

## Factors That Influence the Event of Diarrhea in the Health in Rawat Puskesmas Inap Mariyai Sorong District

Yolanda Yable<sup>1</sup>, A. L. Rantetampang<sup>2</sup>, Yacob Ruru<sup>3</sup>, Anwar Mallongi<sup>4</sup>

<sup>1</sup>Magister Program of Public Health, Faculty of Public Health, Cenderawasih University, Jayapura.

<sup>2,3</sup>Lecturer of Master Program in Public Health. Faculty of Public Health, Cenderawasih University, Jayapura

<sup>4</sup>Environmental Health Department, Faculty of Public Health, Hasanuddin University, Makassar

Corresponding Author: Anwar Mallongi

### ABSTRACT

**Introduction:** Diarrhea is 10 major diseases in Indonesia and has an incidence and period prevalence in infants of 3.5 percent and 7.0 percent, West Papua Province is 5 provinces with the highest incidence of diarrhea in infants.

**Target of research:** To find out the factors that influence the incidence of diarrhea in toddlers at the Mariyai Inpatient Health Center, Sorong Regency.

**Research of result:**

Observational analytic with cross sectional study design. The study was conducted on October 16 to December 10, 2018 at the Mariyai Inpatient Health Center with a population of mothers who had toddlers and a total sample of 90 people in total sampling. Data were obtained using a questionnaire and analyzed using the chi square test and binary logistic regression.

**Research results:** Obtained factors that influence the incidence of diarrhea in toddlers at the Mariyai Inpatient Health Center of Sorong Regency are waste management p value 0.005 Rp = 2.133; CI95% = (1,167-3,899), availability of clean water facilities p value 0,000 RP = 3,188; CI95% = (1,707-5,952), the availability of SPAL p value 0.001 Rp = 0.492; CI95% = (0.321-0.754), MCK availability p value 0,000 RP = 2,325; CI95% = (1,559-3,467), environmental cleanliness p value 0,000 Rp = 2,314; CI95% = (1,409-3,801), knowledge p value 0,004 Rp = 1,859; CI95% = (1,214-2,847), p value 0,000 Rp = 2,364; CI95% = (1,406-3,974), age p value 0,681 Rp = 1,131; CI95% = (0.764-1.675), education p value 0.005 RP = 1.923; CI95% = (1,176-3,137), occupation p value 0,001 RP = 1,978; CI95% = (1,362-2,872), history of exclusive breastfeeding p value 0,003 RP = 1,857; CI95% = (1,227-2,810). The dominant factor that influences the

incidence of diarrheal disease in children under five is the availability of clean water to the incidence of diarrheal diseases in infants in the Mariyai Inpatient Health Center of Sorong Regency.

**Keywords:** Diarrhea, Mariyai Inpatient Health Center, Sorong Regency

### 1. INTRODUCTION

According to Riskesdas (2013) data, the incidence and period prevalence of diarrhea for all age groups in Indonesia are 3.5 percent and 7.0 percent. The five highest incidence and period prevalence of diarrhea were Papua, South Sulawesi, Aceh, West Sulawesi, and Central Sulawesi. The incidence of diarrhea in the toddler age group in Indonesia is 10.2 percent. The five highest incidence of diarrhea were Aceh, Papua, DKI Jakarta, South Sulawesi and Banten. From the results of the Basic Health Research (Riskesdas) in West Papua the highest rate was the prevalence of diarrhea (10.8%) (Riskesdas, 2013). Whereas in Sorong Regency the number of diarrhea cases in 2016 was 914 cases (Dinkes, 2017). Based on environmental factors, diarrheal disease is one of the diseases that are environmentally based. Two dominant influence factors are the incidence of diarrhea, namely clean water facilities and stool disposal. These two factors will interact with human behavior. If environmental factors are unhealthy because they are contaminated with germs and accumulate with unhealthy behavior, through food and drink, it can cause

diarrheal disease (Sudaryat, 2010).

