

Determinants Of Preventing Diarrhea in Children in Siulak Gedang Puskesmas In 2022

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ABSTRACT

Introduction: Diarrhea is a condition marked by changes in the shape and content of watery feces. It can also be accompanied by vomiting and bloody stools. Especially in the first three years of life, when the child may experience one to three episodes of severe diarrhea, this disease frequently affects children under the age of five. **Aims:** This study's objective was to determine the relationship between education level, knowledge, and attitudes of mothers in preventing diarrhea in toddlers in the working area of the Siulak Gedang Public Health Center, Kerinci Regency, 2022. **Method:** This kind of study is quantitative, cross-sectional, and uses 96 samples as its sample size. The Siulak Gedang Health Center in Kerinci Regency's operational region served as the site of this study. Proportional Random Sampling is the method of sampling. Without taking into account the strata in the population, proportional random sampling is a technique for taking samples at random. **Results:** According to the study's findings, 56.3% of people engage in effective actions for preventing diarrhea. According to statistical analyses, knowledge (0.000) and attitude (0.000) are the two factors that mothers' conduct in preventing diarrhea is connected with (0.000). Additionally, there is no connection between behavior used to prevent diarrhea and education level (0.338). **Conclusion:** There are relationship between the knowledge and attitudes of mothers with the prevention of diarrhea in children under five in the working area of the Siulak Gedang Health Center, Kerinci Regency.

Keywords: Attitude, Diarrhea Prevention, Education Level, Knowledge.

INTRODUCTION

According to the World Health Organization (WHO), diarrhea is a condition marked by changes in the shape and content of watery feces. It can also be accompanied by vomiting and bloody stools. Especially in the first three years of life, when the child may experience one to three episodes of severe diarrhea, this disease frequently affects children under the age of five (WHO, 2019) The first three years of life or in toddlers are particularly vulnerable to this condition (Yuniati, 2021).

In terms of nutrition and disease, particularly infectious diseases, toddlers are a very vulnerable age group. Diarrhea is an infectious disease that affects young children (Cono et al., 2021). According to the World Health Organization (WHO), diarrhea is a condition characterized by changes in the shape and consistency of

watery stools, as well as an increased frequency of defecation of 3 or more times per day, and can be accompanied by vomiting and bloody stools. The disease is common in children under five years of age, especially in the first three years of life, when the child may have 1-3 episodes of severe diarrhea (Prawati, 2019a). This disease often occurs especially in the first three years of life or in toddlers (Yuniati, 2021).

The second most typical global cause of death for children under five is diarrhea. Every year, 2 billion cases are recorded worldwide, and as a result 1.9 children under the age of five die. According to the World Health Organization (WHO), there were 688 million cases of diarrheal disease and 499,000 infant deaths globally in 2015. Meanwhile, in 2017, 1.7 billion toddlers experienced diarrhea with the death toll was 525,000 (Utami et al., 2022). If this

continues to occur without prevention it can increase mortality in infants caused by diarrhea (Setyowati, I., NA, F., & Sugiharti, 2021). Even in developing countries like Indonesia, the high rates of morbidity and mortality contributed by infants and toddlers are still a global health problem that cannot be resolved (Hendrastuti, 2019).

According to the Indonesian Health Profile, in 2019 diarrhea was the highest cause of under-five deaths, namely 10.7% with a case prevalence of 11.0%, while in 2020 it was recorded that there were 201 under-five deaths caused by diarrhea with an average case frequency of 28.9 % (Kementerian kesehatan, 2020; Beyer et al., 2006). Based on RISKESDAS 2018 data where the provinces in Indonesia with the highest cases of diarrhea in toddlers occurred in North Sumatra Province and Jambi Province ranked 24th, even so cases of diarrhea in Jambi Province are still a public health problem due to the large number quite a high case (Kemenkes RI, 2018).

