



SYSTEMATIC LITERATURE REVIEW: OF KNOWLEDGE AND ATTITUDE OF MOTHERS TOWARD PREVENTION OF DIARRHEA IN TODDLERS

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ABSTRACT

Diarrhea often attacks children more than adults because their immune system is still weak. This is because knowledge about diarrhea in children is still low so it will affect the attitude of mothers in handling diarrhea in children. The aim is to review the literature to provide more in-depth information and descriptions, ideas to others about mothers' knowledge and attitudes towards preventing diarrhea in children under five. The research method used is a Literature Review of research results related to maternal knowledge and attitudes of diarrhea prevention published in the Google Scholars and Pubmed databases, the articles selected are Indonesian and English articles that were published in 2015 to 2015. by 2021 which can be accessed in full text in Pdf format. From the search data using the google scholar database, 6 articles were found and from Pubmed 4, from 10 articles, it was found that mothers' knowledge and attitudes were still lacking in preventing diarrhea in toddlers. Authors of the journal discussed a lot about the knowledge of mothers' attitudes about diarrhea; the number of samples and the most cross-sectional sample analysis; The author also suggests that mothers always maintain personal and surrounding hygiene, improve toddler nutrition; increase the literature review and increase mother's knowledge about diarrhea.

Keywords: diarrhea; knowledge; literatur review; mother toddler attitude

INTRODUCTION

According to WHO, diarrhea is a disease characterized by an increase in the frequency of bowel movements more than 3 times a day, which may be accompanied by vomiting or bloody stools. This disease is often found in children under five, especially in the first 3 years where a person can experience 1-3 severe episodes (Ardayani 2015). In Indonesia, diarrhea is one of the most important health problems in children under five, according to WHO, diarrhea is the consistency of soft or liquid stools 3 or more times a day. Generally, diarrhea is caused by several types of germs such as Rotavirus, Escherichia coli, Shigella, and Salmonella (Komara et al. 2020).

The head of UNICEF's representative in Indonesia, Gunilla Olsson, said the death rate decreased from 84 deaths per 1,000 live births to 29 per 1,000 live births. However, Indonesia still faces challenges, especially since overall efforts to reduce maternal and child mortality have slowed, even reaching a point of stagnation over the last 5-10 years. The child mortality rate is quite high in Indonesia due to several things, namely, open defecation, not having access to clean water and a clean environment, and contaminated water causing diarrhea and other deadly diseases. Meanwhile, one third of the deaths of children under one year are caused by diarrhea. Repeated diarrhea causes malnutrition (Khasanah & Sari, 2016)

Akhar, diarrheal diseases in infants and children have a negative impact on children's growth, such as inhibiting children's growth and development and reducing children's quality of life. In toddlers the incidence of diarrhea is more dangerous than in adults, because the body composition of toddlers contains a lot of water compared to adults, if exposed to diarrhea,

toddlers are more susceptible to dehydration and other complications that can cause malnutrition or death (Taher & Sabon, 2017).

Knowledge is something that is very important in life to shape behavior. Therefore, knowledge has a role in shaping the behavior of mothers to live clean and healthy, which can affect the incidence of diarrhea in children (Jannah, Kepel, and Maramis 2016). Diarrhea in children under 5 years old can be treated both at the primary and secondary levels of treatment, first, environment and clean water, second, early recognition of dehydration due to diarrhea and oral rehydration using ORS available at home. Optimal feeding and child-feeding practices can prevent diarrhea such as the habit of washing hands before and after eating, washing hands with soap after defecation and a clean environment can reduce the incidence of diarrhea (Workie, Syarif Abdillah, and Addis 2018). Prevention of diarrhea can be done by: using the latrine and washing hands after using the latrine, after cleaning the children, after doing house cleaning activities, before preparing food, before eating and before breastfeeding (Agegnehu et al. 2019).

Diarrhea can spread and infect children through 4 factors, namely, food, feces, air, hands. To prevent transmission of this chain, hygiene is an important factor to prevent children from diarrheal disease. Diarrhea is caused by several viruses and bacteria. In clean and healthy living conditions and behaviors, adequate food and water are available, healthy patients usually recover from common viral infections within a maximum of 1 week. However, people who are sick will experience severe malnutrition and dehydration and can be life-threatening if left untreated. Diarrhea can be a more serious disease such as dysentery, cholera or stonelism, and can also be an indication of a chronic syndrome such as Crohn's disease (Khasanah and Sari 2016).