According to WHO (2012) Indonesia's statistical profile officially released the 10 highest-causing diseases in Indonesia, including diarrhea in number 10 which is often the cause of death. From the results of observations that the researchers did in the general polio room of the Mariyai Inpatient Health Center, Sorong Regency, that diarrhea morbidity rates that occurred in 2018 in 3 months were 36 patients in November, 24 in November and 30 in total until December. 90 patients suffering from diarrhea. Viewed from the residential environment, most of them are mangrove areas, which is one of the places where disease is easily affected, one of which is diarrhea, many facilities that are not available, namely clean water facilities where people have to find clean water in other residents' houses that have boreholes, MCK facilities most of them still use hanging toilets, landfills that do not meet the requirements because people dispose of garbage under the house and there is no SPAL in some houses due to the environmental conditions in the form of mangroves. This causes the researcher to be interested in examining the factors that influence the incidence of diarrhea in toddlers at the Mariyai Inpatient Health Center, Sorong Regency.

## 2. MATERIALS AND METHODS

### 2.1. Type of Research

This study is an observational analytic study. Observational analytic research is a study that aims to find relationships between variables by analyzing the data that has been collected. This study uses the Cross Sectional approach, namely by measuring the independent variables and the dependent variable only once at the same time (Notoatmodjo, 2012).

### 2.2. Location and Time of Research

This research was conducted at the Mariyai Inpatient Health Center on October 16 to December 10, 2018.

### 2.3. Population and Samples

Research population; The population in this study were all mothers with children under five who visited and registered at the Mariyai Inpatient Health Center of Sorong Regency in the 3 months running from October to December, totaling 90 children. The sample size uses a total sampling of saturated sampling techniques, so the number is 90 people.

## 3. RESULTS

### a. Effect of characteristics on the incidence of diarrheal diseases

Table 1 Effect of maternal age on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency in 2018

Mother's age	Incidence of diarrheal				Number	
	diarrhea		Not Diare			
	f	%	f	%	f	%
< 22 year	32	58,2	23	41,8	55	100
≥22 uear	18	51,4	17	48,6	35	100
Total	50	55,6	40	44,4	90	100
$p = 0,681$ ; $RP = 1,131$ ; $CI95\% = (0,764-1,675)$						

Table 1 above shows that of 55 mothers aged <22 years there were 32 people (58.2%) diarrhea and 23 people (41.8%) were not diarrhea. While from 35 mothers aged  $\geq 22$  years there were 18 people (51.4%) diarrhea and 17 people (48.6%) were not diarrhea. The chi-square statistical test results at a significance value of 95% ( $\alpha = 0.05$ ) obtained  $p$  value =  $0.681 > \alpha = 0.05$ . This means that there is no effect on the age of the mother on the incidence of diarrheal disease in the Mariyai Inpatient Health Center, Sorong Regency. Results of the value of  $RP = 1,131$ ;  $CI95\% = (0.764-1.675)$ , with a lower value  $< 1$ , so age is not a significant factor with the incidence of diarrheal disease.

Table 2 Effect of education on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency in 2018

Education	Incidence of diarrheal				Number	
	diarrhea		Not diarrrhea			
	f	%	f	%	f	%
Low	38	67,9	18	32,1	56	100
High	12	35,3	22	64,7	34	100
Total	50	55,6	40	44,4	90	100
$p = 0,005$ ; $RP = 1,923$ ; $CI95\% = (1,176-3,137)$						

Table 2 above shows that out of 56 low-educated mothers there are 38 people (67.9%) diarrhea and 18 people (32.1%) not diarrhea. While from 34 highly educated

mothers there were 12 people (35.3%) diarrhea and 22 people (64.7%) did not have diarrhea. The results of the chi-square statistical test at a significance value of 95% ( $\alpha = 0.05$ ) obtained a value of p value =  $0.005 < \alpha = 0.05$ . This means that there is an influence of maternal education on the incidence of diarrhea in the Mariyai Inpatient Health Center, Sorong Regency. The result of the value of  $RP = 1,923$ ;  $CI95\% = (1,176-3,137)$ , shows that mothers of children with low education are at risk of having their children suffering from diarrhea 1,923 times higher than those of highly educated mothers.

