The Relationship Between Maternal Knowledge and Attitudes and The Incidence of Diarrhea

Ria Angelina[1*], Juliyanti[2], Heny Marintan[3]
[1,2,3]Immanuel Bandung Health Institute (Faculty of Nursing, Indonesia)
Email: riaangelina@institutkesehatan-immanuel.ac.id

ABSTRACT

Diarrhea is a disease that we often encounter in society and in developing countries and is a cause of death in children under five which is usually caused by contaminated food and drink. for drinking habits. poor clean living. The aim of this study was to determine the relationship between maternal knowledge and attitudes and the incidence of diarrhea in toddlers in the pediatric inpatient ward at Immanuel Hospital, Bandung. This research is a quantitative research with a cross sectional approach. The sampling technique for this research was accidental sampling with a total sample of 64 mother respondents. The research instrument used a questionnaire. The results of univariate analysis show that almost all respondents (71.9%) have good knowledge and almost all respondents (69.7%) have a supportive attitude (Favorable). The results of the bivariate analysis obtained a p-value of 0.03, which is smaller than 0.05, so it can be concluded that there is a significant relationship between mother's knowledge and attitudes and the incidence of diarrhea in toddlers in children's inpatient rooms. It is recommended that hospitals can further improve the promotion of disease prevention health services. diarrhea in mothers of toddlers, to increase understanding about diarrheal disease so that recurrent diarrhea does not occur in toddlers which can lead to death.

Keyword: maternal, knowledge, attitudes, diarrhea

INTRODUCTION

Diarrhea remains the second leading cause of death after pneumonia among children under 5 years globally (Sari & Sartika, 2021). Based on Basic Health Research in 2018, the prevalence of diarrhea for all age groups was 8% and the prevalence rate for toddlers was 12%, and 3%, while in infants, the prevalence of diarrhea was 10.6%. The latest data from the results of the 2020 Indonesian Nutrition Status Sarurvey, the prevalence of diarrhea is at 9.8%.

The latest data from the results of the 2020 Indonesian Nutrition Status Survey, the prevalence of diarrhea is at 9.8%. Diarrhea is closely related to the occurrence of stunting cases.Repeated cases of diarrhea in babies and toddlers can cause stunting. Based on data from the 2020 Indonesian Health Profile, infectious diseases, especially diarrhea, are a contributor to death in the group of children aged 29 days - 11 months. Just like the previous year, in 2020, diarrhea was still the main problem causing 14.5% of deaths. In the group of children under five (12-59 toddlers), deaths due to diarrhea were 4.55% Directorate General of Disease Prevention and Control, 2020).

Diarrhea is a disorder that all humans experience at one time or another, and in the majority of cases, it is mild and can be cured on its own. West Java Province has 4 priority areas for handling diarrhea in toddlers 12-59 months, namely Bekasi City, Karawang Regency, Cianjur Regency and West Bandung Regency (Sari et al., 2023). According to the results of several studies on parents' knowledge and attitudes towards the occurrence of diarrhea, there is a relationship between knowledge and the occurrence of diarrhea, while attitude has no relationship with the occurrence of diarrhea (Syahdan & Kurniasari, 2019). The description of mother's knowledge is 21.9% good knowledge while 34.3% poor knowledge (Astuti, 2018). The level of knowledge is lacking regarding how to treat diarrhea in toddlers. 68.6% of toddlers have experienced diarrhea and 31.4% of toddlers have not had diarrhea (Arsurya et al., 2017).

According to Wawan and Dewi (2019), knowledge is the result of “knowing” and this occurs after people sense a particular object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears. Knowledge is a very important domain in shaping a person's actions (open behavior). Other research shows that knowledge or cognitive is a very important domain in shaping a person's behavior (overt behavior) (Rusadi & Putra, 2020). According to Rogers Afnis (2018) revealed that the process of adopting behavior that originates from knowledge, that is, before someone adopts a new behavior, several processes occur within that person, including: Awareness or consciousness at this stage, the individual is aware of the existence of a stimulus or the stimulus that comes to him, interest or feeling interested, that is, the individual begins to be interested in the stimulus and evaluates or considers where the individual will consider whether it is good or not the stimulus for him. This is what causes individual attitudes to improve.

Trial or trial is where an individual begins to try a new behavior. Adaptation or delivery, namely the individual has new behavior in accordance with knowledge, attitude and awareness of the stimulus. The affective domain can be measured by attitude. Attitude is said to be a response that only arises when an individual imagines a stimulus. A person's attitude towards an object is a feeling of liking or disliking a particular object. Mothers take preventive measures where mothers are the people who look after and care for their children most every day.

The affective domain can be measured by attitude. Attitude is said to be a response that only arises when an individual is faced with a stimulus. A person's attitude towards an object is a

feeling of favorable or a feeling of not favorable particular object. Mothers take precautions where the mother is the person who most often looks after and cares for the child every day.

