

## THE RELATIONSHIP OF KNOWLEDGE ON THE BEHAVIOR OF MOTHERS CARING FOR CHILDREN TODDLER WITH DIARRHEA

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### Abstract

*Diarrhea is an endemic illness in Indonesia and a potential case of Kasus Luar Biasa (KLB) is often accompanied by death. Easy diarrhea occurs in children, especially children toddlers. Respondents of the research were mothers of children toddler with diarrhea were treated in a private hospital child care in Lippo Village Tangerang in August-September 2017. The purpose of this study was to find out. The relationship of knowledge on the behavior of mothers caring for children toddler with diarrhea. The method used is a quantitative descriptive correlation with a cross-sectional study design. The technique of collecting data by distributing questionnaires. The data collection method by total sampling, the total sample of 53 respondents with the most respondents at the age of 31-40 years as many as 25 people (47.2%), Some of them are university graduated as many as 26 people (49.1%) most of them 32 people (60.4%) as a housewife, well the educated as many as 41 people (77.4%) and well behaved as many as 45 people (84.9%). The results of this study indicate that there is no relationship between age ( $p$ -value = 0.0469), education ( $p$ -value = 0.075), job ( $p$ -value = 0.0632) with the behavior of mothers caring for children toddler with diarrhea and there is a relationship between knowledge and behavior of mother to toddler care for children with diarrhea ( $p$ -value = 0.045). Knowledge is the result out of someone on an object through its senses, so that a good mother knowledge about caring for children toddler with diarrhea, the mother will have good behavior as well as his son should be admitted to hospital because of diarrhea.*

**Keywords:** Diarrhea; Knowledge; Behavior of the Mother

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### 1. Introduction

Diarrhea can lead to lack of fluids resulting in severe dehydration and death (Hockenberry, 2016). Diarrhea is an endemic illness in Indonesia and the potential is often accompanied by death (Ministry of Health, 2016). Diarrhea is a symptom caused by abnormal function of digestion, absorption, and secretion. The increase in the number of fecal water content increases as a result of changes in water and electrolyte (Hockenberry, 2016; Abas, 2017).

The world's major death rate in 2016 due to diarrhea, accounting for about 8 percent of all deaths among children under 5 years of age, meaning about more than 1,300 children die every day or approximately 480,000 children per year. Most deaths from diarrhea occur in children less than 2 years old who live in South Asia and sub-Saharan Africa. From

2000 to 2016, the total number of annual deaths due to diarrhea among children under 5 years old declined by 60 percent (Unicef, 2018). In Indonesia in 2015 occurred 21 times potential Extraordinary Cases (KLB), diarrhea spread in 13 provinces with the number of 1,213 people and the death of 30 people (2:47%), whereas in 2014 occurred 6 times KLB, diarrhea spread across 5 provinces with the number of patients 2,549 people and death 29 people (Ministry of Health, 2016; Lopolisa & Pakasi, 2014). According to one Private Hospital in Lippo Village 2016, diarrhea is the second-largest cause of child-care spaces by children hospitalized with diarrhea total number of 184 patients, whereas in 2017 from January to May total number of 42 patients hospitalized child. Data of children hospitalized in June 2017 several 26 patients with toddler son prevalence of several 15 patients.

Toddler child is a child to the age of 1-3 years and still requires care of mother when diarrhea disease and hospitalized (James, 2013).

The results of observations on some of the mothers whose children are being treated in hospital ward children with diarrhea in a private hospital in Lippo Village, the mother looked panicked when the child Defecate continuously, butt blisters made kids fussy and the mother did not have the heart for cleaning a child, some mothers do not take care his son, the mother just watched and told her nanny for cleaning a Defecate thus act passively and busy by herself. The importance of the mother has good knowledge about the health that affects the mother's behavior in the treatment of children with diarrhea.

Knowledge and behavior of a good mother in the management of children with diarrhea toddler is expected to reduce child mortality caused by diarrhea. Based on these descriptions, this research has the objective to determine the relationship of knowledge on the behavior of mothers caring for children toddler with diarrhea

## 2. Method

The study was conducted using quantitative research methods to test the design of descriptive correlational and cross-sectional population in this study are mothers who have children toddler aged 1-3 years old with diarrhea and is being cared for in a child care room private hospital in Lippo Village. Sampling was done by total sampling, the mothers who have children toddler since August-September 2017 as many as 53 children.

Researchers observing the principles ethic to protect the rights of the respondent during the study by considering *the five rights of human subjects in research* that (*respect for autonomy*) respondents are given the freedom to be willing or reject after receiving an explanation from the researcher, (*privacy or dignity*) respondents have the right to appreciated, respondents are willing to sign an *informed consent*, the respondent's name using the name initial (*anonymity*), (*confidentiality*) conceal the information given by the respondents The questionnaire used in this study is a standard questionnaire by Ayu Indriyani Manggaru in 2012 that has a value of validity and reliability with *Cronbach's Alpha* 0915.

Data analysis is univariate analysis to obtain the data of frequency distribution characteristics of the respondents (Sugiyono, 2014), bivariate analysis using *Chi-square* test to look at the relationship between age, education, work and knowledge of the behavior of mothers caring for children toddler in a private hospital in Lippo Village.