Based on RISKESDAS data for Jambi Province in 2018, cases of diarrhea in toddlers were 15.69% in Kerinci Regency (Kemenkes RI, 2018). According to data from the Kerinci District Health Office, With 324 cases, the Siulak District had the most under-five cases of diarrhea in 2018. Then, in 2019 there was a decrease of 192 cases of diarrhea in children under five, but in 2020 there was a decrease of 211 cases (Dinkes Kerinci, 2018). The conduct of individuals, including their degree of education, knowledge, and attitudes, has a significant impact on the prevention of diarrhea. In the results of findings conducted It demonstrates that there is a strong correlation between the prevention of diarrhea in toddlers and the amount of maternal education. There is a connection between a mother's mindset and her toddler's conduct to prevent diarrhea, claims research (Suparyanto dan Rosad, 2020).

Knowledge regarding how to process healthy and clean food maintains cleanliness and has a significant impact on mother's behavior when cooking food. Parents' knowledge and understanding of their toddler's health problems is very important to ensure that their children are always healthy and protected from various infections, and diarrhea does not get worse. Most of the deaths from diarrhea

are thought to be caused by a lack of public awareness, especially mothers, about efforts to prevent diarrhea. Knowledge about how to process healthy and clean food greatly influences the behavior of mothers in maintaining cleanliness and preparing food.

Many factors, including parental education, poor personal hygiene, unclean environment, financial level, and behavior, can influence diarrhea. The absence of parental information about diarrhea, its transmission mechanisms and effective prevention measures has contributed to an increase in cases of diarrhea (Rane et al., 2017). It was found that there was a significant relationship between the education level of mothers regarding the behavior of treating diarrhea in toddlers in the working area of the Pemulutan Health Center, Organ Ilir Regency (Suparyanto dan Rosad, 2020). There is a relationship between mother's education and prevention of diarrhea in toddlers at the Tanjung Pinang Health Center, Jambi City, (RIYA et al., 2018).

A person's attitude can affect how they behave towards certain things, people, or opportunities. A mother is a unit to avoid diarrhea if she has a positive attitude about it. According to Girsang's research, there is a relationship between mother's attitude and toddler's behavior to prevent diarrhea (Girsang, 2022). Meanwhile in Yuniati's research, there is a relationship between the mother's attitude in preventing diarrhea and the incidence of diarrhea in toddlers 1-3 years old at Mitra Medika General Hospital in Medan in 2020 (Yuniati, 2021). Based on the previous studies, the study's objective was to determine the relationship between education level, knowledge, and attitudes of mothers with the prevention of diarrhea in toddlers in the working area of the Siulak Gedang Public Health Center, Kerinci Regency, in 2022.

METHODS

This study is a form of quantitative research that uses a cross-sectional, analytical observational research design. The Siulak Gedang Health Center's operational area included five villages with the highest prevalence of diarrhea, where this study was undertaken, namely Badar Sedap Village, Dusun Dalam Village, Koto Beringin Village, Siulak Gedang Village,

and Telago Biru Village which was carried out in May 2022. All toddlers in the Siulak Gedang Health Center's working region in 2022 served as the study's population. 308 toddlers, ranging in age from 12 to 60 months, were included in this study. Proportional random sampling was used in this investigation, and a total sample size of 96 samples was used.

Collecting data using a questionnaire sheet. The variables studied were the level of education, knowledge and attitudes of the mother. Data processing and analysis uses statistical data processing software. Data analysis uses bivariate and univariate analysis. For bivariate analysis using the chi-square test. This study received an approval from the Research Ethics Committee, Poltekkes Kemenkes Jambi, No. LB.02.06/2/370/2022.

RESULTS AND DISCUSSION

This research was conducted at the Siulak Gedang Health Center with a total of 96 respondents using the chi-square test. This research is a quantitative research type with an analytic observational research design with a cross-sectional approach.

The distribution of respondents based on the mother's behavior in preventing diarrhea is divided into 2 categories, namely the poor category and the good category. In more detail can be seen in the following table:

Diarrhea Prevention Behavior	Frequency	Percentage
Negative	42	43,8%
Positive	54	56,2%
Total	96	100%

Table 1. Distribution of Maternal Diarrhea Prevention Behavior at the Siulak Gedang Public Health Center's Working Area in 2022.