In many developing countries, most episodes of diarrhea are treated at home, and mothers are the primary caregivers for children under five (6). It is they who decide about the type of food given to the child and the overall management of the disease. Therefore, their knowledge of this common disease is very important. Awareness and perception of diarrhea, and individual and household actions to prevent and/or manage disease, are critical to reducing diarrhea-related morbidity and mortality (2). On the other hand, mothers' poor knowledge and attitudes about the causes of diarrhea may limit them to take appropriate timely action. Although the risk factors associated with diarrheal disease are theoretically known to program managers in general, empirical evidence is lacking to target specifically important risk factors that can significantly contribute to their incidence and distribution in the region in general, and at present. learning community in particular. Factors such as maternal education, identifying danger signs, and seriousness of disease in indigenous and other communities, can also hinder healthy practices in diarrheal disease management (Merga & Alemayehu, 2015)

METHOD

Literature Search Strategy

Literature Search Strategy is the method used when writing a literature review including protocol and registration, search database, inclusive and exclusive criteria, search results and study selection, quality assessment.

Protocol and Registration

A comprehensive summary in the form of a literature review regarding the relationship between the mother's level of knowledge about diarrhea and the prevention of diarrhea in children under five. The protocol and evaluation of the literature review will use the PRISMA checklist to

determine which selected studies have been found and adapted to the objectives of the literature review.

Search database

Literature review which is a comprehensive summary of several research studies that are determined based on certain themes. The literature search was carried out in April-June 2020. The data used in this study were secondary data obtained not from direct observation, but obtained from the results of research conducted by previous researchers. Secondary data sources can be in the form of reputable journal articles both nationally and internationally with predetermined themes. Search literature in the literature review using databases with high and medium quality criteria, namely Google Scholar and Pubmed.

Inclusion and Exclusion Criteria

The strategy used to find articles using the PICOS framework, which consists of:

1. Population/Problem, namely the population or problem to be analyzed in accordance with the themes that have been determined in the literature review
2. Intervention is a study management action in accordance with the themes that have been determined in the literature review.
3. Comparison, namely intervention or other implementation that is used as a comparison, if there is no one can use the control group in the selected study.
4. Outcomes are the results or outcomes obtained in previous studies that are in accordance with the themes that have been determined in the literature review.
5. Study design, namely the research design used in the article to be reviewed.

Kriteria	Inklusi	Eksklusi
Population problem (Problem population)	Knowledge level and mother's attitude about diarrhea to the prevention of diarrhea in toddlers.	Mother's level of knowledge and not attitudes about diarrhea to prevention of diarrhea in toddlers
Intervention (Implementation)	Variables (Level of knowledge and attitudes of mothers about diarrhea to prevention of diarrhea in toddlers)	Not a variable (not knowledge and attitudes of mothers about diarrhea to prevention of diarrhea in toddlers)
Comparation	Control (Not Diarrhea)	Case (Mother's knowledge and attitude about diarrhea)
Research design	Cross sectional, quasi-experimental, descriptive case study.	In addition to cross-sectional case design
Publication Year	Post 2010 (years 2010 and above)	Pre 2010 (year 2010 and below)
Language	Engglish, Indonesian	Apart from English and Indonesian

