# Relationship of Oral Rehydration Treatment by Mother to The Occurrence of Diarrhea within Public Health Center of 4 Ulu Palembang

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## **ABSTRACT**

## Introduction

Diarrhea is a liquid that comes out of the rectum without be able to be controlled. CRO treatment is the main of fluid therapeutic in this disease. ORS is given as an attempt to give fluids (rehydration) orally and is given as early as possible since diarrhea has begun. The aim of this study to know the relationship of oral rehydration treatment by mother to the occurrence of diarrhea.

#### Method

This research is a quantitative research, analytic cross-sectional approach.

## Result

The result of this study also found p value  $0.001 < \alpha$  (0.05) show that there is a connection between the handling of oral rehydration in infants with diarrhea in 4 Ulu Palembang Health Center in 2010. The analysis result also obtained OR values = 11,500 and 95% CI = 3,326 - 39, 762. It means that the mothers are less oral rehydration treatment efforts have the opportunity as many as 8 times experienced diarrhea in her baby.

## Conclusions

If the mother makes efforts to deal with poor oral rehydration, the incidence of diarrhea for children under five can increase, but if the mother makes an effort to properly administer oral rehydration, the child does not experience diarrhea.

# **Keywords**

Oral Rehydration Treatment; Mother; Occurrence of Diarrhea; Public Health Center

# **BACKGROUND**

Diarrhea is not a disease, but only a syndrome that accompanies certain diseases or a disorder of the digestive tract caused by a nutritional disorder, lack of digestive enzymes, and worries. Diarrhea is a liquid that passes through the rectum without

being controlled. Diarrhea generally defecates more than 3 times a day. Feces turn out to be watery and even like water, depending on the cause of the diarrhea. Diarrhea is often called vomiting, vomiting, diarrhea or vomiting. Feces sometimes contain blood and mucus. Diarrhea can cause the body to lose fluid, and this can cause death in sufferers, especially in infants, children under 5 years of age (Sitorus 2008).

Appropriate management of diarrhea patients in an effort to reduce mortality due to diarrhea is by eradicating diarrheal diseases. Based on the decision of diarrhea eradication seminar on the principle of managing diarrhea, namely 1) Plan A Therapy (diarrhea therapy without dehydration at home), 2) Plan for Therapy B (therapy for diarrhea with mild / moderate dehydration), 3) Plan C Therapy (therapy for severe dehydration). If the management of diarrhea is successful in the patient, then this can be the entrance to other promotions and other environmental health activities in reducing diarrhea morbidity (Harianto 2004).

In general, diarrhea in children can be cured by giving ORS and can overcome the cause of diarrhea. Giving ORS is an effort to give fluids (dehydration) orally and given since diarrhea begins to occur. Children must still be assured of drinking so that their fluid intake is met. It is very important to provide fluids for diarrhea sufferers because this fluid is needed to replace fluid lost due to vomiting or diarrhea, even if diarrhea becomes worse. Fluid must be given a little but often (sakinah 2010).

The incidence of diarrhea in most parts of Indonesia is still high. In Indonesia, around 162 thousand toddlers die every year or about 460 toddlers every day. From the results of the Household Health Survey (SKRT) in Indonesia, diarrhea is the number 2 cause of death for children under five and number 3 for infants and number 5 for all ages. Every child in Indonesia experiences diarrhea episodes as much as 1.6-2 times per year (setiyawatiningsih 2005).

The results of the data recapitulation of the Health Office of Palembang City, the number of diarrhea sufferers in 2007 was 2,375 patients and in 2008 there were 2,482 patients and in 2009 there were 2,261 patients (P2P Section of the Palembang City Health Office, 2009).

Based on the amount of data above, the incidence of diarrhea experienced an increase in 2008, which was 107 patients from 2007, while in 2009 the incidence of diarrhea decreased by 2.21 patients from 2008. Cases of diarrhea in the Work Area of Public Health Center of 4 Ulu Palembang ranks 4th of the 10 most installments in 2009.

Efforts to handle oral rehydration in Public Health Center of 4 Ulu Palembang have not been done optimally. because the limited supply of medicines does not match the number of diarrhea sufferers who visit for treatment. So that giving ORS or other drugs to toddlers who suffer from diarrhea is not fulfilled as a whole. Purpose of research to know the relationship of oral rehydration treatment by mother to the occurrence of diarrhea in 4 ulu Palembang health center working area in 2010.

### **METHODS**

This type of research includes quantitative research, analytic with a cross-sectional approach. This research uses Non Random method with Accidental technique. Sampling is obtained by respondents as many as 57 with the criteria of mother respondents who brought their babies to Palembang 4 health centers. The research was conducted on 15 June - 03 July and the instruments used were observation, questioner, and interview. The results of the study were Chi-square statistical tests.

## **Result and Discussion**

The characteristics of respondents in this study were in the form of education and the work of mothers who visited treatment at the Ulu Palembang Health Center 4 in May-June 2010, including the following:

Table 1. Distribution of Frequency of Respondents by Mother Education at Palembang's 4 Ulu Health Center in 2010

No			Donaontogo	Events of diarrhea		
	Education	n	Percentage - (%)	diarrhea	Not diarrhea	
1	Low	29	50,88	19	10	
	(SD, SMP)					
2	Height	28	49,12	11	17	
	(SMA, Perguruan)					
	Amount	57	100	30	27	

Source: Results of Data Analysis, 2010

Based on the table above, the majority of mothers are low-educated (SD, SMP) as many as 29 respondents (50.88%) with toddlers who experience diarrhea as many as 19 toddlers.

According to Notoadmodjo (2003), a person's level of education can increase their knowledge about health. One factor that influences one's knowledge is the level of

education. Education will provide knowledge so that positive behavior changes occur. Education is important in influencing a person's mind.

