

# Relationship Between Mother's Knowledge And Clean And Healthy Living Behaviors Towards Fever Typhoid In Toddlers

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**Abstract.** *One of the tropical infectious diseases in developing countries is typhoid fever. Typhoid fever is often found in people's lives, both in urban and rural areas. This disease is very closely related to clean and healthy living behavior (PHBS) such as poor environmental sanitation, personal hygiene and daily community behavior. Purpose To find out The Relationship between Mother's Knowledge and Clean and Healthy Living Behavior towards Typhoid Fever in Toddlers in the Children's Ward of Dr. H. Yulidin Away Tapaktuan Regional Hospital. This research method is descriptive correlation with Cross Sectional approach with a sample size of 52 parents with typhoid fever cases. The results of this study obtained p-value results = 0.000 < 0.05 so that there is a relationship between the two variables. Conclusion There is a significant relationship between the level of knowledge with clean and healthy living behavior (PHBS) on typhoid fever in toddlers in the children's room of Dr. H Yulidin Away Tapaktuan Hospital. Suggestions from the results of this study provide input to service institutions and become guidelines for maximizing the implementation of clean and healthy living behavior (PHBS) in parents whose children are being treated with typhoid fever cases.*

**Keywords :** Typhoid, Fever, Knowledge, Behavior

## 1. INTRODUCTION

According to Data from the Global Burden of Disease (GBD) on the Disability-Adjusted Life Year (DALY) concept, the incidence of Typhoid Fever globally in 2018 was ranked 6th with a value of 1895.4 DALYs per 100,000. The latest data in 2019 showed an improvement in this disease as indicated by a decrease in position to 12 with a value of 1251.52 DALYs per 100,000 (Global Burden of Disease, 2019). According to the latest data from the World Health Organization (WHO), the estimated global burden of typhoid fever is 11-20 million cases per year resulting in around 128,000-161,000 deaths per year, most of which occur in Southeast Asia, South Asia, and Sub-Saharan Africa. (WHO, 2022).

Typhoid fever cases in Indonesia range from 350-810 per 100,000 population, the prevalence of this disease in Indonesia is 1.6% and ranks 5th in infectious diseases that occur in all ages in Indonesia, which is 6.0% and ranks 15th in the cause of death of all ages in Indonesia, which is 1.6%. (Khairunnisa et al., 2020). Riskesdas data (2018) stated that Aceh Province is the first highest typhoid out of 5 provinces throughout Indonesia. This is again explained by the data from the North Aceh District Health Office in 2020 showing that Aceh is the province with the highest prevalence of typhoid fever, which is 1,640 or 7.0%. Based on data obtained from the initial survey of the study that researchers

obtained from the Children's Room of the dr. H Yulidin Away Tapaktuan Hospital, South Aceh Regency in 2023, there were 52 cases of typhoid fever sufferers recorded, starting from December 2023 to January 2024.

Typhoid fever cases often occur in the age range of 3-19 years. Children under 5-11 years of age are school-age children, where this age group often does activities outside the home so they are more susceptible to typhoid fever because their immune systems are not as strong as adults. (Musthofa, 2021). Fever (hyperthermia) is one of the most important clinical complaints and symptoms that arise in all typhoid fever patients (Idrus, 2020).

One of the factors that can influence the occurrence of typhoid fever is the habit of clean and healthy living behavior caused by dirty and slum environments. Knowledge can influence someone to practice clean and healthy living behavior in order to prevent various diseases (Husna et al., 2020). Knowledge is obtained from educational background, higher education will be more prepared in dealing with a problem and thinking critically so that they can sort out what is good and what is not, while those with low education have less knowledge so that a problem arises where the impact affects the family or closest people. A person's knowledge about clean and healthy living against typhoid fever will affect the good and bad behavior of a person, unhealthy behavior will have a bad impact, namely the increasing number of typhoid fever cases (Maarisit et al., 2018).

Efforts that can be made to improve knowledge and clean and healthy living behavior are through clean and healthy living behavior programs that a small part of the community has implemented, including washing hands with soap or antiseptic in public places, having a clean environment, and consuming healthy and clean food (Husna et al., 2020). According to research (Rahmawati, 2020) it states that there is a significant relationship between the practice of washing hands after defecating and the incidence of typhoid fever and germs transmitted through food or drink can be mediated through flies or other vectors where flies or vectors land on the food they eat, or secretions are carried with water and transmitted to humans.

