

The Relationship Between Personal Hygiene and The Incidence of Typhoid Fever in The Working Area of The Health Center

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ABSTRACT

Typhoid fever or abdominal typhoid is an infectious disease that usually affects the digestive tract with symptoms of fever for more than 7 days. This disease is caused by *Salmonella typhi*. Transmission occurs through a person's personal hygiene. This research is a descriptive research with a survey method with a random sampling technique, which is a sampling technique by selecting a sample from among the population. This research was conducted in February-March 2023. Using questionnaires and medical records. The results of the study on poor personal hygiene were 28 people (56%) in the category of severe fever, respondents with sufficient personal hygiene and good personal hygiene did not have severe fever. Results Analysis using the chi-square statistical test showed results (P Value = 0.000 < 0.05) so that there was a significant relationship between personal hygiene and the incidence of typhoid fever. The majority of a person has a severe fever, this can occur due to poor personal hygiene. The majority of people have poor personal hygiene, this is due to a lack of knowledge about personal hygiene with the incidence of typhoid fever. There is a relationship between personal hygiene and the incidence of typhoid fever at the Candi Health Center, this is because families pay less attention to personal hygiene, such as the habit of not washing hands before and after eating, not washing hands after going to the toilet, and eating snacks outside the home.

Keywords: Personal hygiene, Typhoid fever

PENDAHULUAN

Typhoid fever or abdominal typhus is an acute infectious disease that usually affects the digestive tract with symptoms of fever for more than 7 days, disturbances in the gastrointestinal tract and impaired consciousness (S Khairunnisa, 2022; Tyagita Widya Sari, 2020). In society this disease is known as typhus or typhoid (Kiki Karmila, 2020; Munaya Fauziah, Andriyani, Ernyasih, 2020). Transmission of typhoid fever through fecal and oral into the human body through contaminated food and drink (Festy Ladyani Mustofa, 2020). This disease is caused by *Salmonella typhi* and can only be found in humans (Rahmat et al., 2019). Transmission of this disease almost always occurs through a person's personal hygiene, and contaminated food or drink (Hayun & Wulandari, 2021). Typhoid fever is closely related to environmental sanitation and personal hygiene, for example personal hygiene, food hygiene, dirty environment, lack of cleanliness in public places as well as community actions that do not support a healthy life. (Febiyanti., 2021; Manalu & Rantung, 2021)

According to WHO (World Health Organization) 2022, estimates that typhoid fever is ranked 3rd globally with 11-20 million cases per year resulting in around 128,000-161,000 deaths per year. Typhoid fever that occurs in Indonesia is around 350-810/100,000 population, what is obtained is 1.6% and typhoid fever is in the 5th order of infectious diseases that occur in all age groups in Indonesia (6,0%), (Nur Aini Fatimah, Ilham Nova Widiyatmoko, 2021; Salsabila, 2023). Then the 15th order as a cause of death at all ages (1.6%) (Intan Putri Swari Aristi, 2020; Sihombing et al., 2022). The incidence rate in 2020 was 6,420 cases, in 2021 the number of cases increased to 8,567 cases and in 2022 it increased again to 9,982 cases (Kesehatan, 2021). On the East Java scale, typhoid fever is ranked 10th based on data from the Health Profile

Indonesia East Java Health Service in 2020 the incidence of typhoid fever was 1,281 cases, in 2021 the incidence of typhoid fever was 5,716 cases, and in 2022 the incidence of typhoid fever was 5,810 cases (Octavia Nur Laila, 2022; Okky Purnia Pramitasari, 2019). At the Candi Health Center the number of incidents in 2020 was 240

people, in 2021 there were 293 people, and in 2022 there were 315 people.

Typhoid fever sufferers are the main source of infection which always releases disease-causing microorganisms both when he is sick, or when he is in the healing process (Betan et al., 2022; Rahmat et al., 2019). This disease is closely related to personal hygiene such as the habit of washing hands before eating and after eating, the habit of bathing, washing hands after going to the toilet, and the habit of snacking outside (Akbar, 2020; Almaida et al., 2022). Improving personal hygiene is one of the prevention programs, namely self-protection against typhoid transmission (Andini, 2021; Yuliandi & Hikmah, 2022). Personal hygiene is a human effort to protect themselves and their environment from all that is dirty in order to realize and preserve a healthy and comfortable life (Afifah & Pawenang, 2019; Gunawan, A., Rahman, I. A., Nurapandi, A., Chandra Maulana, N., & Muhammadiyah, 2022). Based on the description above, there is a problem of increasing the incidence of Typhoid Fever with personal hygiene, so the authors are interested in conducting research on "The Relationship between Personal Hygiene and the Incidence of Typhoid Fever in Candi Health Centers."

