

## The Relationship Between Maternal Clean and Healthy Living Behavior (PHBS) and The Incidence of Diarrhea in Toddlers

Fandi Nur Aghani<sup>1</sup>

Diah Fauzia Zuhroh<sup>2</sup>

Ervi Suminar<sup>3</sup>

<sup>1,2,3</sup> Faculty of Health, Nursing Study Program, Universitas Muhammadiyah Gresik

Email : vandyghany23@gmail.com

### ABSTRAK

Diare merupakan keadaan yang ditandai dengan frekuensi buang air besar sering dengan konsistensi cair. Diare pada anak erat kali terjadi karena perilaku menjaga kebersihan diri maupun lingkungan yang kurang. Tingkah laku seseorang adalah salah satu faktor utama yang menentukan tingkat kesehatan. Penelitian ini bertujuan untuk menganalisis hubungan perilaku hidup bersih dan sehat (PHBS) ibu dengan kejadian diare pada balita. Penelitian ini menggunakan pendekatan cross sectional dengan populasi ibu balita yang sakit di Ruang anak Rumah Sakit Muhammadiyah Gresik sebanyak 157 orang. Sampel diambil secara total sampling. Pengumpulan data menggunakan kuesioner yang dibagikan kepada responden. Hasil penelitian menunjukkan sebagian besar tidak mengalami diare pada balita sebanyak 81 (52%) dan sebagian besar memiliki perilaku positif sebanyak 82 (52%). Hasil analisis dengan uji Chi-Square dimana  $P = 0,000$  lebih kecil dari  $0,05$  maka  $H_0$  ditolak yang berarti ada hubungan perilaku hidup bersih dan sehat ibu dengan kejadian diare pada balita.

**Kata Kunci:** Balita, Kejadian Diare, Perilaku HIidup Bersih dan Sehat

### ABSTRACT

Diarrhea is a condition with symptoms by frequent of bowel movements with liquid consistency. Diarrhea in children often occur due to poor of personal and environmental hygiene. A person's behavior is one of the main factors that determine the level of health. This research aims to analyse the relationship between mother's clean and healthy lifestyle behavior with the incidence of diarrhea in toddlers. This research used cross sectional approach with a population of 157 mothers who were sick in the children's room at the Muhammadiyah Hospital Gresik. Sampling was carried out in a total sampling. using a questionnaire. Collected of data use questionnaire was distributed to respondents. The results showed most of them did not experience diarrhea in toddlers as much as 81 (52%) and most of them had positive behavior as many as 82 (52%). The results of the analysis were obtained using the Chi-Square test where  $P = 0.000$  is less than  $0.05$ , so  $H_0$  is rejected, which means that there is a relationship between the mother's clean and healthy lifestyle and the incidence of diarrhea in toddlers.

**Keyword:** Toddlers, Insidence of Diarrhea, Clean and Healthy Lifestyle Behavior

### INTRODUCTION

Diarrhea is a disease with signs of changes in the shape and consistency of the stool, which swell until it dissolves and increases the frequency of bowel movements usually three or more times a day (Ariani, 2016). Diarrheal disease in Indonesia is one of the main public health problems, especially in toddlers, The

number of diarrheal illnesses in Indonesia from year to year tends to increase. The rate of diarrheal pain in 2010 was 423 per 1000 population, with a total of 10,980 cases and 277 deaths (CFR 2.52%). In Indonesia, it is reported that there are 1.6 to 2 incidents of diarrhea per year in toddlers, so that overall it

is estimated that the incidence of diarrhea in children under five ranges from 40 million a year to 200,000 – 400,000 toddlers (Ministry of Health, 2013).

In the context of health in Indonesia, diarrhea is a major health issue caused by poor sanitation. There are several factors related to the incidence of diarrhea, namely inadequate supply of clean water, water contaminated by feces, lack of sanitary facilities, unhygienic fecal disposal, poor personal and environmental hygiene, and improper food processing and storage.

Many factors can directly or indirectly be driving factors for diarrhea, consisting of host agents, environmental and behavioral factors. The most dominant environmental factors are the means of providing clean water and disposing of feces, these two factors will interact together with human behavior. What if environmental factors are unhealthy because they are contaminated with diarrheal germs and accumulate with unhealthy human behavior, the transmission of diarrhea can easily occur (Ministry of Health, 2012).

Behavior is one of the factors that plays an important role in determining the degree of health, because the three other factors such as the environment, the quality of health services and genetics can still be influenced by behavior. Unhealthy behavior will cause disease. Behavior change is not easy to do, but it is absolutely necessary to improve the degree of public health. Diarrhea that if it occurs constantly can be washed hands, especially before and after eating, after touching uncooked meat, after coming from the toilet, or after sneezing and coughing, using soap and clean water. The behavior of maintaining personal hygiene is closely related to this diarrheal disease, so researchers are interested in analyzing the relationship between the incidence of diarrhea and clean and healthy living behavior in mothers under five years old

**METHOD**

This research was conducted in December 2022. The research design used is a descriptive analytical research design with a cross sectional approach. The population in this study is 471 mothers of toddlers who have been treated in the children's room of Muhammadiyah Gresik hospital for the last 3 months while the average number of toddlers who are treated in the children's room is 157 per month. Sampling was carried out in total sampling in the children's room of Muhammadiyah Gresik Hospital within 1 month so that a total of 157 respondents were obtained. The data collection instruments or tools in this study use questionnaires that have been tested for validity and reliability. The data that has been collected will be analyzed using the chi square test.

