



Factors That Influence Community Behavior Of Incidental Defeat at Desa Jawa Belakang, Kecamatan Langsa, Kota Langsa

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ABSTRACT

Disposal of feces (feces and urine) that is not according to the rules. Open defecation can be influenced by several factors, including factors of knowledge, education, habits (habit) and others. The purpose of this study was to determine the factors influencing the behavior of people to defecate openly in the village of Jawa Behind Langsa Kota. This type of research is an analytical survey method with a cross sectional approach. The research was carried out in the area of Jawa Behind Village, Langsa Kota District. The population of this study is the population of the village of Jawa Behind totaling 605 families. The sample in this study was 86 families. Sampling was done by simple random. Data analysis used univariate, bivariate and multivariate analysis. The results showed that there were 56 people with positive defecation (65.1%) and 30 people with negative defecation (34.9%). The results of the chi-square statistical test showed that the variables of knowledge, attitude, education, income, latrine ownership and the role of health workers had an influence on open defecation behavior with $p < 0.05$. Simultaneously, the results showed that education and latrine ownership were the most dominant factors influencing people's open defecation behavior. It is hoped that the community will always explore and seek information about public health and have a high response and responsiveness in carrying out the Stop Open Defecation program either individually or in groups by always being environmental sanitation and not practicing open defecation.

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1. INTRODUCTION

Sanitation according to the World Health Organization (WHO) is an effort to monitor several physical environmental factors that affect humans, especially those that affect physical development, health, and survival. Bloom (1974) states that there are 4 factors that affect the

degree of health, namely: 1. lifestyle (life style), 2. environment (social, economic, political, cultural) 3. health services, 4. genetic factors (genetic), factors The environment plays a very big role in improving the health status of the community (1). Poor public health conditions can lead to several infectious diseases, thereby lowering the degree of public health (2).

According to the Regulation of the Minister of Health of the Republic of Indonesia No. 39 of 2016 concerning Guidelines for the Implementation of the Healthy Indonesia Program with a family approach that the family has access to and uses a healthy latrine is if the family has access and uses a means to defecate in the form of a goose-neck toilet or a plengsengan toilet (3). To prevent contamination of the environment, the disposal of human feces must be managed properly, namely by using latrines. A healthy latrine is 1) if it does not pollute the surrounding ground surface, 2) does not contaminate the surrounding ground water, 3) does not pollute the surrounding ground water, 4) is not accessible to insects, 5) does not cause odor, 6) is easy to use and maintainability, 7) simple in design and inexpensive, 8) acceptable to the user (4)

The problems faced by Indonesia regarding environmental sanitation are still very large. WHO data in 2015 stated that 13% of the world's population still defecate in open areas. In the Southeast Asia region alone there are 34%. WHO data in 2015, states that the population of open defecation in Indonesia has decreased by 18%, from 40% in 1990 to 22% in 2015 (5). Indonesian data on Public Health towards open defecation according to the Basic Health Research Survey (Riskesdas, 2018) the proportion of households based on the use of defecation facilities. Nationally, the behavior of defecating in the latrine is (88.2%). The five lowest provinces are Papua (55.8%), Central Kalimantan (75.8%), West Sumatra (76.5%), Central Sulawesi (80.3%) and Aceh (82.5%). (5) ."

The cause is that there are still many people who defecate in open areas due to lack of knowledge, low socioeconomic level, lack of knowledge in the field of environmental health, and bad habits in disposing of human waste that are passed down from generation to generation. Disposal of feces needs special attention because it is one of the waste materials that causes many problems in the health sector and as a medium for germs. Besides being able to cause environmental pollution in water sources and foul odors as well as aesthetics. The greater the percentage of families who defecate (BAB) carelessly, the threat of the disease will be higher in intensity. Human waste is the end result of the digestive system process that must be removed from the body. Human waste consists of solids, organic substances, and inorganic substances. In addition to these components, human waste has the potential to contain various pathogenic microorganisms that can cause diseases such as Salmonella typhi, Vibrio cholera, poliomyelitis, ascariasis, and so on (6)

The STBM program emphasizes changing the behavior of community groups by triggering. Triggering is carried out by providing facilities to the community in an effort to improve the condition of sanitation in their environment until it reaches an Open Defecation Free (ODF) condition, which is where 100% of the community has access to private latrines so that there is no dirt in their environment, so they are able to maintain the cleanliness of the latrine. The results of the evaluation of the Minister of Health at this time Indonesia still faces challenges to complete the target of the 2015-2019 national medium-term development plan (RPJMN) which stipulates universal access to 100% drinking water, 0% slum settlements and 100% cessation of open defecation (BABS). Based on data released by the STBM secretariat, as of 2015 as many as 62 million or 53% of the rural population still do not have access to proper sanitation, 34

million of whom are still practicing open defecation, a 40% acceleration is needed to achieve Indonesia's target of Stop Opening Open Defecation. SBS) in 2019 (7).