METHOD

This type of research used descriptive research with survey methods. Survey research was conducted by giving questionnaires to respondents. In this study using random sampling technique (Notoadmodjo, 2018; Nursalam., 2020).

RESULT AND DISCUSSION

Table 1.

Distribution of Respondents Based on the Incidence of Typhoid Fever at the Health Center

No	Category	N	%
1	Good	5	10 %
2	Enough	9	18 %
3	Bad	36	72 %
Amount		50	100 %

Source: Primary Data 2023

Table 1. shows the results of research on 50 respondents based the incidence of typhoid fever was mild fever in 7 people (14%), moderate fever in 15 people (30%), and severe fever in 28 people (56%). From the data, most of the respondents had a severe fever.

Table 2.

Distribution of Respondents Based on Personal Hygiene at the Health Center

No	Category	N	%
1	Mild Fever	7	14%
2	Moderate Fever	15	30%
3	Severe Fever	28	56%
Amount		50	100 %

Source: Primary Data 2023

Table 2. shows the results of research on 50 respondents based on Personal Hygiene. In the distribution, 5 people (10%) had good Personal Hygiene, 9 people (18%) had enough, and 36 people (72%) had bad. From the data, most of the respondents have poor personal hygiene.

Table 3.

Cross-tabulation of the Relationship between Personal Hygiene and the Incidence of Typhoid Fever at the Health Center

Personal Hygiene	Typhoid Fever						Total	
	Mild Fever		Moderate Fever		Severe Fever			
	f	%	f	%	f	%	f	%
Bad	2	4%	6	12%	28	56%	36	72%
Enough	2	4%	7	14%	0	0%	9	18%
Good	3	6%	2	4%	0	0%	5	10%
Total	7	14%	15	30%	28	56%	50	100%
Uji chi-Square p = 0,000								

Based on the analysis using the chi-square statistical test, the results were obtained (P Value = 0.000 <0.05) so that there was a significant relationship between personal hygiene and the incidence of typhoid fever.

DISCUSSION

Incidence of Typhoid Fever

Based on the results of the research conducted, there were 7 people (14%) had a mild fever, 15 people (30%) had moderate fever, and 28 people (56%) had a severe fever. From this number it can be seen that more respondents experienced severe fever, namely with a temperature of 39°C, more than those with mild fever and moderate fever. This is due to poor personal hygiene, transmission of typhoid fever can occur in various ways, which are known as the 5F (food, finger, fomitus, fly, feces).

Identify Personal Hygiene

Based on the facts from the research conducted, there were 36 people (72%) had poor personal hygiene, 9 people (18%) had sufficient personal

hygiene, and 5 people (10%) had good personal hygiene. From this number it can be seen that more respondents have poor personal hygiene, namely with a score of 1-6 compared to sufficient and good personal hygiene. This is due to poor personal hygiene, some healthy living habits, including the habit of washing hands before eating and after eating, washing hands after going to the toilet, and eating snacks outside the home.

Analyzing the relationship between personal hygiene and the incidence of typhoid fever at the temple health center

Based on the analysis using the chi-square statistical test, it obtained a significant value of $p = 0.000$, meaning that the value of $p < 0.05$ so that there is a significant relationship between personal hygiene and typhoid fever.

CONCLUSIONS

Based on the results of the discussion that has been presented, researchers can conclude several things based on objectives

1. Based on the results of the discussion that has been presented, the researcher can conclude several things based on the specific objectives: From the results of the study it can be concluded that more than half of the respondents suffered from severe fever as many as 28 people (56%).
2. From the results of the study it can be concluded that more than half of the respondents had poor personal hygiene as many as 36 people (72%).
3. From the results of the study it can be concluded that there is a relationship between personal hygiene and the incidence of typhoid fever.

SUGGESTION

Based on the conclusions above, several suggestions can be put forward as follows: Based on the conclusions above, several suggestions can be put forward as follows:

1. To carry out prevention from the human side, namely the typhoid vaccine which can be given to children starting at the age of 2 years and repeated every 3 years until the child is 18 years old. Apart from the typhoid vaccine for children, it is also for adults who are at risk of developing typhus, such as living close to typhoid sufferers. From an environmental point of view, it is expected to always maintain the cleanliness of the environment. If

signs and symptoms of typhoid fever occur, such as fever accompanied by chills, headache, nausea, discomfort in the stomach, dry cough and muscle aches, immediately get checked to avoid further spreading of salmonella typhi bacteria in the patient's body and so that someone is not infected by the patient.

2. To pay more attention to the personal hygiene of each individual.
3. For health workers to conduct counseling about typhoid fever, namely by paying attention to personal hygiene. This aims to reduce the increasing number of sufferers of typhoid fever.

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