**Table 3 Effect of work on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency in 2018**

Occupation	Incidence of diarrheal				Number	
	diarrhea		Not diarrhea			
	f	%	f	%	f	%
Work	29	78,4	8	21,6	37	100
Not work	21	39,6	32	60,4	53	100
Total	50	55,6	40	44,4	90	100

$p = 0,001$ ;  $RP = 1,978$ ;  $CI95\%=(1,362-2,872)$

Table 3 above shows that out of 37 working mothers there were 29 people (78.4%) diarrhea and 8 people (21.6%) did not have diarrhea. While from 53 mothers who did not works there were 21 people (39.6%) diarrhea and 32 people (60.4%) did not have diarrhea. The chi-square statistical test results at a significance value of 95% ( $\alpha = 0.05$ ) obtained a value of p value =  $0.001 < \alpha = 0.05$ . This means that there is an influence of the work of mothers on the incidence of diarrhea in the Mariyai Inpatient Health Center, Sorong Regency. The result of the value of  $RP = 1,928$ ;  $CI95\% = (1,362-2,872)$ , indicating that mothers of children under five who are at risk of childbirth suffer from diarrhea 1,978 times higher than mothers who do not work.

**b. Effect of waste management on the incidence of diarrheal diseases.**

**Table 4. Effect of waste management on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency in 2018**

Waste management	Incidence of diarrheal				Number	
	diarrhea		Not diarrhea			
	f	%	f	%	f	%
Not meet requirement	42	65,5	22	34,4	64	100
Meet requirement	8	30,8	18	69,2	26	100
Total	50	55,6	40	44,4	90	100

$p = 0,005$ ;  $RP = 2,133$ ;  $CI95\%=(1,167-3,899)$

Table 4 above shows that of the 64 mothers who treated waste that did not meet the requirements there were 42 people (65.5%) diarrhea and 22 people (34.4%) were not diarrhea. While from 26 mothers with solid waste processing who met the requirements there were 8 people (30.8%) diarrhea and 18 people (69.2%) did not have diarrhea. The results of the chi-square statistical test at a significance value of 95% ( $\alpha = 0.05$ ) obtained a value of p value =  $0.005 < \alpha = 0.05$ . This means that there is an effect of waste management on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. The results of the value of  $RP = 2,133$ ;  $CI95\% = (1,167-3,899)$ , indicating that waste processing that does not meet the requirements is at risk of suffering from diarrhea 2,133 times higher than the processing of waste that meets the requirements.

**c. Effect of the availability of clean water facilities on the incidence of diarrheal diseases**

**Table 5. Effect of the availability of clean water on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency in 2018**

Clean water availability	Incidence of diarrheal				Number	
	diarrhea		Nit diarrhea			
	f	%	f	%	f	%
Worse	42	75,0	14	25,0	56	100
Good	8	23,5	26	76,5	34	100
Total	50	55,6	40	44,4	90	100

$p = 0,000$ ;  $RP = 3,188$ ;  $CI95\%=(1,707-5,952)$

Table 5 above shows that from 56 mothers with poor availability of clean water there were 42 people (75.0%) diarrhea and 26 people (76.5%) did not have diarrhea. While from 34 mothers with good availability of clean water there were 8 people (23.5%) diarrhea and 26 people (76.5%) did not have diarrhea. The results of the chi-square statistical test at a significance value of 95% ( $\alpha = 0.05$ ) obtained a p value =  $0,000 < \alpha = 0.05$ . This means that there is an effect of the availability of clean water on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. The results of the value of  $RP = 3.188$ ;  $CI95\% =$

(1,707-5,952), indicating that the availability of poor clean water is at risk of suffering from diarrhea 3,188 times higher than the availability of good water.

**d. Effect of the availability of sewerage (SPAL).**

**Table 6 Effect of the availability of sewerage channels on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency in 2018**

Sewerage channel	Incidence of diarrheal				Number	
	diarrhea		Not diarrhea		f   %	
	f	%	f	%		
Not meet requirement	16	36,4	28	63,6	44	100
Meet requirement	34	73,9	12	26,1	46	100
Total	50	55,6	40	44,4	90	100

*p* = 0,001; RP = 0,492; CI95%=(0,321-0,754)

Table 6 above shows that of the 44 mothers with SPAL who did not meet the requirements there were 16 people (36.4%) diarrhea and 28 people (63.6%) were not diarrhea. While from 46 mothers with SPAL who fulfilled the requirements there were 34 people (73.9%) diarrhea and 12 people (26.1%) did not have diarrhea. The chi-square statistical test results at a significance value of 95% ( $\alpha = 0.05$ ) obtained a value of  $p$  value = 0.001  $< \alpha = 0.05$ . This means that there is an effect of sewerage on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. The results of the value of RP = 0.492; CI95% = (0.321-0.754), indicating that the availability of sewerage pipes that meet the requirements has a tendency to suffer from diarrhea 0.492 times higher than the availability of sewerage channels that do not meet the requirements.

