

## **THE EVALUATION OF HEALTH BEHAVIOR TOWARDS THE INCIDENCE OF DIARRHEA IN CHILDREN UNDER-FIVE YEARS IN THE WORKING AREA OF THE COMMUNITY HEALTH CENTER OF COT KUTA**

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**Abstract:** Diarrhea is a condition of abnormal or unusual defecation. Based on the medical record data from the community health center (Puskesmas) of Cot Kuta, the number of cases of diarrhea increased in 2016, from 105 cases in 2015 to 107 cases in 2016. The purpose of this study was to determine the factors related to the incidence of diarrhea in children under-five years. This study was an analytical survey with cross sectional approach. Population in this study was 34 people with a total sampling being used. Data analysis used was univariate and bivariate analysis. The results of this study showed that there was a relationship between knowledge and attitude with the incidence of diarrhea in under-fives ( $p\text{-value} < \alpha = 0.05$ ). The conclusion was that there was a relationship between knowledge and attitudes with the incidence of diarrhea in under-fives in the Puskesmas of Cot Kuta of Suka Makmue District, Nagan Raya Regency in 2015. It is expected that the community can get more information or improve their knowledge about diarrhea, especially in under-fives, so that the under-fives can be avoided to experience diarrhea. The improvement of the community's knowledge is also expected can make them know the forms of prevention and treatment of diarrhea, so that when the under-fives experience diarrhea, the parents can immediately perform the first aid.

**Keywords:** Behavior, Diarrhea, Under-fives

### **Introduction**

Diarrhea is a condition of abnormal or unusual defecation. In this condition, there is an increase of the volume of the liquid within the feces and of the frequency of the excretion either with or without bloody mucus, which is more three times a day (Hidayat, 2013). Diarrhea is a disease that occurs when these conditions happen consistently. A person suffers diarrhea when he/she experiences to have more mucous feces than his/her normal condition, or when they defecate three times or more within 24 hours even without blood (Ministry of Health of Indonesia, 2012).

Diarrhea disease is a health problem in the world, including in Indonesia. According to WHO and UNICEF, there are around 2 billion cases of diarrheal disease worldwide each year. Deaths of children under five due to diarrheal disease mostly occur in Africa and Southeast Asia, with 78% (Ministry of Health, 2013). According to WHO data in 2014, diarrhea is the second disease that causes death in under-fives. Diarrhea kills 760,000 children every year. Most people with diarrhea die because of excessive loss of fluid (Ministry of Health of Indonesia, 2014).

There were 1,654 diarrhea cases in Indonesia in 2012 which resulted to the death of 34 people. This number ever reduced to 646 cases in 2013 with only 7 people died (Ministry of Health of Indonesia, 2013). However, the number of diarrhea cases in Indonesia rose significantly in 2014, with the estimation of 8,713,537 cases. Unfortunately, the number of the cases that were handled was 8,490,976 cases (Ministry of Health of Indonesia, 2014). This number was able to be reduced again in 2015 to 5,405,235 cases at the estimation. Nevertheless, the number handled was only 4,017,861 cases (Ministry of Health of Indonesia, 2015).

To be specific in Aceh province, there were 196,948 cases in 2013 where 98,525 cases (50.03%) were experienced by male and 98,423 cases (49.97%) were experienced by female. From this number, the cases that were handled were 107,582 cases with 51,343 cases (52.1%) in male and 56,239 cases (57.1%) in female (Aceh Health Office, 2013). These cases also experienced an increase in 2015 with the estimation of 101,368 cases and 64,589 cases (63.71%) were handled (Ministry of Health of Indonesia, 2015).

In a specific regency in Aceh, Nagan Raya regency, the number of diarrhea cases in 2014 was estimated at 2,521 cases (2.10%) and the number handled was 2,438 cases (93.13%). This number increased to 3,517 cases (3.20%) in 2015 and the number handled was 3,286 cases (93.4%). This number slightly decreased in 2016 to 3,496 cases (2.25%) and the number handled was 3,329 cases (95.2%) (Health Office of Nagan Raya, 2016).