Based on the table above, it can be seen that 42 people (43.8%) had negative diarrhea had positive diarrhea prevention behaviors. So, it can be concluded that the positive behavior Based on the table above, it can be seen that 42 people (43.8%) had negative diarrhea prevention behaviors, while 54 people (56.2%) of preventing diarrhea is higher than the negative behavior of preventing diarrhea in mothers in the working area of the Siulak

Gedang Health Center in 2022. The Siulak gedang health center is one of the health centers in Jambi Province. This health facility offers various health center programs, including blood pressure, checks, pregnancy checks, children checks, blood group checks, uric acid, cholesterol, and others. This health center also offers outpatient care, sewing changing dressings, suturing wounds, pulling teeth, and other medical services.

Table 2. Distribution of Mother's Education Levels at the Siulak Gedang Public Health Center's Working Area in 2022.

Level of education	Frequency	%
Low	11	11,5%
Tall	85	88,5%
total	96	100%

Based on the table above, it can be seen that 11 respondents (11.5%) had a low education level, while 85 people (88.5%) had a high education level. It can be concluded that the percentage of mothers with high education is far greater than mothers with low education in the working area Sulak Gedang health center in 2022.

Table 3. Distribution of Mother's Knowledge at the Siulak Gedang Public Health Center's Working Area in 2022.

Knowledge level	F	%
Not enough	27	28,1%
Well	69	71,9%
total	96	100%

Based on the table above, it can be seen that 27 people (28.1%) have less knowledge of diarrhea prevention, while 67 people (71.9%) have good knowledge. It can be concluded that the level of good knowledge of mothers is higher than the level of knowledge of mothers in the working area of the Siulak Gedang Health Center year 2022.

Attitude	Frequency	Percentage
Negative	35	36,5%
Positive	65	63,5%
total	96	100%

Table 4. Distribution of Mother's Attitudes in the Working Area of the Siulak Gedang Health Center in 2022.

Based on the table above, it can be seen that 35 respondents (36.5%) had a negative attitude, while 61 respondents (63.5%) had a positive attitude. It can be

concluded that the positive attitude of mothers is much higher than the negative attitudes of mothers in the working area of the Siulak Gedang Health Center in 2022.

Relationship between Knowledge and Mother's Behavior in Diarrhea Prevention

Table 5. Relationship between Mother's Education Level and Prevention of Diarrhea At the Siulak Gedang Public Health Center's Working Area in 2022.

Mother's Education Level	Diarrhea Prevention				Total		PR	P-v
	Negative		Positive		n	%		
	n	%	n	%				
Low	3	27,3	8	72,7	11	100	0,594 (0,220-1,603)	0,338
Tall	39	45,9	46	54,1	85	100		
Total	42	43,8	54	56,3	96	100		

The Chi Square test results' statistical analysis yielded a p-value of 0.338 (p-value > 0,05). It might be said that there is no connection between the mother's education level and scores PR=0,338 (CI= 0,220-1,603) in the Siulak Gedang Health Center's operating area with the prevention of diarrhea in toddlers. The Siulak Gedang Health Center in Kerinci Regency's operating region has determined from statistical analysis of the Chi-Square test results that there is no correlation between education level and prevention of diarrhea in toddlers (P-value 0,338; P-value > 0,05). After analysis additional value PR = 0,594 (CI 0,220-1,603).

This research is in line with that conducted by Radjabayacolle et al. (2018) with 50 respondents in the Work Area of the Tikala Baru Health Center in Manado City. The results of statistical analysis using Chi-square obtained a p value of 0.074 > 0.05. It can be concluded that there is no relationship between the education level of mothers and prevention of diarrhea in toddlers in the working area of the Tikala Baru Health Center (Radjabaycolle et al., 2019).

