization is an effective and efficient way to prevent disease. Until now, there are seven infectious diseases in children that can cause death and disability, although some children can survive and become immune. The seven diseases are included in the immunization program, namely tuberculosis, diphtheria, pertussis, tetanus, polio, measles and hepatitis-B (Syukri & Appi, 2021).

Immunization will make the baby's growth and development optimal, namely becoming a healthy, strong, intelligent, creative, and well-behaved child. The immunity of toddlers who have been immunized will increase and be protected from dangerous diseases, so that the child's growth and development is not disturbed. Immunization also prevents various dangerous infectious diseases in a safe, effective and relatively inexpensive way (Safutri et al., 2023). The growth and development of babies is very rapid, especially the growth of the baby's brain (golden period). Babies whose brain development is not trained will have their growth and development disrupted. If children are not given complete basic immunizations routinely, one of them can cause disorders in the child's brain so that their growth is disrupted.

In Indonesia, the immunization program has been started since the 19th century to eradicate smallpox in Java. The last case of smallpox in Indonesia was found in 1972 and in 1974 Indonesia was officially declared a smallpox-free country. From 1977 to 1980, BCG, DPT and TT immunizations were introduced successively to provide immunity against childhood tuberculosis, diphtheria, pertussis and neonatal tetanus. In 1981 and 1982, polio

and measles antigens were introduced in 55 sub-districts and were known as the Immunization Program Development (PPI) sub-districts (Kulsum, 2023).

Research related to immunization has been conducted by Adhisty et al., (2021) Based on the results of the study, the level of maternal knowledge regarding complete basic immunization for infants aged 0-12 months in Talun Village, Kemalang District, Klaten. Most respondents had sufficient knowledge (43.33%). Research conducted by Balqis et al., (2023) also showed that the characteristics of mothers in Simpang Tiga District were mostly she is 26-30 years old (49.5%), has a high school/equivalent and college education (43.3%), and is unemployed/housewife (73.2%). The level of maternal knowledge about basic infant immunization in Simpang Tiga District is mostly categorized as lacking (69.1%), sufficient (25.8%), and good (5.2%). From this study, it can be seen that maternal knowledge and behavior influence the provision of immunization to toddlers. This study aims to describe the relationship between maternal knowledge and education levels and the completeness of child immunization. It is hoped that the results of this study can provide input for the development of more effective health promotion strategies to increase the coverage of complete basic immunization in Indonesia.

RESEARCH METHOD

This research method uses a descriptive research type. Research with a descriptive method is carried out with the aim of explaining or describing a condition, event, or anything related to variables that can be explained either with numbers or words. The research design used is Cross Sectional where the research object is measured simultaneously at the same time.

The sample of this study was all mothers who have children aged 1-5 years who visited the Posyandu as many as 103 respondents, who were willing to become research respondents by filling out the questionnaire that had been given.

RESULT

Description of Maternal Knowledge Factors Regarding Immunization in Toddlers

Table. 1
Frequency Distribution
of Maternal Knowledge Regarding Immunization

Mother's knowledge	F	%
Low	15	14.6
Medium	69	67.0
High	19	18.4
Total	103	100.0

Table 1 shows that the majority of mothers' knowledge about immunization is in the moderate category, as many as 69 respondents (67.0%).

Description of the Level of Formal Education of the Mother or Husband Regarding the Provision of Immunization

Table. 2
Frequency Distribution of Formal Education Level of Mother/Husband Regarding Immunization

Mother's Education	F	%
Low	15	14.6
Medium	72	69.9
High	16	15.5
Total	103	100.0

Table 2 shows that 72 respondents (69.9%) had moderately educated mothers, while 16 respondents (15.5%) had highly educated mothers and 15 respondents (14.6%) had lowly educated mothers.