Stop Open Defecation (Stop Open defecation), which is one of the activities of STBM, which is a community empowerment program in the field of sanitation where the activity leads to changes in behavior from open defecation (BABS) to a certain place (latrine/latrine). which can prevent unpleasant odors, pollution of clean water sources and the affordability of flies that can cause environmental-based diseases such as diarrheal disease (7).

Open defecation can be influenced by several factors, including factors of knowledge, education, habits (habit) and others. The results of Sukma et al's research show that there is a relationship between knowledge, attitude and ownership of septic tanks with ODF status in Candisari District, Semarang City (8) The results of previous research that have been conducted show that there is a relationship between age, knowledge, attitude, education, latrine ownership, number of family members with the behavior of the household in the use of latrines (9). From the results of research conducted by Paladiang (2020) economic status, attitude, distance from house to river, latrine ownership are factors for people to defecate and the strongest factors are attitude and latrine ownership (10).

Table 1.1. Data on the Number of People who open open defecation at Desa Jawa Belakang

No	Year	Number of Families that are BABS
1	2017	242 families
2	2018	202 families
3	2019	308 families
4	2020	352 families

Source: Dikes Kota Langsa, 2021

Based on the data above, it is found that the number of families practicing open defecation is increasing, where from 605 families it is known that in 2017 as many as 242 families practiced open defecation (40%), in 2018 as many as 202 families practiced open defecation (33.4%), in 2019 as many as 308 families practicing open defecation (50.9%) and in 2020 as many as 352 families practicing open defecation (58.2%). Based on the data above, it can be seen that the number of people in the village of Jawa Behind doing open defecation from 2017 to 2020 there was an increase in open defecation.

Based on population data (BPS) Aceh, the population increases every year, in 2016 the population of Langsa Regency/City amounted to 168,820 people and increased in 2019 by 177,870 people and in 2020 increased to 186,971 people. The average population density in Langsa Regency/City in 2016 is based on an estimate of 644 people per Km², the 2019 estimate is 675 people per Km² and the 2020 estimate is 710 people per Km². Population density from the health sector is an indicator in seeing several health conditions that will arise, especially environmental health conditions related to the availability of drinking water, clean water, waste water disposal systems and handling family waste. In addition to the increasing population density, during the pandemic period, community activities are limited so that it affects people's behavior to carry out open defecation for people who do not have family latrines.

Communities who organize STBM independently by referring to the 5 Pillars of STBM. The number of villages/kelurahan that implement Community-Based Total Sanitation is the cumulative number of villages/kelurahan that are verified to implement STBM. In 2020 in Aceh, 3,428 villages/kelurahan have implemented STBM or 53% of the total 6,514

villages/kelurahan. The coverage of villages/kelurahan that implement STBM in Langsa Regency/City in 2020 is 3%.

Based on a preliminary survey in the village of Jawa Behind, Langsa Kota sub-district in the implementation of the Stop Open Defecation of 20 houses from the heads of families in Kampong Jawa Hamlet, it is known that 7 households have latrines and 13 households do not. From the initial observations that have been made that the behavior of defecating by families who do not have family latrines is mostly in rivers, gardens, and forests behind their homes, but some family members who do not have latrines at home can still defecate in the latrine. common in the area. People who practice open defecation, this is because people who do not have latrines are caused by low economic factors, besides the level of community knowledge that researchers get in the initial survey of research is still lacking about environmental health which will have a negative impact on the health of the individual itself and can also be known people with an average level of junior high and high school education. The problem of open defecation is a major problem because human waste is a source of disease. Open defecation tends not to use the latrine which is one of the habits that individuals have due to imitating the people around them and the attitude of the community who is less concerned about the health of the surrounding environment.

2. RESEARCH METHODE

This type of research is an analytical survey method with a cross sectional approach. This research will be carried out in the Village of Behind Java, Langsa Kota District, Langsa City. The population in this study was 605 families. Sampling was done by simple random sampling on 86 samples. The results of the Cronbach's Alpha test for the reliability test of the knowledge instrument obtained results of 0.846 of 10 valid items, attitudes obtained a value of 0.906 of 10 valid items, and the role of health workers obtained a value of 0.782 of 10 valid items, so that the three question questionnaires were declared reliable or can reliable. The test carried out in this research is logistic regression analysis using the enter method.

