# RELATIONSHIP BETWEEN MOTHER'S KNOWLEDGE ABOUT IMMUNIZATION BASIC WITH COMPLETE BASIC IMMUNIZATION IN THE WORK AREA OF TAREMPA COMMUNITY HEALTH CENTER ANAMBAS ISLANDS REGENCY 2024

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#### **Abstract**

Lack of maternal knowledge about the need, completeness, fear of immunization and the existence of misperceptions are common. However, the most influential is due to the mother's ignorance of the importance of immunization. This study uses a quantitative research type with a Total Sample design. The study was conducted at 3 integrated health posts under the working area of the Tarempa Health Center, namely the Tarempa Barat Daya Integrated Health Post, the Sri Tanjung Integrated Health Post and the Tarempa Selatan Integrated Health Post of 35 toddlers, more than half of the toddlers received complete basic immunization. The study was conducted to determine the frequency distribution of maternal knowledge about basic immunization in, to determine the frequency distribution of complete basic immunization in infants, to analyze the relationship between maternal knowledge and complete basic immunization in infants at the Sri Tanjung Integrated Health Post, the Southwest Integrated Health Post and the Tarempa Selatan Integrated Health Post, South Tarempa Village, Anambas Islands Regency in 2024. This study obtained a p value of 0.030 < 0.05. This study shows that there is a relationship between maternal knowledge and complete basic immunization in toddlers at the Tarempa Health Center. need to provide socialization as an effort to increase mothers' knowledge about immunization to increase mothers' knowledge about immunization.

**Keywords:** Disease Prevention, Posyandu, Immunization

#### INTRODUCTION

Based on data published in 2023 by the World Health Organization (WHO) and UNICEF in 2022, there were 20.5 million children who did not receive one or more vaccines given through routine immunization services, compared to 24.4 million children in 2021. Despite the increase, this number is still higher than the 18.4 million children who were out of school in 2019 before the pandemic-related disruption (WHO, 2023).

Vaccines against diphtheria, tetanus and pertussis (DTP) are used as a global marker of immunization coverage. Of the 20.5 million children who missed one or more doses of the DTP vaccine in 2022, 14.3 million children did not receive a single dose, which is not to mention a child without a dose. This figure is an increase from 18.1 million children without doses in 2021, but still higher than 12.9 million children in 2019 (WHO, 2023).

Based on WHO data in 2021, as many as 25 million children do not get complete immunization at the global level. This data shows 5.9 million more than 2019 tofu and the highest number since 2009. Meanwhile, in Indonesia, the number of children who have not been fully immunized since 2017 to 2021 is 1,25,936 children (WHO, 2021).

Based on data from the Ministry of Health of the Republic of Indonesia in 2018, the coverage of complete basic immunization in Indonesia is 81.99% (Indonesia, 2017) (Ministry of Health, 2019). In 2019, the coverage of complete basic immunization is 89.13% with the target of the 2019 strategic plan of 93% with the achievement of HB-0 immunization of around 83.6%; BCG

around 94.3%; DPT-HB-Hib 3 reached 97.0%, Polio 4 92.4% and Measles around 93.0%. In 2020, the coverage of complete basic immunization was 83.9% Health. (Ministry of 2019). percentage of villages that achieved Universal Child Immunization (UCI) in Indonesia in 2018-2020 decreased and increased, in 2018 it was 82.13%, and in 2019 in during the Covid-19 pandemic by 90.2%. In 2020, the coverage of complete basic immunization is 83% (Ministry of Health, 2019).

#### MATERIALS AND METHODS

The type of research used in this study is quantitative research with a Cross Sectional design. Cross Sectional research design is a type of research that emphasizes the time to measure/observe independent and dependent variable data only once at a time (Syahrizal, 2023). In this study, the researcher aims to determine the relationship between maternal knowledge and basic immunization and the completeness of basic immunization.

Data collection is carried out directly by the researcher. The used questionnaire is a closed questionnaire that has been equipped with multiple choice answers, where each item consists of several alternative answers shown to the respondents in this study. This study adopts from a questionnaire made by (Syahrizal, 2023).

#### RESULTS AND DISCUSSION

a. Research Results

Based on the results of the study entitled "The Relationship between Mother's Knowledge About Basic Immunization and Immunization Completeness in the Working Area of the Tarempa Health Center, Anambas Islands Regency in 2024". Data on the frequency distribution of respondents was obtained based on the results of the research, as follows:

Table 1.1 Distribution of Frequency of Mother's Knowledge About Basic Immunization in the Working Area of the Tarempa Health Center, Anambas Islands Regency in 2024

Mother's Knowledge	Frequency (f)	Percentage (%)
Less	9	25,72%
Simply	9	25,72%
Good	14	14%
Total	35	100%

Based on table 1.1, it can be concluded that mothers of toddlers who visit basic immunization at the Tarempa Health Center in 2024 who have less knowledge are 9 mothers (25.72%), 9 mothers (25.72%) who have simply knowledge while mothers with good knowledge are 14 mothers (40c/o). This means that based on this table, mothers with good knowledge are more than mothers with less and simply knowledge.