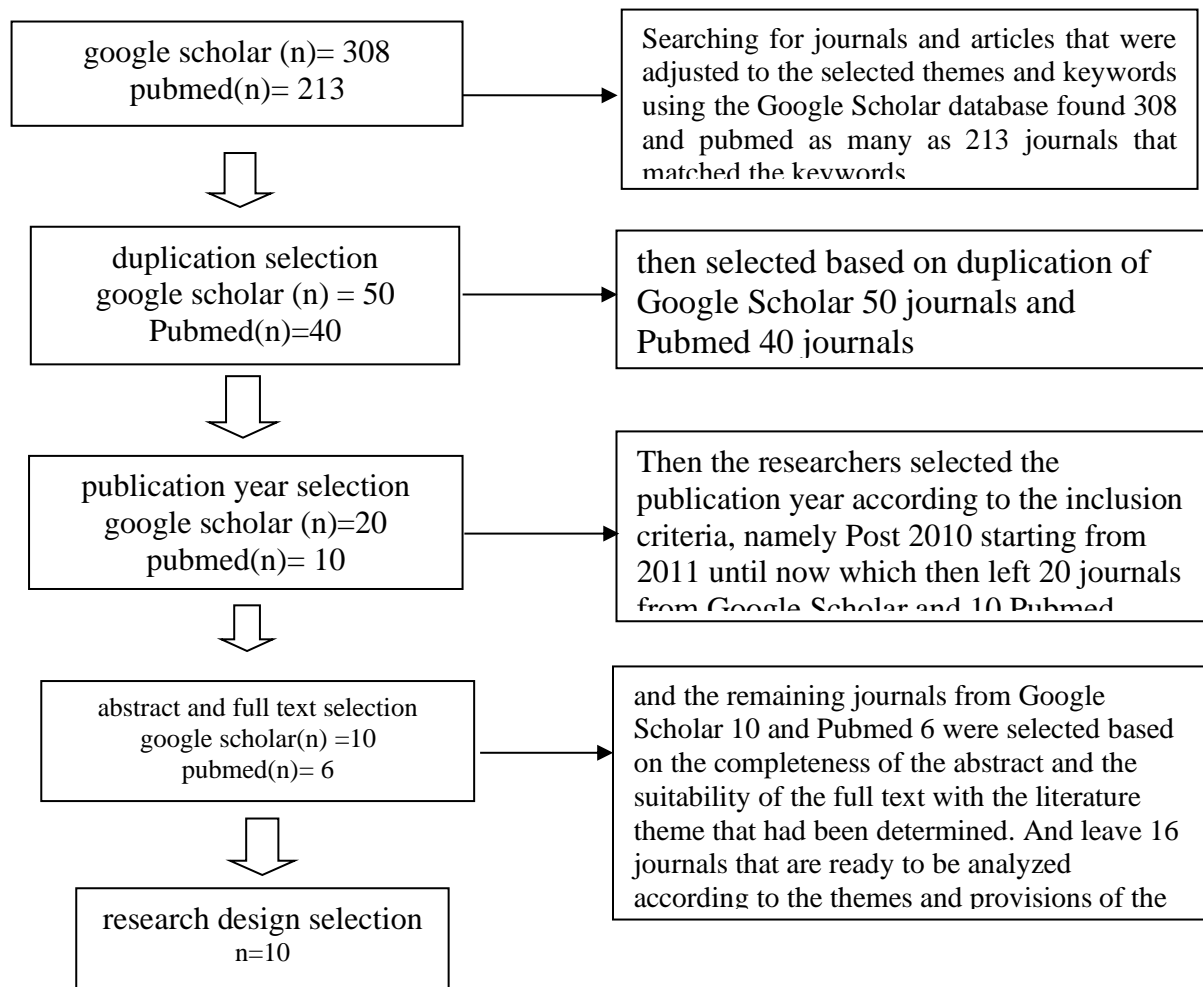
Study search and selection results

Based on the results of a literature search through publications in two databases and using keywords that have been adjusted to MeSH, the researchers found 2319 articles that matched these keywords. The search results that have been obtained are then checked for duplication, found there are 90 articles. Researchers then screened based on the title, there were 16 articles adapted to the theme of the literature review. The assessment carried out based on the feasibility

of the inclusion and exclusion criteria obtained as many as 10 articles that can be used in the literature review. The results of the selection of study articles can be illustrated in the Flow Diagram below:

Chart 1.

The results of the selection of study articles can be described in a Flow Diagram



Quality Rating

Analysis of the methodological quality in each study (n=10) with a checklist of assessment lists with several questions to assess the quality of the studies. The assessment criteria were assigned a score of “yes”, “no”, “unclear”, or not applicable, and each criterion with a score of “yes” is given 1 point and the score is 0, each study score is then calculated and added up. Critical appraisal to assess studies that meet the requirements is carried out by researchers. if the assessment score at least 50% meets the critical appraisal criteria with the cut-of value that has been used by the researcher, the study is included in the inclusion criteria. Researchers excluded studies that were of low quality to avoid bias in the validity of the results and review recommendations. In the last screening, 18 studies achieved scores higher than 50% and were ready to synthesize data, however due to the assessment of the risk of bias, 2 studies were excluded and 10 articles were used in the Literature review.

