

---

**RELATIONSHIP OF CLEAN AND HEALTHY BEHAVIOR (PHBS) AND LATRINE OWNERSHIP WITH THE INCIDENCE OF DIARRHEA IN LUENG BARO VILLAGE, DISTRICT OF SUKA MAKMUE, NAGAN RAYA REGENCY**

DARMAWI,  
MULIYA PASELA,  
ARFAH HUSNA,  
AZWAR,  
FITRAH REYNALDI

AFakultas Kesehatan Masyarakat Universitas Teuku Umar  
darmawi@unsyiah.ac.id

**ABSTRACT:**

Diarrhea is a disease characterized by defecation more than 3 times a day. Based on data from the Cot Kuta puskesmas in 2017 there were 144 cases and in 2018 there were 150 cases. In 2018, there were 43 diarrhea cases in Lueng Baro village. This study aims to determine the incidence of diarrhea and the factors associated with the incidence of diarrhea in Lueng Baro Village, Suka Makmue District, Nagan Raya Regency. This type of research is analytic survey with Cross Sectional approach using univariate and bivariate analysis. The population in this study were all family heads in Gengong Loeng Baro as many as 358 families and the number of research samples were 78 respondents. The results showed that there is a relationship of clean and healthy life behavior and latrine ownership and the incidence of diarrhea. Suggestions, are expected to provide health education about diarrhea, also broaden insight and motivate people to behave clean and healthy, maintain the sanitation of food sanitation and the importance of having a toilet so that people do not defecate behind their homes or in streams and provide prevention of oral rehydration drugs or can also make your own with salt and sugar liquid, the method of manufacture is 1. provide one sugar tea alone (5 grams), 2. Provide a quarter teaspoon salt (1.2 grams), 3. 1 cup of warm

water that has been cooked, 4 Mix sugar, salt in warm water, then stir until dissolved and evenly distributed, 5. Drunk when suffering from diarrhea to increase body fluids.

**KEYWORDS:** PHBS, Latrines, Diarrhea

**INTRODUCTION:**

Diarrhea is a disease characterized by defecation more than 3 times a day (Ariani, 2016). The occurrence of diarrhea can occur worldwide and causes 4% of all deaths and 5% of health losses cause disability. In 2015, the World Health Organization (WHO) stated that more than 1,400 children die every day, or around 526,000 children per year due to diarrhea (Ariani, 2016). The prevalence of diarrhea based on diagnosis. Health Workers (Nakes) in Indonesia in 2013 was 4.5%, while in 2018 the prevalence of diarrhea in Indonesia increased to 6.8%. The prevalence of diarrhea based on diagnosis by health professionals and symptoms in 2013 was 7.0% while in 2018 the prevalence of diarrhea in Indonesia based on health workers and symptoms increased by 8.0%. The prevalence of diarrhea in infants based on diagnosis by health workers in 2013 was 2.4%, while the prevalence of diarrhea in infants based on diagnosis by health workers in 2018 increased to 11.0% (Riskesdas, 2018). Diarrheal disease is an endemic disease in Indonesia and is also a potential disease Number 1 (one) Extraordinary Genesis (KLB) which is often accompanied by death. In 2016

the number of patients with SU diarrhea (All Ages) served by health facilities was 3,176,079 patients and an increase in 2017 was 4,274,790 patients or 60.4% of the estimated diarrhea in health. In 2017 there were 21 outbreaks of diarrhea spread across the Province, 17 districts / cities. The regencies of polewali mandar, pohuwato, lampung Tengah and marauke each occurred 2 times outbreaks. With 1,725 patients and 34 deaths (CFR 1.97%) (RI Ministry of Health, 2018).

Latrine is one of the basic sanitation facilities needed in every home to support the health of its occupants as a human waste disposal facility consisting of squats or seats with goose necks or without goose necks equipped with shit collection units and water to clean them (Proverawati, 2012 ). Based on the regulation of the Minister of Health of the Republic of Indonesia Number 3 of 2014 concerning Community-Based Total Sanitation, a condition when every individual in the community does not defecate carelessly, the Stop Defecation (SBS) behavior is followed by the use of sanitary facilities in the form of healthy latrines. sanitary is a condition of sanitation facility that meets the health requirements standard, that is, it does not result in the direct distribution of substances that are harmful to humans due to the disposal of human waste and can prevent the carrier vector to spread the disease to the user and the surrounding environment. Healthy latrines are effective for breaking the chain of transmission of disease, healthy latrines must be built, owned, and used by families with placements (inside the house or outside the house) that are easily accessible by residents. (Permenkes, 2014).