Based on medical record data from the Health Center of Cot Kuta in 2015, the number of children under five was 238 people and the number who suffered from diarrhea was 105 children (44.12%) (Health Center of Cot Kuta, 2015). The number of under-fives increased to 312 children in 2016 and the number who suffered from diarrhea was 107 children (34.3%). (Health Center of Cot Kuta, 2016).

Based on the observations and the results of interviews with 8 mothers whose under-fives suffering from diarrhea, it was found that two mothers did not know the cause of diarrhea so that they didn't forbid their children to play anything and eat whatever they liked. Two other mothers stated that they never forbade their children to play outside and never watched their children to wash their hands before eating. One mother said that she often gave snacks to her child in order to make him not fussy. Two mothers stated that when they were working, they left their children with their grandmothers, and the children were allowed to play and eat whatever they liked as long as they didn't cry. The other one mother said that her child could not be prohibited from playing outside, like playing with sand, because the other children around their house also played outside.

## **Research Methodology**

This study was an analytical survey with cross sectional approach which evaluated the health behavior of the community in relation to the incidence of diarrhea in under-fives in the working area of the community health center (Puskesmas) of Cot Kuta of Suka Makmue District of Nagan Raya Regency. This study was conducted in the Puskesmas from June 12 to August 2, 2017. The population was all mothers who had under-fives visiting the Puskesmas from January to March 2017 with a total of 34 mothers. These 34 mothers were entirely taken as the sample.

## **Results and Discussion**

### **Univariate Analysis**

#### **a. Knowledge**

**Table 1.1. The Distribution of Respondents Based on Their Knowledge about the Incidence of Diarrhea in Under-Fives in the Working Area of the Puskesmas of Cot Kuta of Suka Makmue District of Nagan Raya Regency**

No	Knowledge	Frequency (n)	Percentage (%)
1	Poor	19	55.9
2	Good	15	44.1
	Total	34	100

Source: primary data in 2017

Based on Table 1.1, it is shown that the number of mothers who had poor knowledge about diarrhea was 19 people (55.9%), while those who had good knowledge was 15 people (44.1%).

## b. Attitude

**Table 1.2 The Distribution of Respondents Based on Their Attitude towards the Incidence of Diarrhea in the Working Area of the Puskesmas of Cot Kuta of SukaMakmue District of Nagan Raya Regency**

No	Attitude	Frequency (n)	Percentage (%)
1	Negative	18	52.9
2	Positive	16	47.1
	Total	34	100

Source: primary data in 2017

Based on Table 1.2, it is shown that the number of mothers who had negative attitude towards the incidence of diarrhea was 18 people (52.9%), while those who had positive attitude was 16 people (47.1%).

## c. Diarrhea

**Table 1.3. The Distribution of Respondents Based on the Incidence of Diarrhea in the Working Area of the Puskesmas of Cot Kuta of Suka Makmue District of Nagan Raya Regency**

No	Diarrhea	Frequency (n)	Percentage (%)
1	Experienced	20	58.8
2	Did not experience	14	41.2
	Total	34	100

Source: primary data in 2017

Based on Table 1.3, it is shown that the number of mothers whose under-fives experiencing diarrhea was 20 people (58.8%), while those whose under-fives did not experienced diarrhea was 14 people (41.2%).

## Bivariate Analysis

### 1. The Relationship between Knowledge of Mothers and the Incidence of Diarrhea in Under-Fives

**Table 1.4. The Relationship between Knowledge of Mothers and the Incidence of Diarrhea in Under-Fives Diarrhea in the Working Area of the Puskesmas of Cot Kuta of Suka Makmue District of Nagan Raya Regency**

Knowledge	Diarrhea		Total		p	PR	CI 95%
	Experienced	Did not experience	f	%			
Poor	15	78.9	4	21.1	19	100	0.020
Good	5	33.3	10	66.7	15	100	(1.1-5.02)

Based on the result of chi square test, it was obtained that the p-value = 0.020 and this was smaller than  $\alpha = 0.05$  (p-value = 0.020 <  $\alpha = 0.05$ ) so that there was a relationship between the knowledge of mothers and the incidence of diarrhea in under-fives in the working area of the Puskesmas of Cot Kuta of Suka Makmue District, Nagan Raya Regency. The PR of 2.368 indicated that mothers who had poor knowledge about diarrhea had a risk of 2.368 times to have their under-fives experiencing diarrhea compared to those who had good knowledge.