**e. Effect of the availability of toilet washing facilities (MCK) on the incidence of diarrheal diseases.**

**Table 7 Effect of the availability of toilet washrooms (MCK) on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency in 2018**

Availability toilet washing	Incidence of diarrheal				Number	
	diarrhea		Not diarrhea		f   %	
	f	%	f	%		
Not available	32	82,1	7	17,9	39	100
Available	18	35,3	33	64,7	51	100
Total	50	55,6	40	44,4	90	100

*p* = 0,000; RP = 2,325; CI95%=(1,559-3,467)

Table 7 above shows that of the 39 mothers who did not have MCK there were

32 people (82.1%) diarrhea and 7 people (17.9%) did not have diarrhea. While from 51 mothers who have MCK there are 18 people (35.3%) diarrhea and 33 people (64.7%) are not diarrhea. The results of the chi-square statistical test at a significance value of 95% ( $\alpha = 0.05$ ) obtained a  $p$  value = 0,000  $< \alpha = 0.05$ . This means that there is an effect of the availability of toilet washing facilities (MCK) on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. The results of the value of RP = 2,325; CI95% = (1,559-3,467), shows that mothers of children under five who do not have MCK are at risk of having their children suffering from diarrhea 2,325 times higher compared to mothers of children under five who have MCK.

**f. Effect of environmental hygiene on the incidence of diarrheal diseases.**

**Table 8 Effect of environmental hygiene on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency in 2018**

Environment hygiene	Incidence of diarrheal				Number	
	diarrhea		Noy diarrhea		f   %	
	f	%	f	%		
Bot hygiene	38	73,1	14	26,9	52	100
hygiene	12	31,6	26	68,4	38	100
Total	50	55,6	40	44,4	90	100

*p* = 0,000; RP = 2,314; CI95%=(1,409-3,801)

Table 8 above shows that of 52 mothers who had an unclean environment there were 38 people (73.1%) diarrhea and 14 people (26.9%) did not have diarrhea. While from 38 mothers who have a clean environment there are 12 people (31.6%) diarrhea and 26 people (68.4%) are not diarrhea. The results of the chi-square statistical test at a significance value of 95% ( $\alpha = 0.05$ ) obtained a  $p$  value = 0,000  $< \alpha = 0.05$ . This means that there is an influence of environmental cleanliness on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. Results of the value of RP = 2,314; CI95% = (1,409-3,801), shows that mothers of infants with an unclean environment are at risk for their toddlers suffering from diarrhea 2,314 times higher compared to mothers of toddlers who have a clean environment.

## 4. DISCUSSION

### 4.1. Effect of waste management on the incidence of diarrheal diseases in infants.

The results showed that there was an effect of waste management on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. This research is in line with the research conducted by Mafazah (2013), in the work area of Purwoharjo Public Health Center, Pemalang Regency that there is an influence on the availability of garbage disposal facilities with the incidence of diarrhea in infants.

Waste management is all activities carried out in handling waste from being dumped to final disposal. Broadly speaking, activities in waste management include the control of landfill, garbage collection, transfer and transportation, processing and final disposal (Slamet, 2007).

Waste management that is not carried out properly and does not meet the requirements has a huge impact on maternal health so that it can transmit the disease to infants. If the management of waste that is not carried out systematically, thoroughly, and sustainably, it will cause various negative impacts. This shows that unmanaged waste disposal will result in a greater incidence of diarrhea compared to managed waste disposal.

### 4.2. Effect of the availability of clean water facilities on the incidence of diarrheal diseases in infants.

The results showed that there was an effect of the availability of clean water facilities on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. This research is in line with research conducted by Mafazah (2013), in the work area of Purwoharjo Public Health Center, Pemalang Regency that there is an influence of the availability of clean water facilities on the incidence of diarrheal diseases in infants.