The risk of bias in this literature review uses an assessment of the research methods of each study, which consists of , Nursalam 2020:

1. Theories: theories that do not fit, are out of date, and lack credibility

2. Design: the design is not in accordance with the research objectives
3. Sample: there are 4 things that must be considered, namely, population, sample, sampling, and sample size that are not in accordance with the sampling rules
4. Variables: the variables that are set are not appropriate in terms of number, controlling for confounding variables, and other variables,
5. Instrument: the instrument used does not have the validity, specifications and reliability validity
6. Data analysis: data analysis is not in accordance with the rules of analysis in accordance with the standard

RESULTS

Study Characteristics

Ten articles that met the inclusion criteria (Figure 1) were divided into two sub-discussions based on the topic of literature review, namely the relationship between the level of knowledge and mother's attitude towards diarrhea prevention with 10 journals. The results of the study characteristics are depicted in the table as follows:

Table 1.
The results of the study characteristics are depicted in the table as follows:

Sumber bahasa	Tahun	Database	N	Jenis studi penelitian	
				Cross sectional	Simple random
Bahasa indonesia	2014-2021	Google scholar	2700	5	1
English	2015-2019	Pubmed	213	1	3
Hasil			10	6	4

The relationship between the level of knowledge and the attitude of mothers of children under five on the prevention of diarrhea mostly used a cross sectional or cross-sectional study. Overall, each study discussed the relationship between the level of knowledge and attitudes of mothers of children under five on the prevention of diarrhea. the average study according to this systematic review carried out in Indonesia was 6 [six] and in Ethiopia 4 [four].

10 [Ten] journals on average knowledge are influenced by age, gender, educational background, economy, health conditions and sources of information while attitudes are influenced by experience, perception, education and environment.

Table : 2 Literature Search Results

No	Author and year	Research design	Number of respondents/sample and place of research	The result of the factor analysis	Result Summary
1.	(Komara et al. 2020)	This study used a cross sectional analytic research method. The variables studied were mother's knowledge as the independent	The number of 90 samples with instruments is a questionnaire that has been tested for validity in Pemecutan Kelod village, Denpasar, Bali.	The results showed that most (63.3%) mothers had good knowledge, and as many as 36.6% of their toddlers had diarrhea, 21.1% of mothers with sufficient	So the researchers suggest that health workers provide counseling about the prevention of diarrhea related to knowledge. Mother's knowledge is very important because she can understand what diarrhea is,

No	Author and year	Research design	Number of respondents/sample and place of research	The result of the factor analysis	Result Summary
		variable and the incidence of diarrhea in toddlers as the dependent variable.		knowledge had 42.1% of their children with diarrhea, and 15.6% of mothers who had sufficient knowledge. experienced less knowledge as much as 78.6% there was a significant relationship between the mother's level of knowledge.	management of diarrhea, and prevention of diarrhea. So that the researchers concluded that diarrhea can be prevented by increasing the knowledge of mothers under five which include: exclusive breastfeeding, not giving milk using a milk bottle, washing hands with soap and running water, keeping home sanitation clean and healthy.
2.	(Rane, Jurnal, and Ismail 2017)	The research method is analytic and data processing using chi-square test and other variables by identifying existing variables. and researched at the same time.	The number of samples is 40 subjects, the highest level of education is high school graduates 18 people (45%) respondents with work are housewives 27 people (67.5%) and this research was conducted in Lubuk Buaya Padang Village.	Mother's knowledge about diarrhea with moderate level of knowledge was 27 people (67.5%), low 8 people (20%), and high as much as 5 people (12.5%).	It was concluded that the mother's knowledge was low about diarrhea so it was hoped that the mother could seek information about handling diarrhea such as maintaining diet, and maintaining a clean environment.
3.	(Ramon et al. 2021)	This type of research is a quantitative study with a cross sectional approach and the independent variable is	The number of research samples as many as 92 mothers who have toddlers. This simple random sampling technique was carried out in the working area of the Kelam Tengah	The results showed that from 92 respondents there were 43 people (46.7%) who had poor knowledge, 30 people (32.6%) had good	After analyzing the knowledge and attitudes of mothers of toddlers on preventing diarrhea, mothers of toddlers need to increase knowledge so that