Generally, highly educated people tend to have a better mindset in the future so that they adopt a clean and healthy pattern or behavior. With higher education, it is hoped that it can lead to attitudes and behaviors that can counteract the emergence of negative behavioral changes to health, mothers with high education will find it easier to understand the need to maintain health in their children.

Table 2. Distribution of Respondents' Frequency by Mother's Work at Public Health Center of 4 Ulu Palembang in 2010

			Donaontogo	Events of diarrhea		
No	Job N		Percentage (%)	diarrhea	Not	
			(70)	ulai i lica	diarrhea	
1	Not Working	23	40,35	14	9	
2	Working	34	59,65	16	18	
	Amount	57	100	30	27	

Source: Results of Data Analysis, 2010

Based on the table above, the majority of working mothers are 34 respondents (59.65%) with toddlers who experience diarrhea as many as 16 toddlers.

With activities outside the home, making activities to care for and care for toddlers is limited, respondents may be assisted by their families. Parenting is carried out for toddlers other than mothers (respondents) as well as from their families so that there is a possibility of changes in parenting patterns.

Table 3. Distribution of Respondent Frequency by Toddler Age at Public Health Center of 4 Ulu Palembang in 2010

	A co Of	N	Donaontogo	Events of diarrhea		
No	Age Of Toddler		Percentage - (%)	diarrhea	Not diarrhea	
1	0-2 Months	2	3,5	1	1	
2	>2- 11 Months	10	17,5	6	4	
3	1-5 years	45	78,0	23	22	
	Amount	57	100	30	27	

Source: Results of Data Analysis, 2010

Based on the table above, the characteristics according to the age of toddlers, the majority of toddlers are 1-5 years old as many as 45 toddlers (78%) with those who experience diarrhea as many as 23 toddlers.

Toddlers who are 1-5 years old are more susceptible to diarrhea than children and adults because those who are given bottle milk or who have received additional food that has not been able to maintain cleanliness and prepare their own food, so that the quality of food and drinks depends on the mother as the primary caregiver. Mother's behavior in maintaining cleanliness and processing food is strongly influenced by knowledge about healthy food processing and storage. Because pathogens that cause diarrhea can be transmitted through food, water, and eating and cooking utensils.

Table 4. Distribution of Frequency of Respondents According to Maternal Rehidration Handling Efforts by Mothers at Public Health Center of 4 Ulu Palembang

No	Handling Efforts Oral Rehydration	n	Percentage (%)	
1	Less	29	50,9	
2	Good	28	49,1	
	Amount	57	100	

Source: Results of Data Analysis, 2010

Based on the table above, the majority of mothers do not make efforts to deal with oral rehydration as many as 29 respondents (50.9%) of 57 respondents.

Table 5. Distribution of Frequency of Respondents According to Diarrhea Events on Toddlers at Public Health Center of 4 Ulu Palembang

No	Events of Diarrhea	N	Percentage (%)
1	Diarrhea	30	52,6
2	No Diarrhea	27	47,4
	Amount	57	100

Source: Results of Data Analysis, 2010

Based on the table above, toddlers who experienced diarrhea were 30 toddlers (52.6%)

Table 6. Relationship between Efforts to treat Oral Rehydration with Diarrhea Events in Toddlers at Public Health Center of 4 Ulu Palembang in 2010

Efforts to	Diarrhea Events						OR	95% CI	
treat	Diarrhea		Not		Total				P Value
Rehydration	Dia	Diarrhea Diarrhea							
Oral	N	%	n	%	N	%	•		
Less	23	79,3	6	29,7	29	100		11.50	2.226
Good	7	25,0	21	75,0	28	100	0,001	11,50 0	3,326- 39,762
Amount	30		27		57		•		

Based on the table above, of the 29 mothers who did not make an effort to handle oral rehydration, there were 23 toddlers (79.3%) who experienced diarrhea greater than those of children without diarrhea, which were 6 children under five (20.7).

Lack of handling of oral rehydration by mothers of toddlers who experience diarrhea, most mothers do not know how to make ORS or salt and sugar water solutions and how to handle or care for children who experience diarrhea. So that it can cause children to become severely dehydrated.

The results of the Chi-Square test showed that p value  $0.001 < \alpha \ (0.05)$  showed that there was a significant relationship between efforts to treat ral rehydration with diarrhea in children under five at Public Health Center of 4 Ulu Palembang in 2010. The results of the analysis also obtained OR = 11,500, and 95% CI = 3.326 - 39.762, meaning that mothers who have not taken oral rehydration efforts have 11 times the chance of experiencing diarrhea in their babies.

# **CONCLUSIONS**

Based on the results of the study it can be concluded that:

- 1. The majority of mothers have low education (elementary, junior high school), as many as 29 respondents (50.88%) with toddlers who experienced diarrhea as many as 19 children.
- 2. The majority of mothers who do not work or are part of housewives are 23 respondents (40.4%) with toddlers who experience diarrhea as many as 14 children.
- 3. The majority of children aged 1-5 years are as many as 45 toddlers (78%) with toddlers who experience diarrhea as many as 23 toddler
- 4. The majority of mothers do not make efforts to handle oral rehydration as many as 29 respondents (50.9%).

- 5. The majority of children under five who experienced diarrhea were 30 children (52.6%)
- 6. There is a significant relationship between efforts to manage oral rehydration with the incidence of diarrhea in children under five in Public Health Center of 4 Ulu Palembang 2010. If the mother makes an effort to deal with poor oral rehydration, the incidence of diarrhea for children under five can increase. But if the mother makes an effort to properly administer oral rehydration, the child does not experience diarrhea. Because the mother has done oral rehydration well.

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