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# COMMUNITY HEALTH WORKER'S BEHAVIOR IN PREVENTION AND TREATMENT OF DIARRHEA AT HOME IN MOTHERS WITH TODDLERS

Sri Haryani<sup>1</sup>, Yusniarita<sup>2</sup>, Yanti Sutriyanti<sup>3</sup>, Derison Marsinova Bakara<sup>4</sup>, Chandra Buana<sup>5</sup> Politeknik Kesehatan Kementerian Kesehatan Bengkulu<sup>1,2,3,4</sup> Politeknik Kesehatan Kementerian Kesehatan Yogyakarta<sup>5</sup> sri.ani37@gmail.com<sup>1</sup>

#### ABSTRACT

This study aims to determine how the behavior of community health worker in preventing and treating diarrhea at home in mothers who have toddlers at home. This study used a quantitative research type with a Quasi Experiment design with an intervention group and a control group. The design used is pre-test and posttest. The results of the study obtained pre-test knowledge for the intervention and control groups at the age of cadres 57 (95%) adults, higher education 59 (98.3%), length of time as a cadre 44 (73.3%) long. Pre knowledge with p-value 0.257, post 0.000 and pre attitude 0.379 post 0.160, and pre action 0.814 post 0.603. The conclusion was that the knowledge of community health worker was good after health education was carried out and for the attitudes and actions of community health worker were not good after health education was carried out in preventing and treating diarrhea at home in mothers who with toddlers.

Keywords: Knowledge, Attitude, Action, Community Health Worker, Treatment, Diarrhea

#### **INTRODUCTION**

Morphologically, the incidence of diarrhea in toddlers in the world in 2004 there were 2.5 billion cases of diarrhea in children and 1.1 billion children died from diarrhea in 2009. In Indonesia in 2011 there were 0.4% cases of diarrhea and there was an increase in 2012 of 1.53% of children suffering from diarrhea. Liunokas et al., (2022) In Rejang Lebong Regency in 2021 there were 322 cases and in 2022 there were 299 cases of diarrhea in children. In the health center there was the most diarrhea, namely in the Kampung Delima health center 142 cases, Tunas Harapan 37 and Talang Rimbo 34 cases of diarrhea in children aged 1-4 years (Rejang Lebong Health Service Report 2022).

According to WHO Liunokas et al., (2022) Diarrhea is a condition where an individual experiences bowel movements with a frequency of 3 or more per day with a liquid stool consistency caused by various bacteria, viruses and parasites. According to Oktavianisya et al., (2023) the cause of diarrhea is also caused by malabsorption, allergies, poisoning, immunodeficiency and other causes. This infection is spread through contaminated food or drink and can also occur from person to person as a result of poor personal hygiene.

Prevention at home is one alternative that can be done by parents who have toddlers to avoid the side effects of diarrhea. One effort that can be done by health workers is to provide health education to mothers who have toddlers. The information given to community health worker is about the importance of maintaining a clean home environment, implementing PHBS (clean and healthy living behavior), paying attention to the importance of using SPAL, the importance of sterilization of milk bottles, and providing clean water. There is a high prevalence of diarrhea in children in the research area (Gede et al., 2022). Irin & Kurniadi (2022) stated that increasing the knowledge of mothers of toddlers can be achieved through the provision of health promotion by integrated health post community health worker.

The health education provided is expected to increase mothers' knowledge about preventing and treating diarrhea in toddlers. According to Irin & Kurniadi, (2022) the mother's attitude and behavior about diarrhea have a significant effect on the incidence of diarrhea in toddlers and when toddlers experience diarrhea they will be taken to health facilities and the behavior of giving oral rehydration therapy is also important. In addition, it is also necessary to consider the mother's age factor, the age difference between boys and girls, the number of children who are still alive, and the place of residence to avoid the occurrence of diarrhea in toddlers Asilah et al., (2022). the number of community health worker in Rejang Lebong was 200 in 2019. In Rejang Lebong district there is a 211 health worker program to support the increase in active health center, namely with 2 cadres 1 hamlet / neighborhood, 1 program in order to improve healthy communities (Hijazi & Si, 2020). The total number of community health worker in Rejang Lebong Regency is 1251 (Rejang Lebong Health Office, 2022).

The results of the initial study conducted by researchers through interviews with those responsible for handling children's diseases showed that there were still parents who considered diarrhea as a common disease in children and did not require serious treatment or prevention to prohibit the disease from occurring and the need for immediate treatment to prevent complications from the disease in children. One of the causes is the low level of parental knowledge about prevention and care when children are sick and the role of community health worker in handling this problem has not been maximized, because from the results of interviews with 4 health center community worker, they themselves did not dare to convey information because they did not have more knowledge about prevention and care for diarrhea in toddlers.