Table 1.2 Distribution of Frequency of Immunization Completeness in the Working Area of the Tarempa Health Center, Anambas Islands Regency in 2024

No.	Immunization Status	Frequency (n)	Percentage (%)
l.	Self-Management After Intervention		
	Complete	32	91,4
	Incomplete	3	8,6
	Total	35	100

Based on table 1.2, shows that 32 toddlers (91.4c/o) who visited the Tarempa Health Center in 2024 received complete immunization. Meanwhile, the toddlers who were Incomplete immunized were 3 toddlers (8.6%). This can be interpreted that there are fewer toddlers who do not get complete immunization than toddlers who get full immunization.

#### DISCUSSION

### a. Definition of Immunization

Immunization is an effort to actively cause/increase a person's immunity to a disease so that if one day they are exposed to the disease they will not get sick or only experience mild illness (Constitution et al., 1967).

Immunization comes from the word immune, immune or resistant. Children are immunized, meaning they are given immunity to a certain disease. Children are immune or resistant to one disease but not necessarily immune to other diseases. Immunization is an effort to actively cause/increase a person's immunity to a disease, so that if one day they are exposed to the disease they will not get sick or only experience mild pain. Immunization is the most effective and efficient public health effort in preventing several dangerous diseases (Andini, 2024).

#### b. Immunization Objectives

According to the Indonesian Minister of Health Regulation Number 12 of 2017, immunization has a general and special purpose. The general purpose of this immunization is to reduce the rate of

illness, disability and mortality caused by Immunization-Preventable Diseases (PD3I).

While the specific objectives of this program are as follows:

- 1. Achievement of complete basic immunization (IDL) coverage for infants according to the RPJMN target.
- 2. Achievement of Universal Child Immunization/UCI in all villages/sub-districts.
- 3. Achievement of the target of advanced immunization for children under two years old (baduta) and for elementary school age children and Women of Childbearing Age (WUS).
- 4. Achieving reduction, elimination, and eradication of diseases that can be prevented by immunization.
- 5. Achieving optimal protection for people who will travel to areas endemic to certain diseases.
- 6. The implementation of safe immunization and medical waste management (safety injection practice and waste disposal management).

#### c. Benefits of Immunization

The benefits of immunization are not only felt by the government by reducing the rate of illness and death from diseases that can be prevented by immunization (Fitriani et al., 2024), but can be felt by:

- 1. Children, i.e. prevent suffering caused by illness and possible disability or death.
- 2. Family, which is to eliminate anxiety and medical expenses when the child is sick, encourages the formation of a

- family if parents are confident that their child is having a comfortable childhood.
- 3. The state, namely improving the level of health, creating a strong and sensible nation to continue state development.
- d. Classification and Types of Immunization

The classification of vaccines based on the type of antigen contained in them is as follows (Isnaniar, et al, 2023):

#### 1. Bacteria:

- a) Live attenuated (hidup dilemahkan): BCG
- b) Inactivated (mati / diinaktivasi): DPT-HiB-HB, Pneumococcal (PCV), Tifoid (Typhim Vi),
- c) Toksoid yang dihasilkan bakteri: DT. Td

# 2. Virus:

- a) Live attenuated : Campak, mumps, rubella, polio (OPV), rotavirus, yellow fever, varisela
- b) Inactivated : Polio (IPV), influenza, Hepatitis B, hepatitis A

# CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research that has been conducted on "The Relationship between Mother's Knowledge About Basic Immunization and Immunization Completeness in the Working Area of the Tarempa Health Center, Anambas Islands Regency in 2024" it can be concluded that:

a. The majority of mothers have a level of knowledge about basic immunization in the Tarempa Health Center Working Area, Anambas Regency in 2024 is a poor category, namely 14 people (40%)

- b. Most of the complete immunization of toddlers in the Working Area of the Tarempa Health Center, Anambas Regency in 2024 is a complete category, namely 32 people (91.4%)
- c. There is a relationship between maternal knowledge and complete basic immunization in toddlers at the Tarempa Health Center with a p value of 0.048 < 0.05.

#### 1. Recommendations

- a. For Facilities in the Working Area of the Health Center
  It is hoped that the relevant institutions, in this case, the health center will make health promotion efforts in the form of providing counseling to the community about what immunization is
- For Respondents
   Advice for mothers of toddlers to further improve knowledge related to complete basic immunization.
- c. For future researchers
  For Batam University It is hoped that this research can be a source of literature for further research so that it can help students' insight and knowledge about maternal knowledge about immunization.
- d. The results of the research obtained can be basic data and information for future researchers. Other researchers are advised to consider Techniques in sampling.

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