No	Author and year	Research design	Number of respondents/sample and place of research	The result of the factor analysis	Result Summary
		attitude, mother's knowledge of the dependent variable is diarrhea	Health Center, Kaur Regency.	knowledge and 19 people (20.7%) had sufficient knowledge	it will cause changes in perceptions, habits, form one's beliefs, such as the habit of washing hands before and after eating and environmental hygiene
4.	(Jannah, Kepel, and Maramis 2016)	The technique used is an analytical survey using a cross sectional approach	Accidental sampling was carried out with 97 respondents at the Tikala Baru Public Health Center, Manado City	Indicates a good level of knowledge (50.5%) while respondents with a poor level of knowledge are (49.5%).	Shows that there is a significant relationship between knowledge and diarrhea prevention behavior because knowledge is influenced by the level of formal education taken and positive maternal behavior in preventing diarrhea is characterized by hygienic feeding, providing clean drinking water, maintaining personal hygiene, getting used to washing hands before and after eating, serve covered food
5.	(TaHER and Sabon 2017)	The analysis technique used a cross sectional approach and the independent variables (knowledge and attitudes)	The number of samples was 110 people. This research was conducted in Sombaopu sub-district, Gowa district, South Sulawesi province.	shows that out of 110 respondents, 64 respondents (58.2%) lack knowledge of mothers, while the least level of knowledge of mothers	Shows that knowledge and attitude are an important unit, because the better a person's knowledge, the more positive the mother's attitude in dealing with

No	Author and year	Research design	Number of respondents/sample and place of research	The result of the factor analysis	Result Summary
		and the dependent variable (the incidence of diarrhea) were measured once at the same time.		about diarrhea is the level of good mother's knowledge as many as 46 respondents (41.8). and it was found that the most attitudes about diarrhea were poor attitudes as many as 69 respondents (62.7%) and the least, namely good attitudes as many as 41 respondents (37.3%)	diarrhea problems in children. mother's attitude in exclusive breastfeeding and mother's attitude in environmental health
6.	(Agegnehu et al. 2019)	The method used is a cross-sectional study, the community population is selected using a simple random sampling technique Logistic regression analysis (bivariable and multivariable) was performed to identify factors associated with the dependent variable	The number of samples is 398 caregivers who have children under five, in Enemay . District .	Of the 398 caregivers, 62.6% had information about diarrhea and almost a third of 34.4% of the participants admitted that diarrhea was partly watery bowel movements once a day. more than half of caregivers considered the use of latrines (54.8%) and hand washing (51.5%) as methods of preventing diarrhea. total participants	The research focuses more on the attitudes of caregivers in preventing diarrhea such as hygiene and sanitation, diet, breastfeeding, immunization, zinc supplements, and probiotics and prevention of diarrhea carried out by caregivers such as health promotion, prevention of diarrhea.

No	Author and year	Research design	Number of respondents/sample and place of research	The result of the factor analysis	Result Summary
				(50.5%) agreed that diarrhea is an infectious disease and 41.5% of caregivers strongly agreed that diarrhea can be caused by open defecation	
7.	(Khasanah and Sari 2016)	This type of research uses a cross sectional approach. The research instrument is a closed questionnaire that has been tested for validity and reliability.	The study population was 72 mothers, the sample was 61 mothers with the total sampling method. The data analysis technique used univariate and bivariate Kendall tau correlation tests. carried out at the Kota Gede II Public Health Center, Yogyakarta.	The mother's level of knowledge about diarrhea is mostly in the sufficient category (54.1%) and diarrhea prevention behavior is in the positive category (77%).	Mother's level of knowledge and attitude is one of the health information about ways to achieve a healthy life, how to maintain health, how to avoid diarrheal diseases and positive life behaviors of mothers in preventing diarrhea marked by providing hygienic food, providing clean drinking water, washing hands with soap. and keep the environment clean
8.	(Merga and Alemayehu 2015)	A community-based comparative cross-sectional study in Assosa district, western Ethiopia in July 2010	Quantitative data were obtained using a structured questionnaire from 232 randomly selected mothers with children less than five years of age regarding their knowledge, perceptions, and management.	Mother's knowledge about the causes, transmission, and prevention of diarrhea in the study area was 37.5%	Knowledge and attitudes are one of the supports to determine the causes, transmission, and prevention of diarrhea, such as water sources in the community, water reservoirs, and knowledge of mothers who remain strong