The factor that influences a person's knowledge is education. Education influences the learning process, the higher a person's education, the easier it is for that person to receive information, both from other people and from the mass media. Immanuel Hospital is a type B hospital where one of the most cases in 2022 among pediatric patients is cases of diarrhea in children. Based on this description, researchers are interested in analyzing the relationship between maternal knowledge and attitudes in preventive efforts with the incidence of diarrhea in toddlers at Immanuel Hospital.

METHODS

The type of research used is quantitative research with a correlational research design, the approach method uses cross sectional. To see the relationship between the knowledge variable and the diarrhea incidence variable, and to look at the attitude variable with the diarrhea incidence variable.

The population of children cared for in the last 3 months in the children's room is an average of 76 toddlers per month. The sampling technique in this research uses an accidental sampling technique, determining the sample based on chance, if it is deemed that the person you meet by chance matches the data source. The total sample size using the Slovin formula was 64 respondents. Respondents in this case are mothers who have toddlers who are being cared for in hospital according to the researcher's inclusion criteria.

The research instrument used a questionnaire containing questions and statements regarding mothers' knowledge and attitudes regarding diarrhea prevention efforts and the incidence of diarrhea in toddlers.The instrument has been tested for validity and reliability. The validity test was carried out on parents who took their children to the children's polyclinic. Immanuel Hospital.

The results of the validity test of the knowledge variable on 30 respondents obtained an r count > 0.361 for 20 questions and this was declared valid, while the attitude variable obtained an r count > 0.361. Reliability with Cronbach alpha > constant (0.6) shows that the Cronbarch alpha value on the knowledge instrument is 0.884 > 0.6, for the Cronbarch alpha value on the attitude instrument it is 0.882 > 0.6. This means that the instrument is declared valid and reliable.

Research ethics has been carried out online through the Health Research Ethics Commission (KEPK) at Immanuel Hospital Bandung, proven by a certificate of ethical suitability.

Data analysis is divided into two, namely univariate and bivariate. Univariate analysis uses the mean for the knowledge variable and the median for the attitude and diarrhea incidence variables. Bivariate analysis uses the spearman rank correlation test, which is a statistical test that tests 2 variables with ordinal data or one variable with ordinal or nominal or ratio data.

RESULTS

Univariate Analysis

The following are the results of research conducted:

Knowledge

Table 1. Mother's Knowledge about Preventive Efforts for Diarrhea

Knowledge	Frequency (f)	Percentage (%)
Good	46	71.9
Enough	12	18.7
Not enough	6	9.3
Total	64	100.0

Based on Table 1, it shows that the majority of mothers have good knowledge about preventive measures for diarrhea in toddlers as many as 46 people (71.9%) and only 6 (9.3%) have poor knowledge.

Attitude

Table 2. Mother's Attitudes Regarding Preventive Efforts for Diarrhea

Attitude	Frequency (f)	Percentage (%)
Support	44	69.0
Does not support	20	31.0
Total	64	100.0

Based on Table 2 above, it shows that the majority of respondents showed 69% supportive attitudes of mothers towards efforts to prevent diarrhea in toddlers.

Diarrhea Occurrence

Table 3. Incidence of Diarrhea Toddlers in Pediatric Inpatient Wards

Diarrhea Occurrence	Frequency (f)	Percentage (%)
Yes	43	67.2
No	21	32.8
Total	64	100.0

Based on Table 3 above, it shows that the majority of toddlers who experienced diarrhea were 43 people (67.2%).

Table 4. Relationship between Knowledge and the Incidence of Diarrhea in Toddlers

Knowledge	Occurrence of diarrhea						p-value
	Yes		No		Total		
	f	%	f	%	f	%	
Good	29	45.3	17	26.6	46	71.9	0.002
Enough	10	15.7	2	3.1	12	18.8	
Not enough	4	6.2	2	3.1	6	9.3	
Total	43	67.2	21	32.8	64	100	

Based on Table 4 above, a p-value of 0.002 <0.05 shows that there is a significant relationship between maternal knowledge and the incidence of diarrhea in toddlers who are cared for in the children's room.

Table 5. Relationship between Attitudes and the Incidence of Diarrhea in Toddlers

Attitude	Occurrence of diarrhea						p-value
	Yes		No		Total		
	f	%	f	%	f	%	
Support	30	46.9	14	21.9	44	68.8	0.001
Does not support	13	20.3	7	11%	20	31.2	
Total	43	67.2	21	32.9	64	100	

Based on Table 5 above, a p-value of 0.001<0.05 shows that there is a significant relationship between attitude and the incidence of diarrhea in toddlers in the pediatric inpatient room.