Water is very important for humans. Human needs for water are very complex, among others, for drinking, cooking, washing, bathing and so on. The availability

of sufficient water is the first priority, but for the sake of security for health the protection of water sources against pollution must also be proven that developing countries, water supply in a fast time will be more effective in protecting the community than providing clean but newly available water after time consuming at least 15 liters of water is needed for each person every day to maintain health (Soemirat 2007).

Most respondents with poor availability of clean water and suffering from diarrhea were more than respondents with good availability of clean water and did not suffer from diarrhea. This is caused by drinking water sources that do not meet sanitation requirements, one of which is a dug well used by the community to have a level of pollution to water quality.

Water has a large role in the spread of several infectious diseases. The magnitude of the role of water in the transmission of diseases caused by the condition of water itself is very helpful and very good for the life of microorganisms. This is because population wells are not plastered and polluted by feces.

The amount of clean water in the form of dug wells used by the community has a high and very high level of pollution to the quality of clean water. The physical condition of clean water facilities that do not meet health requirements based on the assessment of high and very high sanitation inspections can affect the quality of clean water by contaminating dirty water that seeps into well water. This is consistent with what was stated by Soemirat (2007), that drinking water sources are often a source of pollutants in water borne disease. Therefore the source of drinking water must meet the requirements of localization and construction. The localization requirement requires that drinking water sources be protected from contamination, so that it is necessary to pay attention to the distance of drinking water sources with latrines, garbage excavation holes, excavation holes for waste water and other impurity sources.

#### **4.3. Effect of the availability of sewerage (SPAL) on the incidence of diarrheal diseases in infants.**

The results showed that there was an effect of the availability of clean water facilities on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. This research is in line with the research conducted by Stefen Anyerdy Taosu and R. Azizah (2013) that there is a relationship between the use of sewerage channels and the incidence of diarrhea in infants in Bena Village. The means to dispose of waste water is intended to prevent stagnant water around the house, so that it does not become an insect breach or can protect the environment or water sources. This is reinforced by the theory by Soemirat (2007), that domestic wastewater includes used bath water, used laundry, and furniture and foodstuffs, and others. This water contains a lot of soap or detergents and microorganisms. In addition, there is also waste water that contains human feces and urine. Efforts that can be made in preventing transmission of diarrhea are by making SPAL closed and always maintaining sanitary sewerage (SPAL) so that there is no puddle of water and becoming a medium of transmission of diarrheal diseases.

The assumption of researchers is that there are still many people who do not have sewerage channels or use channels that do not meet the requirements. Disposal of waste water that is carried out unhealthy or does not meet health requirements can cause pollution to the surface of the land and water sources. Thus to prevent or reduce contamination of wastewater against the environment, the waste must be managed properly, so that wastewater does not become a breeding ground for germs such as flies, does not pollute water sources, soil and does not cause odor.

#### **4.4. Effect of the availability of toilet washing facilities (MCK) on the incidence of diarrheal diseases in infants.**

This research is in line with the research conducted by Anjar Purwidiana

Wulandari (2009) that there is a relationship between the type of feces disposal site and the incidence of diarrhea in children under five in Blimbing Village, Sambirejo District, Sragen Regency. According to Notoatmodjo (2014), the requirement for sewage disposal that meets the health rules is not to pollute the soil surface, surface water in the surrounding soil. Dirt should not be open so that it can be used as a place to lay eggs and breed. The community already has a MCK but there is no awareness in maintaining the cleanliness of the MCK. This causes many mothers who have toddlers to get diarrhea. Disposing of feces that do not meet sanitary requirements can pollute the residential environment, land and water resources. From fecal contaminated environments that accumulate with unhealthy human behavior, not washing hands thoroughly after working or playing on the ground (children), through food and drink can cause diarrhea.

According to Notoatmodjo (2014), the requirement for sewage disposal that meets the health rules is not to pollute the soil surface, around it, not pollute the surrounding surface water, not pollute the water in the surrounding soil, and dirt should not be opened so that it can be used as a place to lay eggs or breeding of other disease vectors.