# **RESEARCH METHODS**

This study uses a quantitative research type with a Quasi Experiment design in the intervention group and control group, with a pre-test and post-test design involving two groups. The population in this study were all community in Rejang Lebong Regency in 2020, totaling 1,251 people based on the following considerations: Still active as community health worker (have a letter of assignment), willing to be respondents, with a total of 60 people (35 intervention groups and 25 control groups). This research was conducted in the Rejang Lebong Health Service Work Area, in January-December 2023. This research has passed the ethics of the ethics committee (KEPK) of the Bengkulu Ministry of Health Polytechnic No.KEPK.BKL/493/08/2023.

#### RESULTS

Variables	Intervention	Kolmogoro	v-Sm	irnov	Shapiro Wilk		
	Group	Statistics	df	Sig.	Statistics	df	Sig.
	Knowledge						
	Post						
Pre Intervention	19	0.307	4	0,0	0.729	4	0.024
Group	20	0.272	3	00	0.805	31	0,000
Knowledge			1				
Pre Intervention	19	0.210	4	0.0	0.982	4	0.911
Group Attitude	20	0.198	3	03	0.879	31	0.002
			1				
Pre Action	19	0.236	4	0.1	0.911	4	0.488
Group	20	0.133	3	75	0.956	31	0.234
Intervention			1				

Table. 1 Normality Test of Intervention Group Respondent Data

Based on table 1, it is known that the data normality test for the pre-post intervention group was normally distributed with p>0.05.

Variables	Intervention Group	Control Group	Ν	
Age				
Mature	34 (55.7)	23 (92.0)	57 (95)	
Elderly	1 (1.6)	2 (8.0)	3 (5)	
Education				
Low	0	1 (4.0)	1 (1.7)	
Tall	35 (100)	24 (96)	59 (98.3)	
Long time as a community health				
worker	8 (13.1)	8 (32,)	16 (26.7)	
New	27 (44.3)	17 (68.0)	44 (73.3)	
Long				

Table. 2 Respondent Characteristics

Based on the table above, in the intervention and control groups, almost all are adults and the education variable is almost all have higher education in both groups. For the length of time as a community health worker, almost all community health worker have long been in the intervention and control groups.

Table. 3 Test of Average Knowledge, Attitudes and Actions of Respondents in the Intervention and Control Groups

Variables	Ν	Minimum	Maximum	Mean	SD
Intervention					
Group					
Pre	35	17	20	19.14	0.85
Knowledge					
Pre Attitude	35	32	40	37.66	1.99
Pre Action	35	12	20	16.63	1.71

Knowledge	35	19	20	19.89	0.32	
Post	55	19	20	19.09	0.32	
			10	25.0		
Post Attitude	35	33	40	37.8	2.20	
Post Action	35	11	20	15.94	1.92	
Control						
Group						
Pre	25	17	20	19.13	1.32	
Knowledge						
Pre Attitude	25	29	40	36.84	3.14	
Pre action	25	9	18	13.96	2.35	
Knowledge	25	16	20	19.16	1.06	
Post						
Post Attitude	25	30	40	36.04	3.50	
Post Action	25	13	20	15.52	1.63	

Based on table 2 above, in the intervention group, the mean pre value was 19.14 with SD knowledge of 0.85, while for post the mean value was 19.89 and SD 0.32. In the control group, the mean value was 19.13 with SD 1.32 and in the post the mean value was 19.16 with SD 1.06.

 

 Table. 4

 The Influence of Respondent Behavior on the Role of Community Health Worker in Prevention and Treatment of Diarrhea at Home in the Intervention Group and Control Group

Variables	Mean	SD			df	pvalue
			Lower	Upper		
Intervention group						
Pre knowledge	19,486	0.507	19,312	19,660	34	0,000
Pre Attitude	37,143	2,074	36,430	37,855	34	0,000
Pre Action	0.114	0.718	-0.132	0.361	34	0.353
Control group						
Pre knowledge	-0.360	0.569	-0.595	-0.125	24	0.004
Pre Attitude	-0.40	0.611	-0.292	0.212	24	0.746
Pre Action	-0.120	0.781	-0.442	0.202	24	0.450

Table 3. Shows the results in the attitude intervention group with a mean of 37.143, SD 2.074 with a p value of 0.000. For the pre-knowledge control group, the mean was -0.360, SD 0.569 with a p value of 0.004.

 
 Table. 5

 The Influence of Respondent Behavior on the Role of Community Health Worker in Prevention and Treatment of Diarrhea at Home Before and After Action in the Intervention Group and Control Group

Variables	Mean	SD			df	pvalue
			Lower	Upper	_	
Pre						
Pre knowledge	-0.143	0.733	-0.395	0.109	34	0.257
Pre Attitude	0.144	0.758	-0.146	0.375	34	0.379
Pre Action	0.40	0.841	-0.307	0.387	24	0.814
Post						
Post knowledge	-15,057	1,924	-15,718	-14396	34	0,000
Post Attitude	0.171	0.707	-0.071	0.414	34	0.160
Post Action	0.80	0.759	-0.233	0.393	24	0.603

These results indicate that for the pre-post group of knowledge, attitudes and actions after training, only knowledge had an effect with a p value of 0.000, while attitudes and actions had no effect.