## 3. Results and Discussion

Based on Table 1 indicates that mothers who have children toddler hospitalized with diarrhea by 45 respondents, most data obtained at the age of 31-40 years as many as 25 people (47.2%), respondents have university degree, as many as 26 (49.1%), respondents work as housewife as many as 32 people (60.4%), respondents were well educated as many as 41 people (77.4%) and respondents who well behaved in the management of children toddler who is experiencing diarrhea and treated in the Pediatric as many as 45 people (84.9%).

Table 1. Distribution characteristics of respondents

Variables	Category	Frequency (f)	Percent (%)
Age	21-30 years	24	45.3
	31-40 years	<b>25</b>	<b>47.2</b>
	41-56 years	4	7.5
Education	High School	18	34.0
	D3	9	17.0
	Bachelor	<b>26</b>	<b>49.1</b>
Occupation	Civil Servant (PNS)	1	1.9
	Private employee / self-employed	20	37.7
	Housewife (IRT)	<b>32</b>	<b>60.4</b>
Knowledge	Well	<b>41</b>	<b>77.4</b>
	Not good	12	22.6
Behavior	Bad	8	15.1
	Well	<b>45</b>	<b>84.9</b>

According to the table 2, found that respondents are badly behaved children toddler care for with diarrhea, in mothers between the age 20-30 years as many as 5 mothers (5.7%) and well-behaved to care children toddler with diarrhea between the ages of 31-40 years as many as 22 people (41.5%). *Chi-square* test results obtained  $p\text{-value} = 0469$  with  $\alpha = 0.05$  which means that  $H_1$  is rejected, meaning there is no significant relationship between the age of the mother's behavior to care for children toddler with diarrhea in a private hospital in Lippo Village.

The results of this research were supported also by the results of this research Meivi in 2013 stating there was no relationship of mother's age infants with dehydration incidence of diarrhea in infants with a value of  $p\text{-value}$  of 0.779. The results of this study contrast with the results of Layla et al 2017 stating that

there is a relationship with the mother's age of diarrhea in children less than five years with the value of  $p$ -value of 0.001.

Mohammed's research, Tilahun and Tamiru, in 2013 stating that the behavior of a bad mother when washing hands can cause diarrhea in children toddler it by 2, 33 times than those who behave properly washing hands (AOR = 2.33, 95% CI = 1.80, 4.15)

Factors that influence the behavior are age, the age of the characteristics of respondents in this study many respondents aged 31-40 years have good

behavior in the incidence of diarrhea. This shows that with increasing age does not necessarily make a person has a good behavior for the prevention or treatment of children with diarrhea. Behavior can be changed to either based on experience and the willingness of the person Researchers think that the more mature age of the mother, the more the mother's knowledge, how to care for children with diarrhea so the better the behavior of the mother to care for his children's toddler diarrhea.

Table 2. Correlation between Age, Education, Employment and Knowledge of Behavior Mothers Caring for Children Toddler with Diarrhea

Variables	Behavior Mother on Caring for Children Toddler with Diarrhea				Total		Score
	Bad		Well		N	%	P
	N	%	N	%			
Age							
20-30 years	5	9.4	19	35.9	24	45.3	.469
31-40 years	3	5.7	22	41.5	25	47.2	
41-56 years	0	0.0	4	7.5	4	7.5	
Education							
High School	5	9.4	13	24.5	18	34.0	.075
D3	2	3.8	7	13.2	9	17.0	
Bachelor	1	1.9	25	47.2	26	49	
Occupation							
Civil Servants (PNS)	0	.0	1	1.9	1	1.9	.632
Private employee / self-employed	2	3.8	18	34	20	37.7	
Housewife	6	11.3	26	49	32	60.4	
Knowledge							
Well	4	7.5	37	69.8	41	77.4	.045
Less	4	7.5	8	15.2	12	22.6	

Good behavior to care for children toddler with diarrhea, who are being treated at the hospital is doing to manage the treatment of children with true (Munandar, 2016). For example, to meet the needs of children by providing a liquid fluid of nutrients according to diets, such as breast milk or other beverages according to diet. Oral rehydration is a crucial monitoring carried out by the mother (Ministry of Health, 2016). Besides, the mother can give ORS, monitor intravenous fluids, give food to the children according to diet, changing a diaper immediately if it is dirty to avoid irritation and prevent the spread of infection by washing hands before and after a treatment (Hockenberry, 2016; Susanti, 2017). Clean and healthy living behavior certainly will avoid diarrhea in children (Istiroha, 2016).

Based on Table 2 shows that respondents who behave badly at the high school education as much as 5

people (9.4%), while respondents who behave well in undergraduate education experts as many as 25 people (47.2%). *Chi-square* test results obtained  $p$ -value = 0.075 with  $\alpha = 0.05$  which means that H1 is rejected, meaning there is no significant relationship between education and the mother's behavior toddler care for children with diarrhea were treated at a private hospital in Lippo Village.

