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# Analysis of Factors Affecting the Behavior of Incidental Deposition in the Community Around the River, Banjarejo Village, Ngadiluwih District, Kediri Regency

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## **ABSTRACT**

One of the unhealthy lifestyle behaviors is defecating in indiscriminate places such as fields, rice fields, rivers, and other open areas which if left unchecked will pollute the environment, soil, air, and water. In the Banjarejo Village area, they still apply the habit of open defecation (BABS) along the river. From the results of observations that have been made by researchers on October 9, 2020 around the river in the Banjarejo Village area, people are still found defecating around the river. This study aims to analyze the factors that influence the behavior of open defecation in Banjarejo Village, Ngadiluwih District, Kediri Regency. This study uses a quantitative method with an observational research design and uses a cross sectional approach. This research was conducted in Banjarejo Village, Ngadiluwih District, Kediri Regency, a sample of 93 respondents using random sampling technique. Data were collected by questionnaire, bivariate analysis using logistic regression test. The results showed that the variables that had no effect on behavior were economics (p value 0.255 > 0.05) and latrine ownership (p value 0.427 > 0.05) while those that had an influence on behavior were habits (0.00 < 0.05). The behavior of open defection in Banjarejo village is caused by habitual factors where the habit has become a culture for the surrounding community. This is because some residents do not have their own latrine or latrines that are shared in several houses.

**Keywords**: Behavior, Economy, Habits, Latrine ownership, Open defecation

# INTRODUCTION

One of the unhealthy lifestyle behaviors is open defecation which is still common in everyday life. The national target for the 2015 – 2019 RPMJN is that proper sanitation in 2019 will increase to 100% (2014: 60.4) (Presidential Regulation of the Republic of Indonesia No. 59 of 2017). This is a community challenge related to the open defecation phenomenon in Indonesia(Paladiang, Haryanto and Has, 2020).

A condition of people who have carried out total sanitation, one of which is by not defecating openly (BABS) is usually called Open Defecation Free (ODF). A village can be said to be ODF if 100% of the villagers already have access or facilities for defecation in healthy latrines(Hadiati Sukma, Mursid, 2018)

The Ministry of Health (2013) cites WHO data, informing that around 3,400,000 people/year of death are caused by water bone disease. Regarding open defecation (BABS), Indonesia is the second most populous country in the world whose people practice open defecation in open areas after India (Kemenkes RI, 2011). Based on UNICEF data, 44.5% of the total population of Indonesia does not have proper faecal disposal facilities and as much as 24% of the total population of Indonesia still defecates openly in rivers (Kemenkes RI, 2011).

Based on data from the Kediri District Health Office (2018), in East Java the coverage of services for diarrhea sufferers in 2012 was 63%, in 2016 there was an increase of 83%. This

happens because there is a decrease in morbidity from 214/1000 population in 2012 to 843/1000 population in 2015. In Ngadiluwih sub-district, Kediri district ranks first with the coverage of diarrhea services for toddlers.

In the Banjarejo Village area, they still apply the habit of open defecation (BABS) along the river. In fact, some communities around the river already have healthy latrines and according to WHO standards but still apply the habit of open defecation in the river. In terms of the function of the river in the Banjarejo Village area, it is actually a flow of water that comes from a spring that goes directly to a small river that is used by residents to irrigate rice fields. This clean and clear water makes the people of the Banjarejo Village area used as a place for open defecation. In terms of environmental health, the impact of open defecation is very influential because the environment becomes polluted and can cause several diseases such as cholera, diarrhea, hepatitis A, and others. And in terms of subjective norms, people are actually not allowed to open defecation in the river because of the expectations of the surrounding community to make the river clean and healthy.

#### **METHODS**

This study uses quantitative methods with descriptive analytic research design, using a cross sectional approach. This research was conducted in Banjarejo Village, Kec. Ngadiluwih Kediri Regency, a sample of 93 respondents by means of simple random sampling technique. Data were collected by questionnaire, bivariate analysis using logistic regression test.