No	Author and year	Research design	Number of respondents/sample and place of research	The result of the factor analysis	Result Summary
					predators of diarrheal morbidity after the research
9.	(Mekonnen et al. 2018)	A cross sectional study using multistage sampling was conducted in the host community in the gembeela region of Ethiopia	Data were collected by questionnaire-based interviews and 1667 caregivers were involved in this study	It shows that 663 (28.0%) caregivers have poor knowledge, while 393 (23.6%) caregivers have a bad attitude towards diarrhea in children.	Mother's basic knowledge about diarrhea depends on educational status such as the use of ORT with feeding .
10.	Workie M.H et al in 2016	using random sampling method and knowledge and attitude variables.	A sample of 295 mothers who had toddlers with diarrhea in the last 2 weeks was conducted on 15-14 April 2016 in Redawa. with face-to-face interviews using standardized and structured questionnaires.	From a total of 295 mothers, about two thirds (65.2%) had good knowledge, but more than half of mothers (54.9%) had negative attitudes towards home-based management and prevention of diarrhea in children under five.	Mother's knowledge about prevention and treatment of diarrhea in toddlers with ORT giving fluids by mouth to prevent or improve dehydration due to diarrhea is a mixture of clean water, salt and sugar.

Characteristics of respondents

Respondents in this study were all mothers who had children under five with the independent variable being the level of knowledge and attitudes of mothers of children under five about prevention of diarrhea [dependent variable], the majority were > 2000 in each country. Respondents in the study averaged after being productive between 25-45 years which is multi-regional. Most of them live in rural and suburban areas. The overall respondents are Asian people and indigenous people from the research location. According to Fida and Maya, diarrhea is defecation (defecation) in the form of liquid or semi-fluid. The water content in the stool (100-200 ml per stool hour) or the frequency of bowel movements more than 4 times in infants and 3 times in children (Khasanah and Sari 2016).

The incidence of diarrhea in children can have an impact on death if not treated immediately. According to previous research, it is known that diarrhea can be prevented by providing an understanding of the knowledge of mothers under five (Komara et al. 2020) including: Exclusive breastfeeding for infants until the age of 6 months. Not giving bottled milk to infants or children but given in clean glasses or cups, Washing hands with soap before feeding children, before cooking, before eating, after defecating and after defecating children; Eating and cooking utensils must always be clean; Cook until cooked and consume boiled water; Maintain house sanitation to keep it clean and healthy, with sufficient air and sunlight; Using clean water; Maintain the cleanliness of the latrine; Dirty water and sewage are discharged through wastewater disposal; Keep the yard clean by not littering

DISCUSSION

Determining the right criteria for the method greatly affects the number of articles that can be obtained. The determination of the article that was taken was initially by entering all the words contained in the literature review, then a search was carried out using Google Scholar and Pubmed. After seeing that the number of articles obtained was limited, the criteria for taking the next article were specified with the keywords for each variable that had been selected accordingly (using Google Scholar and Pubmed) after that it was specified in the last 10 years. Based on Riskesdas data, globally there has been an increase in the incidence of diarrhea and deaths due to diarrhea in children under five from 2015-2017. In 2015, diarrhea caused about 688 million people sick and 499,000 deaths worldwide occurred in children under 5 years. WHO data 2017, states that almost 1.7 billion cases of diarrhea occur in children with a mortality rate of around 525,000 in children under five each year (Noor, Indah, and Chandra 2020)

Knowledge will greatly support one's understanding of a disease, including mother's knowledge about diarrheal disease, will be very helpful in preventing diarrheal disease in toddlers, good knowledge will support good behavior and vice versa lack of knowledge will lead to negative behavior or behavior that does not support towards health efforts. (Sriwahyuni and Soedirham 2014) Direct behavior is the action of an action or activity. Behavior change according to psychological theory is indeed considered as the result of a learning process that includes 3 domains, namely, the cognitive domain related to one's knowledge, the effective domain related to attitudes and symptoms that indicate a tendency towards behavior, and the psychomotor domain related to actions and behavior. (Hadi, Anam, and Chandra 2018)

Epidemiology Before we know the epidemiology of this diarrhea case, we need to first know the frequency of diarrhea in toddlers, which is 2-3 times per year. So this incident is a recurring occurrence in toddlers. As for what causes diarrhea to occur repeatedly (Husaeni 2017): Spread of germs that cause diarrhea Germs that cause diarrhea usually spread through the fecal-oral route, including eating/drinking contaminated feces and/or direct contact with the patient's feces. Some behaviors can lead to the spread of germs; Host factors that increase susceptibility to diarrhea. Several factors in the host can increase the incidence of several other diseases and the duration of diarrhea. These factors are: Not breastfeeding until the age of 2 years. Breast milk contains antibodies that can protect us against germs that cause diarrhea such as: shigella and V cholera; Malnutrition, severity of illness, duration and risk of death due to diarrhea increase in children who suffer from nutritional disorders, especially malnutrition; Measles, diarrhea and dysentery are common and have a severe impact on children who are suffering from measles in the last 4 weeks this is as a result of a decrease in the patient's immune system.