DISCUSSION

Description of Mothers' Knowledge of Immunization in Toddlers

The results of the study showed that the level of knowledge of mothers about immunization in toddlers was mostly in the moderate category, namely 69 respondents (67.0%). This moderate level of knowledge illustrates the unsuccessful delivery of information about immunization to the community. This can be seen from the characteristics of the respondents, most of whom had received counseling about immunization from health workers and many mothers had moderate education. It can be concluded that mothers do not fully understand the importance of immunization, schedules, how to administer immunizations and the side effects of immunization. This can be influenced by several factors, namely education, information and experience (Fajriati et al., 2024).

From the data above, the number of mothers who have a moderate level of knowledge indicates that information has reached the community, although it still needs to be improved because there are still many mothers who do not clearly understand about immunization. That there is a positive relationship between the level of knowledge and the behavior of mothers in immunization. In addition, experience about the benefits obtained from immunization influences the behavior of mothers (Agustin & Rahmawati, 2021).

Knowledge is the basis for forming a person's actions. Based on this theory, the level of knowledge that is only in the moderate category about immunization is less able to direct a person's behavior and actions in providing immunization to toddlers, so that it will affect the coverage of immunization in toddlers (Adhisty et al., 2024).

There are several questions in testing knowledge about immunization that generally cannot be answered correctly by respondents. Questions about immunization knowledge cannot be answered correctly. However, for other general questions, the answers given are still wrong. This shows the low knowledge of respondent mothers about immunization. This may be due to a lack of interest in knowing about immunization, the lack of counseling they receive, the reaction of mothers when given the questionnaire, most of them complained about the many questions so that maybe some answered the questions just by ticking, even though most

respondents admitted to getting information about immunization from the integrated health post (Widharma et al., 2023).

The more mature a person is, the wiser they are in thinking and the more experiences they encounter to gain knowledge. At this time, young or old age does not affect the level of knowledge. This happens because at this time various information can be accessed via the internet and social media by anyone without any age differences, so that anyone can easily access the latest news or information (Yulia et al., 2023).

A person's behavior is greatly influenced by their level of education. The ability to obtain information and the level of knowledge tend to increase along with the level of education they have. However, the results of this study are not in line with the findings of Azril et al., (2022) who found a significant relationship between maternal education and basic immunization in toddlers ($p = 0.015$). This shows that people who are less educated do not always have low knowledge. In fact, non-formal education can also contribute to increasing a person's knowledge, as does formal education. A mother's attitude towards immunization is often influenced by the amount of information she receives about the immunization. The more information received, the broader the knowledge they have, and this affects their attitudes and behavior towards immunization (Dewi et al., 2024).

Description of the Mother's Formal Education Level Factor Towards Immunization

The results of the study regarding the level of maternal education showed that the percentage of mothers who had a high level of education, in this case having completed education up to a minimum of junior high school, was higher, namely 72 respondents (69.9%). This is related to knowledge, the higher the level of education, the greater the ability to absorb and receive information so that knowledge and insight are broader, in addition, the level of education is one of the factors that underlies knowledge, which then influences a person's attitude. Educational institutions will influence a person's attitude. Education in general is any effort that is planned to influence other people, both individuals, groups or communities so that they do what is expected by the education actors (Audah, 2020; Manis et al., 2020). The description above that education is related to the transmission of knowledge, attitudes, beliefs and skills in other aspects. Education is the process of learning and teaching human behavior patterns according to what society expects. (Hasibuan et al., 2021; Pakaya et al., 2021).

A person with a low level of education does not necessarily have low knowledge and a person with a secondary level does not necessarily have a good level of knowledge. The level of education also determines how easy it is for someone to absorb and understand the knowledge they generally acquire. It is undeniable that the higher the education, the easier it is for them to receive information, and in the end the knowledge they have will increase (Wardani et al., 2019). However, it cannot be used as a benchmark if mothers with secondary education will have good knowledge about basic immunization.

CONCLUSION

The description of the factors that influence the provision of immunization to toddlers are: The factor of the level of formal education of the mother or husband is moderate at 69.9% and the factor of the level of formal education of the mother or husband is moderate at 69.9%.

SUGGESTION

It is recommended that the immunization outreach program be improved, both in terms of coverage, quality of material, and delivery methods, by utilizing more interactive and interesting media.

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