#### RESULTS

#### I. RESULTS

## 1. Characteristics of Respondents

Table 1 Characteristics of Respondents					
No	Characteristics	N	%		
1.	Type tolamin				
	Man	48	52		
	Woman	45	48		
2	A				
2.	Age	8	0		
	12-25	-	9		
	26-45	40	43		
	>45	45	48		
3.	Education				
٥.	No school	3	3		
	SD	23	25		
	junior high school	26	28		
	senior High School	26	28		
	Diplomat/bachelor	15	16		
4	W/l-				
4.	Work	2	2		
	Farmer	3	3		
	Trader/entrepreneur	29	31		
	Private Servant	19	21		
	PNS/BUMN/TNI/Polr	4	4		
	i	7	7		
	Etc	38	41		

Based on the research, as many as 93 respondents can be identified with the female gender as many as 45 respondents (48%), while for the male sex as many as 48 respondents (52%) of the total. Age can be known as many as 8 respondents aged 12-25 years (9%) and as many as 40 respondents aged 26-45 years (43%), while those aged over 45 years were 45 respondents (48%) of the total. Education can be seen that there are 23 respondents with elementary school (SD) education (25%), 26 respondents with Junior High School (SMP) education (28%), 26 respondents with High School (SMA) education (28%). A total of 15 respondents have Diploma/S1 education (16%). While those who did not attend school were 3 respondents (3%) of the total.

#### 2. Variable Characteristics

Table 2 Characteristics of Variables					
No	Characteristics	N	%		
1.	Economy				
	Below the minimum	63	68		
	wage (<2 million)				
	Above the minimum	30	32		
	wage (>2 million)				
2.	Latrine Ownership				
	Do not have	30	32		
	Have	63	68		
3.	Habit				
	Bad	50	54		
	Well	43	46		
4.	Behavior				
	Defecation	52	56		

indiscriminately

not

Do

carelessly

Based on the research of 93 respondents, it can be seen that people with salaries below the minimum wage are 63 respondents (68%) and respondents with salaries above the minimum wage are 30 respondents (32%) of the total. The ownership of latrines can be seen that the people who have latrines are 63 respondents (68%) and respondents who do not have latrines are 30 respondents (32%) of the total. It can be seen that people with bad habits open defecation in rivers as many as 50 respondents (54%) and people with good habits do not defecate in rivers as many as 43 respondents (46%) of the total.

defecate

52

41

56

44

## 3. Statistical Test Results

**Table 3 Statistical Test Results** 

Variable		SE	Wald	df	Sign
Economy	1,1 13	,977	1,296	1	,255
latrine ownership	,9 984	1,238	,631	1	,427
habit	-5.586	1,129	24,496	1	,000
Constant	5,144	2,217	5,383	1	0.020

#### DISCUSSION

# 1. The Influence of the Habits of the Banjarejo Village Community on the Behavior of **Open Defecation in the River**

The habit variable in this study used two categories including the good category and the bad category using the characteristics of gender, education and occupation. From the results of descriptive data obtained good habits there are 43 respondents (46.2%) while with bad habits there are 50 respondents (53.8%)

The results of the analysis using the Logistic Regression Test obtained a habitual pvalue of 0.00 < 0.05, then H0 was rejected and H1 was accepted, so it can be concluded that there is a habitual influence on open defecation behavior. Habit is a behavior that is done repeatedly which if done continuously will become a culture for the perpetrator.

The results of this study are in line with the research of Kurnia et al. (2017) which discusses the Relationship between Individual Characteristics and Social Environment on Indiscriminate Defecation Behavior which states that there is a relationship between habit and open defecation behavior. based on the results of the study that people's habit of open defecation has been done long ago. This behavior is one of the factors that contribute greatly to the occurrence of a disease. As a result of this habit, the community does not care about the impact that will occur. This habit arises because the culture is hereditary and unplanned. If the habit is often repeated, it will result in a certain comfort for the community.

In contrast to the research of Darsana (2012) that respondents who have good habits will have a greater desire to have a family toilet than respondents with bad habits because this can contribute greatly to the incidence of disease. Changing habits is the most difficult thing, because when the habit has become a comfort, of course we will feel strange if the habit we will not do. This is what can cause culture in society.

According to research in the field, based on 93 respondents, 48 respondents (51.6%) defecate openly with bad habits and 39 respondents (41.9%). Why is this happening, because they have a habit from a long time ago, if they do not defecate in the river, the feces cannot be expelled, even if their bottoms are not exposed to running water, the feces cannot be expelled. This habit that continues to be repeated results in bad behavior around defecation.

# 2. Identifying the Economics of the Banjarejo Village Community Against the Behavior of Irrelevant Big Air Bangs in the River.