Environmental sanitation is also closely related to the incidence of Typhoid Fever. Environmental health is essentially a condition or state of the environment that is optimal so that it affects the realization of optimal health, environmental conditions that do not meet health requirements such as used bottles and tires become a medium for the development of disease vectors. The environment is everything around humans that affects the development of human life both directly and indirectly. The environment can be divided into biotic and abiotic environments. Typhoid Fever or abdominal typhus is often

found in our community life, both in urban and rural areas. (Ministry of Health of the Republic of Indonesia, 2019).

This is in line with the results of a study conducted by Sari (2020) on the Relationship of Habits and Environmental Sanitation Factors with the Incidence of Typhoid Fever in the Ngemplak Health Center Work Area, Boyolali Regency, which stated that there was a relationship between clean water sources and the incidence of Typhoid Fever with a  $p\text{-value} = 0.003$ . From the results of the initial interview conducted by the researcher on October 30, 2023 with 1 nurse and 10 mothers whose children were being treated with typhoid fever, the results of the interview with nurse A stated that the majority of Typhoid Fever sufferers who were being treated had poor knowledge about Typhoid Fever.

In addition, the results of interviews with 4 mothers with Typhoid Fever as respondents in the inpatient room admitted that sufferers pay less attention to personal hygiene such as not washing their hands before eating, 3 mothers whose children suffer from Typhoid Fever admitted that their children often eat food outside the home. 3 mothers with Typhoid Fever said they still use the river to wash, use toilets so that this can cause vectors to be transmitted through food contaminated with salmonella typhi bacteria and cause Typhoid Fever (Primary data from Dr. H, Yulidin Away Tapaktuan Hospital in 2023).

## **2. LITERATURE REVIEW**

According to Notoatmodjo, (2018) behavioral determinants can be divided into two, namely:

- a. Internal determinants or factors, namely the characteristics of the individual concerned, which are innate, for example: intelligence level, emotional level, gender, and so on.
- b. External determinants or factors, namely the influence of the environment or outside the individual concerned, be it the physical, social, cultural, economic, political environment, and so on. These environmental factors are often the dominant factors that color a person's behavior.

## **3. METHODS**

The research approach used is a cross-sectional approach. Cross-sectional is a type of research that aims to determine the relationship between variables where the

independent variable and the dependent variable are identified only once and at the same time. This research was conducted in the Children's Room of the Dr. H. Yuliddin Away Tapaktuan Regional General Hospital. This research was conducted from May 15 to June 15, 2024. The population in this study were mothers who had toddlers with typhoid fever cases who were treated in the Children's Room of the Dr. H. Yulidin Away Tapaktuan Regional General Hospital, as many as 52 parents, which was an average of visits in 2 months (December 2023 and January 2024). The reason for taking total sampling is because according to Sugiyono (2019) the population of less than 100, the entire population was used as a research sample.

#### 4. RESULTS

**Table 1.** Distribution of Subjects Based on the Relationship between Knowledge Level and Clean and Healthy Living Behavior (N=52)

Category Knowledge	Prilau Living Clean and Healthy						Total		p-value	
	Good		Enough		Not enough				0.000	
	F	%	F	%	F	%				
Good	18	34.6	1	1.9	0	0.0	19	36.5		
Enough	0	0.0	16	30.8	0	0.0	16	30.8		
Not enough	0	0.0	0	0.0	17	32.7	17	32.7		
Total		18	34.6	17	32.7	17	32.7	52	100	

Based on Table 1 it shows that from 52 respondents, 19 respondents have a good knowledge category, including those who have clean and healthy living behavior in the good category, amounting to 18 respondents (34.6%), those who have clean and healthy living behavior in the sufficient category amounting to 1 respondent (1.9%) and those who have clean and healthy living behavior in the less category none with a percentage (0.0%). The Sufficient knowledge category amounting to 16 respondents (30.8%) of whom have clean and healthy living behavior in the good category none with a percentage (0.0), the sufficient percentage amounting to 16 respondents with a percentage (30.8%), while those who have clean and healthy living behavior in the less category amounting to 0 percent (0.0). The less knowledge category amounting to 17 respondents (32.7%) of whom have clean and healthy living behavior in the good and sufficient categories none with a

percentage (0.0), while those who have clean and healthy living behavior in the less category amounting to 17 percent (32.7%).