Based on data from the Nagan Raya District Health Office (2018) states that, the population of Nagan Raya Regency in 2017 was 123,548 people, the percentage of families that have proper sanitation (healthy latrines) according to the type of latrine used is

communal latrines fulfilling the requirements (31%), goose neck latrines (85%), plesengan latrines (96%), cemplung latrines (54%), the total number of the entire population with proper sanitation access is 65.66 (53.15%). Whereas in 2018, based on progress reports in Nagan Raya District with a population of 45,768 people, they have criteria for toilet ownership by type and access, namely the population who have permanent healthy latrines of 23,167 with access (46.45%), permanent latrines of 8,510 latrines with access (16.14%), sharing 1,599 with access (39.73%), open defecation of 12,499 with access (33.43%). The number of diarrhea cases in Nagan Raya Regency in 2017 was 2,831 and in 2018 diarrhea cases in Nagan Raya Regency increased to 3003 cases (public health office of Nagan Raya, 2018). Based on data from the Cot Kuta Health Center (2018), there are 9,448 people in the Work Area of the Cot Kuta Health Center in 2018, with proper sanitation facilities (healthy latrines) according to the type of latrine used, namely the goose neck toilet which meets the requirements of 1,111 latrines , with a population of 4,468 users (47.3%), cemplung latrines that meet the requirements of 27 with a population of 108 users (1.14%) and the total population with access to proper sanitation (healthy latrines) of 4,576 (48.4 %). In 2017 the population was 8,932 people, the number of diarrhea cases in the Cot Kuta puskesmas handled by health facilities was 144 cases, while in 2018 the population was 9,448, the number of diarrhea cases in the Cot Kuta puskesmas handled by the health facilities increased by 150 cases. In 2018 data distribution of diarrhea cases according to villages in the working area of the Cot Kuta puskesmas, Lueng Baro village ranked number 1 (one) as many as 43 cases, Blang Sapek village ranked number 2 (two) as many as 23 cases, Blang Muling village ranked number 3 ( three) as many as 21 cases, Krak Tampai village was ranked number 4 (four) as many as 16 cases and

Kabu Blang Sapek village was ranked number 5 (five) as many as 10 cases (Puskesmas Cot Kuta, 2018).

Lueng Baro Village is an agricultural village because many people work as farmers. The total population of Gengong Lueng Baro is 1,217 people, based on the sex of the male 585 people, 626 women and the number of household heads (KK) as many as 358 families / households, from the number of family heads there is access to adequate facilities (healthy latrines ) according to the type of goose neck latrine as many as 235 heads of households who have latrines and as many as 123 households without latrines. In 2018 data obtained from the Cot Kuta Health Center number of Gampong Lueng Baro community handled by health facilities as many as 43 diarrhea cases (Puskesmas Cot Kuta, 2018).

Based on an initial survey conducted on March 9, 2019 in Lueng Baro Village, Suka Makmue Subdistrict, Nagan Raya Regency, the results of interviews with 7 community members, 2 people stated that they did not know the cause of diarrhea so they did not prevent it. Furthermore, researchers saw 1 other person lacking a clean and healthy lifestyle behavior, where when they were about to eat something they did not wash their hands. Two other researchers saw that food on the table was uncovered and based on their statement that they washed foods such as vegetables only once while the proper way to wash food three times in running water.. Two other researchers saw that food on the table was uncovered and based on their statement that they washed foods such as vegetables only once while the proper way to wash food three times in running water. Lastly, people stated that they did not have a toilet at home so that if they defecated behind the house and the river flowed. If the community did not wash their hands with soap after their activities and before eating, the bacteria on their hands could cause

diarrhea. In addition, if the community defecates in any place like behind the house and the river, then flies off human dirt and flies will fly to people's homes and then the flies perch on food that is not closed so that it can cause diarrhea.

#### **METHODOLOGY:**

This type of research is analytic survey research with Cross Sectional approach, this study aims to determine the relationship between PHBS and Latrine Ownership with the incidence of diarrhea in Gengong Lueng Baro, District of Suka Makmue, Nagan Raya Regency in 2019. The population in this study is all existing households. in Gengong Loeng Baro as many as 358 families and the sample in this study was the head of the family of 78 respondents. Data analysis in this research is univariate and bivariate analysis

#### **DISCUSSION / ANALYSIS:**

##### **Univariate Analysis**

Table 1. Distribution of respondents based on knowledge, clean and healthy life behavior, food sanitation, latrine ownership and diarrhea occurrences in Lueng Baro village, Suka Makmue district, Nagan Raya district

Variable	Responden	
	N	%
<b>Clean and Healthy Behavior</b>		
There is	47	60,3
There no	31	46,2
Total	78	100
<b>Latrine Ownership</b>		
There ni	16	20,5
There no	62	79,5
Total	78	100
<b>Diarrhea incident</b>		
There no	33	42,3
There is	45	57,7
Total	78	100

## Bivariate Analysis

Table 2 Relationships of, clean and healthy life behavior, Food Sanitation, Toilet ownership, types of latrines and diarrhea events in Lueng Baro Village Suka Makmue District Nagan Raya District

Variable	Diarrhea incident				Jumlah f %		P.Val ue	Prevalensi Rasio
	diarrhea		No diarrhea					
	n	%	n	%	f	%		
PHBS								
There no	3 6	76, 6	1 1	23, 4	4 7	10 0	<b>0,000</b>	2,638
There is	9	29, 0	2 0	71, 0	3 1	10 0		
Latrine Owner								
There no	1 4	87, 5	2 2	12, 5	1 6	10 0	<b>0,015</b>	1,750
There is	3 1	50, 8	3 1	50, 0	6 2	10 0		