## 2. The Relationship between Attitude of Mothers towards the Incidence of Diarrhea in Under-Fives

**Table 1.5** The Relationship between Attitude of Mothers towards the Incidence of Diarrhea in Under-Fives in the Working Area of the Puskesmas of Cot Kuta of Suka Makmue District of Nagan Raya Regency

Attitude	Diarrhea		Total		p	PR	CI 95%	
	Experienced	Did not experience	f	%				
	f	%	f	%				
Negative	14	77.8	4	22.2	18	100	0.042	2.074
Positive	6	37.5	10	62.5	16	100		(1.05-4.09)

Based on the result of chi square test, it was obtained that the p-value = 0.042 and this was smaller than  $\alpha = 0.05$  (p-value = 0.042 <  $\alpha = 0.05$ ) so that there was a relationship between the attitude of mothers and the incidence of diarrhea in under-fives in the working area of the Puskesmas of Cot Kuta of Suka Makmue District, Nagan Raya Regency. The PR of 2.074 indicated that mothers who had negative attitude towards diarrhea had a risk of 2.074 times to have their under-fives experiencing diarrhea compared to those who had positive attitude.

## Discussion

### Knowledge about Diarrhea

The field observations conducted by the researchers showed that there were two factors that made the mothers who had good knowledge about diarrhea but having their under-fives experiencing diarrhea. One of them is the lack of attention to the causes of diarrhea such as ensuring the children to wash their hand before eating. This habit can make germs that cause diarrhea to enter the body of children and result to experiencing diarrhea. Another factor was the allowance from the grandmothers to let the children play outside and without washing their hands. These children were left with their grandmothers because their mothers were working.

For the case of mothers who had no knowledge about diarrhea but their children did not experience diarrhea, it was due to the full attention given to the children. The mothers always watched their children to live cleanly, by ensuring they washed their hands, did not do indiscriminate snacking, and ate their homemade food. However, these were done because the mothers loved their children and felt worried if the children playing without being watched.

According to Fitriani (2011), knowledge is the result of knowing something, and this happens after people have sensed a certain object. Sensing occurs through the five human senses, namely the sense of sight, hearing, smell, taste and touch. Most of the knowledge is obtained through the eyes and ears. The result of this study in accordance with Christy (2013) where she suggests that there is a relationship between parental knowledge and the incidence of diarrhea and dehydration in under-fives in the working area of the Puskesmas of Kalijudan, shown by the p-value for mother's knowledge variable = 0.002.

### **Attitudes towards the Incidence of Diarrhea**

Based on field observations conducted by the researchers, it was shown that the mothers who had positive attitudes but had their children experiencing diarrhea was due to the lack of attention to the causes of diarrhea. They did not watch their toddlers to wash their hands before eating which made the germs causing diarrhea to enter the body of the children and ended up in diarrhea.

According to Santrock, cited in Azwar (2012), it is stated that attitude is a belief or opinion of people, objects or ideas. Everyone has a different opinion or belief in an object or idea. Attitude is a reaction to the assessment of liking or disliking something or someone which is shown through trust, feeling or tendency to behave.

The result of this study is in accordance with Suparno (2014) which suggests that there is a relationship between parental attitudes and the incidence of diarrhea in under-fives in Saung Naga Village, West Baturaja District, in 2014, shown by the p-value for mother's attitude variable = 0.001.

### **Conclusions**

There was a relation between knowledge and attitude and the incidence of diarrhea in under-fives (p-value < 0.05).

### **Suggestions**

It is expected for various stakeholders to involve in helping and increasing information about diarrhea to the public, especially about diarrhea in under-fives, so that the community is able to prevent the incidence of diarrhea as early as possible.

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