DISCUSSION

Mother's knowledge regarding Preventive Efforts for Diarrhea in Toddlers

The research results showed that of the 64 respondents, 46 respondents or 71.9% based on table 1 of the respondents had good knowledge about preventive measures for diarrhea in toddlers. This research is in line with Putra and Utami (2020) research where maternal knowledge is related to maternal behavior in preventing diarrhea in preschool-aged children at Posyandu RW 01, Johar Baru Village. A person's health behavior is influenced by three main factors, namely predisposing factors, enabling factors and driving or reinforcing factors. A person's knowledge is included in the predisposing factors which can influence changes in a person's health behavior along with the other two factors, namely enabling factors and reinforcing factors. The mother's low knowledge is caused by the mother not getting information about diarrheal disease because the mother's ability or desire to seek information does not exist. This is because they

tend to be lazy about doing things such as looking for information or following health education given by health workers (Nasution & Samosir, 2019).

Factors that influence the occurrence of diarrhea include parental knowledge, lack of personal hygiene, unclean environment, socio-economic conditions and community behavior. Mothers who have good knowledge in their efforts Prevention pays attention to aspects of children's personal hygiene, nutrition, and a supportive environment for toddlers.

One of the knowledge that needs to be conveyed is factors that can increase the occurrence of diarrhea, for example environmental factors, hygienic practices when preparing food with unwashed hands, cleaning a child's feces, letting children play in dirty places, teaching mothers how to process and prepare food (Susanti et al., 2017). Based on Putra and Utami (2020) explained the mother's knowledge regarding diarrhea prevention behavior in prescool children. Parents need information about prevention such as personal hygiene, contamination-free protection and clean food preparation. This prevention includes cleanliness of the perineal area, disposal of dirty diapers, correct and appropriate hand washing, isolation of infected people who can transmit diarrheal infections (Hockenberry et al., 2019). Preventive behavior is a preventive effort in this case preventing diarrhea in children.

Mother's attitude regarding preventive measures for diarrhea in toddlers

The research results showed that of the 64 mother respondents who had a supportive attitude, 44 respondents had a percentage level of (68.8%). Meanwhile, there were 20 respondents who had an unsupportive attitude, with a percentage of (31.2%). Matter This shows that the majority of respondents show a supportive attitude regarding the problem of diarrhea in toddlers, but there are still respondents who do not support the problem of diarrhea in toddlers in the children's inpatient room at Immanuel Hospital, Bandung.

The results of this research are also supported by research by Nasution and Samosir (2019), the research method is descriptive, with the research title Knowledge and Attitudes of mothers regarding handling diarrhea at the Polonia Medan Community Health Center. There were 32 people (58.2%) who had a positive attitude, and 23 people (41.8%) had a negative attitude.

Incidence of Diarrhea in Toddlers in Children's Inpatient Rooms

The results of the study which were analyzed using statistical analysis (SPSS) from 64 respondents showed that 43 respondents who had toddlers experienced diarrhea and had recurrent diarrhea or 67.1%, while mothers who had toddlers had diarrhea that did not recur or

never had diarrhea. as many as 21 people or 32.8%. A toddler experiencing diarrhea in the pediatric inpatient room. According to Sari et al. (2023) explained that West Bandung Regency is an area with very high vulnerability apart from Cianjur, Bekasi and Karawang, which is influenced by factors such as low levels of vitamin A administration to toddlers and less than optimal provision of zinc and ORS to toddlers with diarrhea who are served. which falls into the medium level.

Knowledge about Diarrhea Preventive Efforts with the Occurrence of Diarrhea in Toddlers

The results of the study showed that there was a significant relationship between knowledge about diarrhea prevention efforts and the incidence of diarrhea in toddlers in the children's inpatient room at Immanuel Hospital Bandung with a p-value of 0.002 < 0.05. This is in line with other research that supports Febrianti et al. (2022), explaining that bivariate results include a relationship between knowledge and maternal behavior in preventing diarrhea in toddlers with a p-value of (0.002), there is a relationship between attitudes and maternal behavior in preventing diarrhea in children toddler p-value (0.000).

Other research in line with Dwiastuti et al. (2018) shows that there is a relationship between increased knowledge and diarrhea prevention behavior in toddlers. Prevention of diarrhea can be done by administering vaccines which can protect children from several diarrhea-related diseases (Istiroha & Sahak, 2016). Important information that parents need about preventing diarrhea is, not giving adult diarrhea medication to children, drinking completely boiled water and carbonated drinks, avoiding consumption of tap water, ice, unpasteurized dairy products, raw vegetables, fruit. unpeeled fruit, meat, and seafood (Kasem et al., 2017). This shows that knowledge and attitudes about diarrhea greatly influence the occurrence of diarrhea in toddlers. The higher the mother's level of knowledge and attitudes about diarrhea, the lower the incidence of diarrhea in toddlers in the children's inpatient room at Immanuel Hospital, Bandung.