### Relationship of Clean and Healthy Behavior (PHBS) with the incidence of diarrhea

This is in accordance with the chi-square test obtained Pvalue0,000 and this is smaller than  $\alpha = 0.05$  ( $Pvalue0,000 < \alpha = 0.05$ ) so that there is described a relationship between clean and healthy living behavior with the incidence of diarrhea in Lueng Village Baro District Suka Makmue Nagan Raya Regency. Based on the results of the Prevalence Ratio (PR) of 2,638, it can be concluded that respondents who did not behave in a clean and healthy life would have as much as 2,638 times the incidence of diarrhea compared to respondents who behaved in a clean and healthy life.

Based on the results of the research in the field, the researcher is of the opinion that the respondents who did not behave were clean and healthy and there was an incident of diarrhea caused by the respondents not having a clean and healthy life behavior. the place of food so that flies infested. And vice versa respondents

who behave clean and healthy life and there is no incidence of diarrhea due to respondents washing their hands before and after eating using soap and respondents there close their food so that there is no fly and no incident of diarrhea.

Behavior is the result of experience and the process of interaction with the environment, which is manifested in the form of knowledge, attitudes and actions in order to obtain a balanced state between the driving force and the strength of cash. One's behavior can change if there is an imbalance between the two forces within oneself (Notoadmojo in Maulana). Hasil penelitian diatas sejalan dengan penelitian Thahirah (2014), di SD Integral Al-Bayan Yayasan Al-Bayan Pondok Pesantren Hidayatullah Makassar bahwa terdapat hubungan perilaku hidup bersih dan sehat dengan kejadian diare pada anak dengan  $P_{value} = 0,001$ .

### Relationship of Latrine Ownership with the Incidence of Diarrhea

This is in accordance with the chi-square test obtained value of P0.015 and this value is smaller than  $\alpha = 0.05$  ( $P0.0015 < \alpha = 0.05$ ) so that there is no relationship between latrine ownership and diarrhea occurrence in Gengong Lueng Baro Subdistrict Love Makmue Nagan Raya Regency. Based on the results of the Prevalence Ratio (PR) of 1,750, it can be concluded that respondents without latrine ownership will have 1,750 chances of diarrhea compared to respondents with latrine ownership.

From Of 78 respondents who had 62 latrines with 2 types of communal latrines (2.6%), 24 (30.8%) goose neck latrines and 36 cemplung latrines (46.2%). Based on the results of the researchers in the field, the researchers are of the opinion that respondents who do not have possession of the latrine and have diarrhea occur because some of the respondents do not

have latrines / toilets. And vice versa respondents who have latrine ownership and there is no incidence of diarrhea due to respondents having a toilet / toilet and defecating in the toilet so there is no incidence of diarrhea.

Latrine is one of the basic sanitation facilities needed in every home to support the health of its occupants as a human waste disposal facility consisting of squats or seats with goose necks or without goose necks equipped with shit collection units and water to clean them (Proverawati, 2012 ).

The above research results are in line with the research of Megasari (2015), in Barito Kuala Regency that there is a relationship between latrine ownership and diarrhea with Pvalue = 0.011.

#### **CONCLUSION:**

There is a relationship between clean and healthy life behavior with the occurrence of diarrhea in Gengong Lueng Baro, District of Suka Makmue, Nagan Raya Regency.

#### **ACKNOWLEDGEMENT:**

Thank you to the Kepala desa of the the Lueng Baroe village, Nagan Rayan District, Aceh who provided their support so that the research was completed

#### **REFERENCES:**

##### **Book**

- 1) Kemenkes RI. (2018). Data Dan Informasi Profil Kesehatan Indonesia. Jakarta
- 2) Peraturan Menteri Kesehatan Republik Indonesia Nomor 3 Tahun 2014 Tentang Sanitasi Total Berbasis Masyarakat. Jakarta.
- 3) Dinas Kesehatan Nagan Raya. (2017-2018). Jumlah Kasus Diare. Nagan Raya.
- 4) Dinas Kesehatan Nagan Raya. (2017-2018). Jumlah Kepemilikan Jamban. Nagan Raya.
- 5) Puskesmas Cot Kuta. (2017 – 2018). Jumlah Kasus Diare Di Wilayah Kerja Puskesmas Cot

Kuta Tahun 2017 Dan Tahun 2018. Puskesmas Cot Kuta.

- 6) Puskesmas Cot Kuta. (2018). Jumlah Kepemilikan Jamban Di Wilayah Kerja Puskesmas Cot Kuta Tahun 2017 Dan Tahun 2018. Puskesmas Cot Kuta.
- 7) Maulana. (2013). Panduan Mengatasi Penyakit Masyarakat. Jakarta. Rineka Cipta.
- 8) Proverawati, A. (2012). Perilaku Hidup Bersih dan Sehat (PHBS). Nuha Medika.Yogyakarta.