In the economic variable, there are two categories, namely the category above the minimum wage (>Rp. 2,000,000) and below the minimum wage (<Rp. 2,000,000). The results of descriptive data obtained that economic variables above the minimum wage were 63 respondents (67.7%) and those below the minimum wage were 30 respondents (32.3%).

Based on the results of the Logistic Regression analysis, it shows that the economic pvalue is 0.255 > 0.05, so H0 is accepted and H1 is rejected, so it can be concluded that there is no economic influence on open defecation behavior. The economy in this case is the income of a family. If the income of a family is low, it will also affect the construction of latrines.

This is different from the research of Paladiang et al (2020) which states that there is a relationship between economic status and open defecation behavior. This is because most of the jobs are farmers. The level of income is very influential on the behavior of open defecation which depends on the facilities and infrastructure for making latrines. Making a latrine is closely related to a person's income because the construction of a latrine requires a lot of money.

This is also different from the research of Neydi Chandra (2012) which says that there is no money to be saved due to sufficient income for daily use and rising construction costs.

This research is different from the research by Kamria, (2013). The level of income of a family affects the level of making clean, healthy, and maximum latrines. The higher the income of a family, it will not be possible to build a toilet that is not clean and healthy.

Based on research conducted on 93 respondents that the behavior of the community at the economic level is the most open defecation, namely below the UMR by 45 respondents (48.4%) and those who do not defecate openly, namely above the UMR by 23 respondents (24.7%). Why is that, because many respondents work as laborers with little wages and some do not work which means there is no income for the family. This causes a person to think that open defecation in the river without costing much.

# 3. Identifying the Ownership of Community Latrine Around the River, Banjarejo Village Against the Behavior of Arbitrary Water Bangs in the River.

In the latrine ownership variable, there are two categories, namely having a latrine and not having a latrine. In the descriptive data, there are 63 respondents who have latrines (67.7%) and those who do not have latrines are 30 respondents (32.3%).

In Logistic Regression, the p-value of latrine ownership is 0.427 > 0.05, so H0 is accepted and H1 is rejected, so it can be concluded that there is no effect of latrine ownership on open defecation behavior. The ownership of latrines greatly influences the existence of Open Defecation Free (ODF) in the community, especially the area around the river.

This is different from the study of Talakua, et al (2020) which stated that there was a relationship between latrine ownership and defecation behavior. Where available latrine facilities will also affect a person to defecate. If the facilities are not adequate then a person will not have the comfort to defecate in that place.

This is also different from the research of Hadiati Sukma (2018), respondents who do not have a latrine at home due to economic constraints and lack of land owned. Respondents prefer to wait for assistance from the Government to build latrines.

Based on research conducted on 93 respondents that the behavior of people defecating openly at the level of latrine ownership, namely those who have latrines of 28 respondents (30.1%), why is that, because even though they have a latrine at home they still defecate openly. in the river because they are used to defecating in the river. There are also those who share a latrine with their neighbors.

# 4. Analyzing the Habits, Economy, and Ownership of Toilets in the Community Against the Behavior of Open Defecation Around the River.

From the research above, it can be analyzed that habits have an influence on open defecation behavior with a p-value of 0.00 < 0.05 so that H0 is rejected, H1 is accepted. For economic status has no influence on behavior. This is evidenced by the p-value of 0.255 > 0.05, so H0 is accepted and H1 is rejected. Meanwhile, for the status of latrine ownership there is no effect, from the p-value of 0.427 > 0.05, H0 is accepted, H1 is rejected, then latrine ownership has no effect on defecation behavior.

Habits in this case are very influential, because from that habit, people do not know what impact will occur if many people defecate in the river. Habits that are often repeated eating make people comfortable. Because of that convenience, people finally make it a habit that has been entrenched against open defecation.

From the results, the research shows that some respondents already have their own latrine at home and there are also respondents who use one latrine together with their neighbors. To prevent queues to defecate in the morning together with their neighbors, most respondents think it is better to defecate around the river. To prevent queues to defecate in the morning with their neighbors, most respondents think it is better to defecate around the river because people are used to it and it has become a bad culture for the environment. This is also related to family income which if the family income is more than the minimum wage it will affect the facilities and infrastructure in the latrines which causes respondents to also

open defecation around the river.

## **CONCLUSION**

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