#### **4.5. Effect of environmental hygiene on the incidence of diarrheal diseases in infants.**

The results showed that there was an effect of the availability of clean water facilities on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. This research is in line with the research conducted by Ferlando and Asfawi (2014) that there is a relationship between the type of feces disposal site and the incidence of diarrhea in children under five in the Mangkang Health Center Working Area.

The assumption of researchers is that diarrhea occurs in people who have an unclean living environment because the environment is not cleaned. This is due to

environmental factors where there are still many houses where the edges are swampy areas so people tend to dispose of garbage under the house.

Sanitation is one of the most important challenges for developing countries because according to the World Health Organization (WHO) one of the causes of diarrheal disease is the lack of access to sanitation is still too low. This is in accordance with Bloom's theory which states that the degree of public health is determined by environmental factors, behavior, health services, and hereditary factors. Environmental factors that are related to poor people's behavior and bad environmental conditions make a person susceptible to diarrhea in infants. This research is in line with research that states that there is a relationship between environmental sanitation and the incidence of diarrhea patients in children in Majenang General Hospital, Cilacap Regency. This research is also in line with research in Padang which stated that the largest proportion of children under five who suffer from diarrhea is poor environmental sanitation.

#### **4.6. Effect of knowledge on the incidence of diarrheal diseases in infants.**

The results showed that there was an effect of the availability of clean water facilities on the incidence of diarrheal diseases in the Mariyai Inpatient Health Center of Sorong Regency. This research is in line with the research conducted by Susana Surya (2015) in the EDD at Ruteng Hospital that there is a relationship between knowledge and the incidence of diarrhea in children under five. Knowledge or cognitive is a very important domain for the formation of one's actions, because from experience and research it turns out that attitudes and behaviors based on knowledge will be more lasting than those not based on knowledge. Knowledge of diarrhea in mothers of children under five shows the ability of mothers of children under five to know everything related to diarrhea which includes understanding, symptoms and signs

of diarrhea, modes of transmission of diarrhea, causes of diarrhea, treatment of diarrhea and prevention of diarrhea (Notoatmodjo, 2012).

The results of the study also show that there are still mothers of children under five who are knowledgeable about more than mothers with good knowledge. Mother of children under five who have less knowledge about diarrhea mostly come from mothers with low education. This is in accordance with the opinion of Notoatmodjo (2010), one's knowledge is influenced by the level of formal education pursued. The higher the formal education pursued, the better the knowledge. Mothers of children under five who are highly educated have wider access to information than mothers with lower education. In addition, highly educated mothers will more easily absorb health information.

Mother of children under five who are knowledgeable about diarrhea in the category of less demanding participation of health workers, especially midwives to provide health education about diarrhea to mothers of children under five. By providing health information about ways to achieve healthy life, how to maintain health, how to avoid illness, and so on, it will increase people's knowledge about it. Furthermore, with that knowledge will create awareness that will eventually cause people to behave.

## **5. CONCLUSION**

The results of this study can be concluded that the significant factors and dominant factors that influence the incidence of diarrhea in infants are as follows:

1. There is an effect of waste management on the incidence of diarrheal diseases in infants under the prevalence ratio test results obtained  $RP = 2,133$ ;  $CI95\% = (1,167-3,899)$ .
2. There is the influence of the availability of clean water facilities on the incidence of diarrheal diseases in infants under the results of the prevalence ratio test

obtained by  $RP = 3,188$ ;  $CI95\% = (1,707-5,952)$ .

3. There is the influence of the availability of sewage disposal channels (SPAL) on the incidence of diarrheal diseases in infants under the results of the prevalence ratio test obtained by  $RP = 0.492$ ;  $CI95\% = (0.321-0.754)$ .
4. There is the influence of the availability of toilet washing facilities (MCK) on the incidence of diarrheal diseases in infants under the results of the prevalence ratio test obtained  $RP = 2,325$ ;  $CI95\% = (1,559-3,467)$ .
5. There is the influence of environmental hygiene on the incidence of diarrheal diseases in infants under the results of the prevalence ratio test obtained  $Rp. 2,314$ ;  $CI95\% = (1,409-3,801)$ .
6. There is an influence of knowledge on the incidence of diarrheal diseases in infants under the results of the prevalence ratio test obtained by  $RP = 1,859$ ;  $CI95\% = (1,214-2,847)$ .

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