According to (Iskandar and Maulidar 2016), one of the factors that influence the incidence of diarrhea in infants is formula feeding. Formula milk is milk that is suitable and can be accepted by the baby's body system or formula milk is cow's milk whose nutritional content is changed in such a way that it can be given to babies without side effects. Diarrhea is a digestive tract disease characterized by changes in stool consistency and an increase in the frequency of bowel movements. Diarrhea that is not treated immediately can lead to dehydration. Several cases of infant mortality due to diarrhea were due to delays in fluid administration and treatment (Nasution and Samosir 2019)

In the results of the article obtained from the analysis that meets the inclusion criteria and can be used as an article that will be used by referring to articles related to interventions about the diarrheal disease process in an effort to prevent diarrhea in the family by maintaining regular hygiene and food to cure disease. Diarrhea. After lowering the criteria in the form of research methods, finally the articles obtained amounted to 10 articles, the results that are in line in 4 articles are shown in the research results in the article: Factors that affect knowledge and attitudes Age: Age is one of the risk factors that play a role in the relationship between the level of knowledge and attitudes mothers on the prevention of diarrhea in toddlers, this can be explained that when they are old enough the level of maturity and strength of a person will be more mature in thinking and working (Mekonnen et al. 2018); Education level: The higher the formal education taken, the better the knowledge. Mothers of toddlers with higher education have wider access to information than mothers of children with low education. In addition, mothers who are highly educated will be easier to get health information.

From the low knowledge of mothers, some mothers stated that they did not know how to prevent recurrent diarrhea, how to use clean water, and did not know how to care for toddler tools such as washing toddler bottles before giving them to toddlers. There are also some mothers with low knowledge even though they come from higher education and work as civil servants or entrepreneurs. According to the researcher, it could be because mothers are busy working so they rarely come to the puskesmas or posyandu to listen to socialization about diarrhea. Some mothers have high knowledge even though they are housewives and have low or moderate education, according to the researcher this is because housewives who do not work outside the home so that their time is full to care for toddlers, diligently come to the puskesmas diligently to come to the posyandu and have time to immediately come to the nearest health center when a toddler has diarrhea, so that diarrhea in toddlers can be resolved quickly (Rane, Jurnal, and Ismail 2017) Perception: Mother's knowledge and perception related to hygiene, breastfeeding, food preparation sanitation. Attitudes include caregivers about children contracting diarrhea regularly, preventing diarrhea by washing hands with water and soap, washing hands after using the toilet, washing hands before eating, drinking clean water, exclusive breastfeeding and treating diarrhea with ORS (Mekonnen et al. 2018) .

Diarrhea prevention behavior is an action taken by mothers of toddlers to prevent diarrhea in toddlers. Positive maternal behavior in preventing diarrhea is characterized by providing hygienic food, providing clean drinking water, maintaining personal hygiene, getting used to washing hands before eating, defecating in place, providing adequate waste disposal sites, eradicating flies and maintaining environmental cleanliness. According to Hartina, the measures measured in the study were the attitude of mothers of children under five in responding to the activities of using clean water, healthy latrines, and washing hands with soap. Some of the research respondents had less action on clean and healthy living behavior and from 96 respondents there were 40 toddlers who suffered from diarrhea. Jannah, Kepel, and Maramis 2016). Environment: A person's practice is formed from the individual with the environment,

especially regarding knowledge and attitudes towards objects (Jannah, Kepel, and Maramis 2016). According to Angriani & Amiruddin Ibu as a person who is always close and takes care of children's health and feeding, the cause of the majority is an unhealthy environment, the rest is an irregular eating pattern (Jannah, Kepel, and Maramis 2016)

CONCLUSION

Journal authors discuss a lot about the knowledge of maternal attitudes about diarrhea; the number of samples and the most cross-sectional sample analysis; the author also recommends that mothers always maintain personal and surrounding hygiene, improve toddler nutrition.

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