A person's knowledge is included in the predisposing factors which can influence changes in a person's health behavior along with the other two factors, namely enabling factors and reinforcing factors. There is a need for immediate and quick treatment in cases of diarrhea to prevent dehydration. Based on this, it is very important for mothers and parents to pay attention to the information obtained so that good knowledge becomes the basis for mothers to act and can be used as an effort to prevent dehydration, whether mild/moderate or severe. Quick and

appropriate treatment at home will prevent bad effects for toddlers and even prevent death.One of the knowledge that needs to be conveyed is the factors that can increase the occurrence of diarrhea, for example environmental factors,One of the knowledge that needs to be conveyed is factors that can increase the occurrence of diarrhea, for example environmental factors, hygienic practices when preparing food with unwashed hands, cleaning a child's feces, letting children play in dirty places, teaching mothers how to process and prepare food (Susanti et al., 2017). According to Arsurya et al. (2017), the results of bivariate analysis show that there is a relationship between the mother's level of knowledge about treating diarrhea and the incidence of diarrhea in toddlers.

Mother's Attitude Regarding Diarrhea Preventive Efforts with the Incident of Diarrhea in Toddlers in Children's Inpatient Rooms

The research results showed a significant relationship between attitudes and the incidence of diarrhea in toddlers in pediatric inpatient rooms with a p-value of 0.001 < 0.05. This is in line with other research that supports Febrianti et al. (2022), explaining that bivariate results include a relationship between knowledge and maternal behavior in preventing diarrhea in toddlers, there is a relationship between attitudes and maternal behavior in preventing diarrhea in children toddler. According to Girsang (2022), it explains that good maternal knowledge and attitudes can influence mothers to take measures to prevent diarrhea before their child experiences diarrhea or repeats diarrhea. Maternal knowledge and attitudes are very influential in the occurrence of diarrhea in children under five. The results of Ratnasari and Patmawati (2019) show that there is a relationship between maternal behavior, which includes maternal knowledge, attitudes and actions, and the incidence of diarrhea in toddlers. The better the mother's behavior (knowledge, attitudes and actions), the fewer cases of diarrhea in toddlers. This shows that knowledge and attitudes about diarrhea greatly influence the occurrence of diarrhea in toddlers. The higher the mother's level of knowledge and attitudes about diarrhea, the lower the incidence of diarrhea in toddlers in the children's inpatient room at Immanuel Hospital, Bandung.

According to Sukut et al. (2015), it is explained that there is a relationship between attitudes and activities, the results of which are mostly adequate, the rest are poor and none are good, based on the results of statistical tests using linear regression that there is a significant relationship between attitudes related to the respondent's activities (mother) with the incidence of diarrhea in toddlers shows a moderate level of relationship. This means that low attitudes

related to maternal activity cause diarrhea. Attitude is an internal state that influences individual actions towards several personal objects and events. Mothers who have a supportive attitude in this matter influence preventive efforts in preventing diarrhea in toddlers. This is the basis for carrying out this prevention for toddlers.

According to Pender in Alligood (2013) attitudes related to activities (activity-related affect) greatly influence a person's health behavior. In addition, Pender explains that attitudes related to activities describe positive and negative feelings about the behavior itself. The resulting feelings will likely influence whether the individual will repeat the behavior again or maintain the behavior. According to Rospita and Tahlil (2017) states that someone who believes that displaying certain behavior will lead to positive results, will have a favorable attitude towards displaying that behavior, conversely an individual will have an unfavorable attitude if he believes that this behavior will lead to negative results. According to Juliansyah et al. (2021) mothers of toddlers who support the importance of preventing diarrhea in toddlers will tend to make efforts to prevent diarrhea in toddlers, because it has been ingrained from the start because they consider preventing diarrhea to be more important so as not to cause health problems in the future which can pose a risk of death in toddlers. . Mothers of toddlers with an attitude that supports the importance of preventive prevention of diarrhea in toddlers will tend to make efforts to prevent diarrhea in toddlers, because they have been ingrained from the start with the knowledge they have so they respond to this through their attitude because they consider preventing diarrhea to be more important so as not to cause health problems in children. in the future which can pose a risk of death in children under five.

CONCLUSION

Based on the research results, it was concluded that there was a relationship between knowledge and the incidence of diarrhea in toddlers with a p-value of 0.002<0.05, and there was a relationship between attitudes and the incidence of diarrhea in toddlers with a p-value of 0.001<0.05.

LIMITATION

The limitation of the research is that the number of samples experiencing diarrhea is still small so that the results can represent the relationship between the variables studied which are related

to the incidence of toddler diarrhea from maternal factors. Respondents lacked focus when filling out the questionnaire because the child was still being treated at the hospital.

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