## 5. DISCUSSION

### Level of Knowledge

Table 1 shows that the results obtained from measuring the level of knowledge of respondents. That as many as 19 respondents have good knowledge (36.5%), 16 respondents have sufficient knowledge (30.8%) and 17 respondents had less knowledge (32.7%). This shows that the level of knowledge of parents of toddlers whose children are being treated at the dr. H. Yulidin Away Tapaktuan Regional Hospital with typhoid fever cases already has good knowledge, although there are still 16 respondents who have sufficient knowledge (30.8%) and 17 people lack knowledge ((32.7%).

The results of this study in line with research conducted by Marisit, et al. (2020) which showed that the level of parental knowledge about typhoid fever was mostly good, namely 22 respondents (27.7%) out of 30 respondents.

According to Notoatmodjo (2019), knowledge is influenced by several factors, one of which is education. Parents with a higher educational background will be more prepared in raising their children, because extensive knowledge is obtained through reading articles or following progress regarding child development. Highly educated parents are also more able to think critically about what they get, so that they can sort out what is good and not for them to do to their children. From the results of the research that has been done, it is proven that the majority of parent respondents have a high school education background of 31 respondents (59.6%). And the minority of respondents have an elementary school education of 1 respondent (1.9%).

Apart from education, age also influences knowledge. According to Pangesti (2017), a person's age affects their ability to grasp and their mindset. The older they are, the more their ability to grasp and their mindset will develop, so that the knowledge they gain will be better. According to the researcher's assumption, Knowledge underlies a person to behave healthily. The knowledge that a person has will affect how he or she acts. Behavior that is obtained from knowledge will be better than behavior that does not come from knowledge, with the knowledge that a person has will affect the ability to digest the information received while considering whether the information can be used as a basis for their next behavior.

According to Julianti, et al. (2018), the factors that cause children to do PHBS very well are influenced by the mother's good knowledge about PHBS so that children get information given by the mother about how to clean and keep the body from dirt. This is supported by the opinion of Rompas & Oroh (2018) who said that parents play a very important role in reminding children about the implementation of clean and healthy living behavior (PHBS) where parents must be able to berole models and must also ensure that children implement clean and healthy living behavior, where the better the role given by parents, the better the child's habits in implementing clean and healthy living.

According to the researcher's assumption, the good results obtained in this study are indeed inseparable from the knowledge and role of parents in accustoming children to healthy living behavior, through this knowledge can create awareness that makes people behave and take attitudes in accordance with the knowledge they have.

## **6. CONCLUSION**

Based on the results of the research that has been conducted, the researcher drew the following conclusions:

- a. The results of this study showed that most respondents had good knowledge, followed by less knowledge and sufficient knowledge. Of the 52 respondents, 19 respondents had good knowledge (36.5%), 17 respondents had less knowledge (32.7%%) and 16 respondents (19.0%) had sufficient knowledge.
- b. The results of this study show that a large number of respondents who implement clean and healthy living behavior are in the good category, namely 18 respondents (34.6%), followed by clean and healthy living behavior in the sufficient and less categories with the same number, namely 17 respondents (32.7%).
- c. From the results of the analysis using the Chi-Square test at a significance level of 95% ( $\alpha = 0.05$ ) it is known that the p value is  $0.000 < 0.05$ . Therefore, it can be concluded that the hypothesis is that there is a relationship between the level of Mother's Knowledge and Clean and Healthy Living Behavior towards Typhoid Fever in Toddlers in the Children's Ward of Dr. H. Yulidin Away Tapaktuan Regional Hospital.

### **Suggestion**

- a. Research Place

The results of this study can be used as input for the institution of DR. H. Yuliddin Away Tapaktuan General Hospital. It is expected that health workers, especially

nurses, continue to promote health education to mothers of toddlers in the hospital about the importance of clean and healthy living behavior.

b. West Seuramoe Medical College of Health Sciences

It is hoped that the results of this research can be used for the development of science, either as a basis for research or as a study in the field of nursing science.

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