**RESULT**

Table 1. The Relationship between Clean and Healthy Living Behavior of Mothers and the Incidence of Diarrhea in Toddlers

N	Clean and healthy living behaviors	Occurrence of diarrhea				Total
		No diarrhea	%	Diarrhea	%	
1	Negative behavior	11	15%	64	85%	75
2	Positive behavior	70	85%	12	15%	82
	Total	81	52%	76	48%	157

P=0.000

Source: Primary Data, 2022

Based on Table 1, it is known from 157 parents that negative behavior is 75 parents, 64 children under five who have diarrhea, and 11 children who do not have diarrhea. Meanwhile, positive behavior was 82 parents, 12 children had diarrhea, while 70 children did not have diarrhea. The results of

the analysis were obtained by the Chi-Square test where  $P = 0.000$  is smaller than  $\alpha = 0.05$ , so there is a relationship between clean and healthy maternal living behavior and the incidence of diarrhea in toddlers.

## **DISCUSSION**

Based on Table 1, it is known that of the 157 toddlers, most of them do not have diarrhea, as many as 81 children and 76 children do have diarrhea. Diarrhea is a bowel movement with liquid or semi-liquid (semi-solid) stools, water content greater than 200 grams or 200ml/24 hours. The most fatal complication of long-lasting diarrhea without adequate rehydration is death. A person who has diarrhea will be dehydrated and feel thirsty, lose weight, sunken eyes, dry lips, and decreased skin turgor.

Diarrhea often occurs due to several factors, one of which is maintaining personal hygiene and the environment (Wongkar, 2017). The PHBS program is a form of community empowerment that is preventive and promotive in a very easy and cheap way, but the results are very extraordinary and will have an impact on the quantity and quality of the Healthy Family Index (IKS) and the Healthy Individual Index (IIS) because PHBS contains social engineering that aims to make as many community members as possible agents of change with the stages of knowing, willing and able to undergo behavior to improve the quality of daily clean and healthy living behavior (Suminar, 2021). Diarrhea is very closely related to PHBS. The results of the study showed that most mothers under five had positive behaviors in maintaining PHBS as many as 80 mothers and 75 mothers behaved negatively. A clean environment will make us live safely, comfortably, and the environment will be neater and more comfortable to occupy when we pay attention to and cultivate slums in an area, we will feel uncomfortable to pay attention to it. Not only that, just getting closer we feel reluctant. Because of the smell it causes. That's how people judge an unclean

environment. People will judge us if they see the outside of us, such as the area we are in. So that our people or guests do not feel reluctant to enter our home area, we should maintain the cleanliness of the environment. It's not difficult to get started, just throw the garbage in its place first. That way our environment will become neater and more comfortable to see.

The indicators used in PHBS Indonesia are efforts to prevent infectious diseases (indicators of behavior of washing hands with soap, using clean water, using healthy latrines; and eradicating mosquito larvae) and non-communicable diseases (indicators of consuming fruits and vegetables; doing physical activity; and not smoking in the house), as well as efforts to improve maternal and child health (indicators of childbirth with health workers, provide exclusive breastfeeding, and weigh toddlers).

The information that we can get from PHBS in households when sorted from the highest coverage is indicators of clean water sources, childbirth assisted by health workers, defecation (BAB) in the latrine, weighing toddlers, giving exclusive breast milk to babies, doing physical activity every day, and washing hands properly (Zuhroh, 2021). The other two indicators that have very low values, below the value of the PHBS index, are the indicator of not smoking in the house and the consumption of vegetables and fruits every day. Behavior is all biological manifestations of individuals in interacting with the environment, ranging from the most visible to the invisible, from the perceived to the least felt (Okviana, 2015).

## **CONCLUSIONS**

The conclusion of this study is that there is a relationship between the incidence of diarrhea and clean and healthy living behavior in mothers and toddler-age children. The incidence of diarrhea is usually associated with a person's behavior in maintaining a person's physical, mental, social, and environmental hygiene. If a person always implements PHBS

in his environment, it will improve his health in the community. Advice that can be given to health institutions is to provide information and education to patients and their families in taking care of themselves and their environment to avoid diarrheal diseases.

Gresik Engineering Social Science And Health Journal, 784- 792

## **REFERENCES**

- Adyanastri. (2012). *Etiology and Clinical Description of Acute Duare*. Jakarta, Ministry of Health of the Republic of Indonesia.
- Ariani. (2016). *Diarrhea Treatment and Prevention*. Yogyakarta: Nuha Medika.
- Ministry of Health. (2012). *Basic Health Research Year. Health Research and Development. Ministry of Health of the Republic of Indonesia*.
- East Java Provincial Health Office. (2012). *Guidelines for Monitoring Local Areas of Maternal and Child Health (PWS-KIA)*. Jakarta: Ministry of Health of the Republic of Indonesia.
- Ministry of Health of the Republic of Indonesia. (2013). *Basic Health Research, RISKESDAS*. Jakarta: Balitbang, Ministry of Health of the Republic of Indonesia.
- Ministry of Health of the Republic of Indonesia. (2016). *Indonesia's Health Profile*. Jakarta: Ministry of Health of the Republic of Indonesia.
- Nelwa, E. (2014). *Textbook of Internal Medicine*. Jakarta: Interna Publicising.
- Suminar, E. (2021). *The Influence of Health Education on Students' Knowledge of Clean and Healthy Living Behaviors*. Indonesian Journal of Professional Nursing 6-12.
- Wongkar, F. (2017). *The Relationship between Maternal Clean and Healthy Living Behavior (PHBS) and the Incidence of Diarrhea in Toddlers*. Journal of Community & Emergency, 5.
- Zuhroh, D. F. (2021). *Analysis of Changes In Hand Washing Techniques In Preschool Children*. Universitas Muhammadiyah