# DISCUSSION

The results of the study showed that the age of the most community health worker was in the 45 year age group (adults) (95%) for the intervention and control groups. This is in accordance with Utami et al., (2022); Yimenu et al., (2022) that the average mother is between 25-35 years old. This is because only mature mothers are willing to volunteer to become health worker, while the elderly are no longer able to do physical work and are more worldly and they prefer to focus on religion. The results of the study on the education variable almost all have higher education in both groups (98.3%) with high school and college education, this is in accordance with Novianti et al., (2024) that it is dominated by high school graduates who become community health worker. While for the length of time as a community health worker, more than half of the health worker have been work for a long time in the intervention and control groups (73.3%). The results of the researcher's interview that those who have been health worker for a long time feel comfortable because they gain a lot of knowledge after they participate in training organized by the local government and they also gain a lot of experience in solving public health problems that they encounter.

The results of the study on knowledge, attitudes and actions towards the role of cadres found that only knowledge had a meaningful relationship with a p-value of 0.000. This is in line with Kambu & Azinar (2021) that knowledge and attitudes are related to diarrhea prevention behavior in toddlers. Meanwhile, according to Sari et al., (2023) Mother's knowledge is very influential in handling emergencies in toddlers who experience diarrhea. The increase in knowledge of these community health worker after the provision of information by researchers through training, and reading books/leaflets. In addition, information is also obtained by community health worker from reading/watching TV and gadgets they own. Because according to Benyamin Bloom in Oktavianisya et al., (2023) the cognitive domain of knowledge, the results of human sensing are obtained, or the results of a person's knowledge of an object through the senses they have (eyes, nose, ears, tongue and so on). Apart from that, according to Julamnur et al., (2024) knowledge, the role of health workers, attitudes and sources of information contribute to changing mothers' behavior in preventing diarrhea in toddlers.

According to Sudirman et al., (2023) treatment for diarrhea in children can be obtained at health facilities at the community level which is the main priority in handling diarrhea in children. The behavior of washing hands with soap by mothers after and before feeding children and the behavior of washing hands after cleaning children's defecation and the availability of toilets can reduce the incidence of diarrhea in toddlers according to (Fatmawati & Murti, 2024). Irin (2022) stated that increasing the knowledge of mothers of toddlers can be achieved through the provision of health promotion by integrated health post community health worker. Afifa (2024) States that community health worker who have good knowledge, positive attitudes and good behavior will also carry out toddler weighing well. While Milianie et al., (2022) found that mothers' behavior towards preventing diarrhea was said to be still less than good due to low support from health workers who did not provide counseling or information regarding prevention and how to deal with diarrhea.

After the counseling activity was carried out, the participants of the activity understood about the management and prevention of diarrhea in children and will apply what has been conveyed by the counseling team so that children's health will continue to be optimally maintained. Ariyanto & Fatmawati (2021) According to Prawita (2022)That community health worker who have good activities will improve the nutritional status of toddlers to be good too. This is because health workers who actively promote health to mothers who have toddlers and will increase knowledge for mothers in improving the nutritional status of their toddlers. Nuzula et al., (2023) said that the availability of facilities and infrastructure and the support of health workers in carrying out their duties as community health worker greatly influences the knowledge, attitudes and behavior of community health worker.

Meanwhile, according to Efrizal et al., (2022) that community health worker who have received intervention in the form of health education will be able to improve their skills as cadres in carrying out their duties. With this action, many children's lives can be saved with the right handling of diarrhea (Momoh et al., 2022). Therefore, it is necessary to empower trained community health children by involving them in home visits and integrated health post activities and by involving them in related coaching and training activities (Simbolon, 2021). Sari et al., (2020) Said that there was a need for support from family or husband and the need to increase the active role of health workers in providing education to the community. Health promotion in order to increase efforts to prevent diarrheal disease which can be carried out by mothers as an effort to prevent diarrheal disease in toddlers needs to be improved (Ridawati & Nugroho, 2020). Apart from that, there is a need to empower health cadres, because cadres play an important role as an extension of the health workforce to contribute to the success program (Afifa, 2024).

# CONCLUSION

It was found that the knowledge of community health worker was good after health education was conducted and the attitudes and actions were less good after health education was conducted in preventing and treating diarrhea at home in mothers with toddlers.

# SUGGESTION

# For Health Community Worker

It is hoped that less active community health worker can participate in the prevention and treatment of diarrhea at home by playing an active role in providing health education to mothers who have toddlers in their work area.

# For further researchers

For further research, it is hoped that this research data will become basic data in conducting research using experimental methods or other methods.

#### **For Health Service Institutions**

In health service institutions, it is expected to be able to monitor and assist health community worker in carrying out their work as an extension of health workers, so that the incidence of diarrhea in toddlers can be reduced and mothers' knowledge in caring for toddlers with diarrhea can also increase.

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