The results of the research are consistent with the results of research of Evayanti, Purna, Aryana, 2014 which states no relation between the education of mothers with dehydration incidence of diarrhea in infants with a value of  $p$ -value of 0.797. Eko Research, 2014 states that there is a relationship between the mother's formal education on the incidence of diarrhea in children toddler, with an odds ratio (OR) of 2.5, which means that children whose mothers had low formal education more risky 2.5 times to experience

diarrhea compared with either formally educated mothers.

Education is a process of changing the attitudes and behavior of a person or group of people in a mature effort to people through teaching and training to educate. Persons with higher education generally have better behavior in health and have a greater awareness to maintain their health (Ghasemi, 2013).

According to the researchers, that no relationship between education and the mother's behavior to care for children toddler with diarrhea can be caused because education does not necessarily make a person has a good behavior for the prevention or treatment of children with diarrhea. Mom can do the treatment and prevention efforts based on his experience in dealing with children with diarrhea.

Based on Table 2 shows that most respondents who behave badly in housewives (IRT) as 6 people (11.3%), while respondents in the mother behaved most private employees / self-employed as many as 18 people (34%). *Chi-square* test results obtained  $p$ -value = 0632 with  $\alpha = 0.05$  which means that H1 is rejected, meaning there is no significant relationship between work with the mother's behavior in the incidence of diarrhea of children toddler was treated at a private hospital in Lippo Village.

Research results concur with those of Evayanti, Purna, Aryana, 2014 which states that the type of work is not associated with the incidence of diarrhea in infants with a value of  $p$ -value of 0743. This study is not in line with the results of the study in 2014 stating Meivi's research no relationship work status of mothers with dehydration incidence of diarrhea in infants with a value of  $p$ -value of 0.010(Christy M. Y., 2014).

Someone who has worked for so long to be able to make adjustments to the work environment to achieve satisfaction in the work (Motto S. Y., 2013). No relationship between the work with the mother's behavior on the incidence of diarrhea can be caused because the work does not affect the behavior of the mother to be good in handling children with diarrhea, but mothers who have more time with their children can make efforts to better health in children.

Based on Table 2 shows that respondents who behave badly in the category of better knowledge as many as four mothers (7.5%) and less good knowledge category as many as 4 mothers (7.5%), while respondents to behave well in the category of knowledge as many as 37 mothers (69.8%). *Chi-square* test results obtained  $p$ -value = 0.045 with  $\alpha = 0.05$  which means that H1 is accepted, which means there is a significant relationship between the category of knowledge with the mother's behavior in the incidence of childhood diarrhea toddler was treated at a private hospital in Lippo Village.

The results are consistent with the results of research Suparno and Meilina in 2014 which suggested a significant relationship between knowledge with the incidence of diarrhea in infants with value  $p$ -value of 0001. This study did not concur with those of Silvia, Yusri and Djusmaini in 2013 stating there was no significant relationship between the level of knowledge of mothers on the diarrheal disease with the incidence of acute diarrhea in children toddler with a value of  $p$ -value of 0749.

Knowledge of cognitive is a very important domain for the formation of one's actions (*overt behavior*) (Notoatmodjo S. , 2014). The relationship between knowledge with maternal behavior toddler care for children with diarrhea can be caused by a low knowledge that would cause the mother can not do prevention and treatment of childhood diarrhea. Knowledge can be obtained from the information that comes from other people and the mass media. Notoatmodjo, 2012 describes the knowledge or the cognitive domain is very important for the occurrence of an act of a person, because of the attitude and behavior based knowledge will be more lasting than that is not based on knowledge. Lack of knowledge still exist in the mother with a toddler, it needs the support and promotion of the health of health workers to provide health information about how to behave well in treating children with diarrhea (Novrianda, 2014) . For example, by immediately replacing a dirty diaper, keeping the environment clean, wash your hands before and after helping her children and others.

Research Christy Meivi, 2013 states that the knowledge and attitudes or behavior linked to the provision of information about diarrhea. Besides knowledge as the primary basis is important in providing care, someone's knowledge may be obtained by a variety of efforts, for example with his education, because experience or for listening to health information as education and health promotion, because it can increase knowledge and change behavior(Sukut, 2015; Utami, 2017).

#### 4. Conclusions and Suggestions

The results of this study found that: age, education, and occupation do not have a relationship with the mother's behavior in the incidence of diarrhea in children toddler who being treated at a private hospital in Lippo Village. There is a significant relationship between the knowledge of the mother's behavior in the incidence of diarrhea in children toddlers who were treated at a private hospital in Lippo Village.

Their lack knowledge in mothers of children toddlers still having a bad behavior on the incidence of diarrhea in children toddler who were treated at a private hospital in Lippo Village then should the

hospital be more motivating mothers of children toddler with diarrhea to give promotion or health education for regular in conducting management of diarrhea such as *hand hygiene*, environmental cleanliness, hygiene when preparing food, nail and hand hygiene, adequate water supply to reduce the incidence of diarrhea in children toddler. Mothers who have children toddler should be given health promotion in the form of health education on the management of diarrhea so mothers can increase knowledge and their good behavior change in the care of child diarrhea.

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