According to the statistical analysis of the Chi Square test, the working area of the Siulak Gedang Health Center has a relationship between mothers' knowledge and the prevention of diarrhea in toddlers, with a p-value of 0.000 (p-value 0.05) and a value PR=2,811(CI=1,864-4,239). Knowledge is the result of understanding and recognizing something. This is

achieved through experience and observation. Human senses allow us to perceive the world around us. Sight, hearing, smell, taste, and touch are among these senses. The senses of sight and hearing are used to gather the majority of human information.

It can be inferred that there is a relationship between mother's knowledge and prevention of diarrhea in toddlers in the working area of the Siulak Gedang Health Center, Kerinci Regency, based on the statistical analysis of the Chi-Square test, which yielded a p-value of 0.000 (p-value, 0.05). Additionally, the analysis yielded a PR value of 2.811. (CI 1.864-4,239).

Conscience et alresearch.'s and this research are complementary. The knowledge and efforts of mothers in Kamal Village, the working area of the West Kairatu Health Center, to prevent diarrhea can be inferred from the research's findings. Based on the analysis's results, which had a chi-square test p-value of 0.045 (p-value 0.05), this is what was concluded (Hasanela, 2017).

It is possible to draw the conclusion that there is a correlation between maternal attitudes and the prevention of diarrhea in toddlers in the working area of the Siulak Gedang Health Center based on the statistical analysis of the Chi Square test, which yielded a p-value of 0.000 (p-value 0.05) and a PR value of 2.832 (CI=1.781-4.503). which means mothers with positive attitudes have 2.832 times better chances of preventing diarrhea in toddlers than

mothers with negative attitudes about preventing diarrhea.

Given that the Chi-Square test's statistical analysis produced a p-value of 0.000 (p-value, 0.05), it is possible to draw the conclusion that, in the working area of the Siulak Gedang Health Center, Kerinci Regency, there is a correlation between the mother's attitude and the prevention of diarrhea in children under five. Value PR= 2,832 was also obtained from the analysis (CI 1,781-4,503).

The findings of this study are also consistent with Debby and Prawati's when the result of this research shows that attitude variable has p value = 0.019 < α (0.05), so H_0 is rejected. It means there is a significant relationship between mother's attitude and the incidence of diarrhea. Meanwhile, the behavior variable results p value = 0.003 < α (0.05) so that H_0 is rejected. Hence, there is a relationship between mother's behavior and the incidence of diarrhea (Prawati 2019).

Mothers of toddlers who have an attitude that emphasizes the value of diarrhea prevention in toddlers will usually take this step because it is ingrained in them from the start and they view diarrhea prevention as more important to prevent future health problems that can occur. increases the risk of under-five mortality. The resistance rate can be reduced if the mother has a supportive attitude to prevent diarrhea. Children under five who experience diarrhea will not experience moderate or severe dehydration if quick precautions are not implemented to help mothers, thereby reducing mortality (Hapsari & Gunardi, 2018). The way to improve one's attitude is to increase one's knowledge. The better the knowledge a person has, the better the attitude he will have. With increasing knowledge, one's view of something will change.

CONCLUSION

From the results of the research conducted, it can be concluded that there is a relationship between knowledge and attitudes of mothers towards toddlers at the Siulak Gedang Health Center in 2022. While the level of education has no relationship with the prevention of diarrhea in children under five at the Siulak Gedang Health Center in 2022, it is still recommended to increase knowledge

about how to prevent diarrhea so as to avoid many infectious diseases.

It is important to educate and promote to mothers so they could attend integrated health center and actively asking health workers related to health problems. Furthermore, the health workers also improve health programs in the promotive section such as providing health education and designing graphic leaflets and posters which contains information related to diseases, especially in the section on diarrhea diseases so that people know more about diarrhea and can prevent and treat it properly once their toddlers get diarrhea. Hopefully, with the increasing of knowledge and attitude from mothers, it could prevent and suppress the number of diarrhea disease in Siulak Gedang area.

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