3. RESULT AND ANALYSIS

The variables tested in the first stage of binary multiple regression (logistic regression) are all independent variables that have been declared significant at $p < 0.05$ in bivariate analysis, namely all research variables are tested simultaneously in the binary logistic regression test. The results of the variable analysis using the binary multiple regression test (logistic regression) in the first stage using a candidate test of $\text{sig} < 0.25$ value with the enter method which can be seen in the table below:

Table 1.1 Binary Multiple Regression Test (Logistic Regression) Phase I

Step	Variable	Beta	Nilai Sig	Nilai Exp(B)
I	Knowledge	-.057	0,956	0,945
	Attitude	-21.129	0,997	0,000
	Education	-2.488	0,072	0,083
	Socio-Economic	-.698	0,476	0,498
	Latrine Ownership	-2.136	0,059	0,118
	Role of Health Officer	-2.659	0,005	0,070

Based on the results of the first stage of the regression test, it is known that the knowledge variable has a $\text{sig} = 0.956 > 0.25$, the attitude variable has a $\text{sig} = 0.997 < 0.25$, the education variable has a $\text{sig} = 0.072 < 0.25$, the socio-economic variable has a $\text{sig} = 0.476 < 0.25$, the variable of latrine ownership has a value of $\text{sig} = 0.059 < 0.25$ and the variable of the role of health workers has a value of $\text{sig} = 0.005 < 0.25$, then only the variables of education, latrine ownership and the role of health workers can be continued into the second stage of the regression test using the forward conditional method.

Table 1.2. Binary Multiple Regression Test (Logistic Regression) Phase II

Step	Variable	Beta	Nilai Sig	Nilai Exp(B)
II	Education	2.513	0,010	12,341
	Latrine Ownership	2.531	0,004	12,561

Based on table 1.2, it is known that there are 2 research variables that are the most significant. The significant variables are education with a value of $\text{sig}=0.010$ Exp(B) 12,341, which means that education has a significant effect of 12.3 times on open defecation behavior, and latrine ownership with a value of $\text{sig}=0.004$ Exp(B) 12,561, which means ownership latrines have a significant effect of 12.5 times on open defecation behavior.

Knowledge Factor Analysis with BABS Behavior

The results showed that respondents who had good knowledge of 50 people (58.1%) with positive open defecation as many as 24 people (27.9%) and negative defecation as many as 26 people (30.2%) while respondents who lacked knowledge were 36 people (41.8%) with positive defecation. as many as 32 people (37.2%) and negative defecation as many as 4 people (4.7%). Febrianti's research (2016) that the effect of knowledge on the behavior of stopping open defecation is obtained with a P value of < 0.001 it can be concluded that there is an influence of knowledge on the behavior of stopping open defecation. Respondents who have high knowledge have an opportunity not to open defecation 2.75 times compared to respondents who have low knowledge. From Talinusa's research (2017), there is a relationship between knowledge and open defecation behavior with a p value of 0.000 (11).

Knowledge is an important domain for the formation of one's actions (overt behavior), behavior based on knowledge will be more lasting than behavior that is not based on knowledge (4). So that knowledge has a very big role in shaping a behavior.

According to the researcher's assumptions based on the results of the study, it can be seen that the majority of respondents have good knowledge compared to respondents who have less knowledge with almost all of them practicing open defecation. Meanwhile, respondents who have good knowledge are almost equal in number between those who practice open defecation and those who do not. Respondents who have good knowledge but still/have done open defecation. This is different from the existing theory which states that the better a person's knowledge, the better the person's behavior will be, but in this study half of the respondents who had good knowledge still/had done open defecation. According to the researcher's view, this incident was obtained because there were several factors that influenced people to practice open defecation even though their knowledge level was good. This factor is the socio-economic condition of the community where people with low socio-economic conditions will have an impact on the ownership of the family latrine itself, by not having a family latrine it will have an impact on the behavior of the community will defecate openly. Another factor that influences

people's behavior to do open defecation is the habit factor, where people who are on the banks of the river are most likely to do open defecation in the river.

Analysis of Attitude Factors with BABS Behavior

The results showed that respondents who had good attitudes were 58 people (57.4%) with 28 people having positive defecation (32.6%) and negative defecation as many as 30 people (34.9%) while respondents who had poor attitudes were 28 people (32.6%) with all of them positive for open defecation as many as 28 people (32.6%) and there were no respondents who were negative in defecation (0.0%).

For the head of the family who still does not have a latrine or still defecates in the river, it is possible that the family head's income is not an important need because there is a river that can be used as a place to defecate. This is one of the supporting factors. The lack of support from the community such as community leaders, religious leaders, and health workers also encourages the attitude of the head of the family who is lacking. The good attitude of the head of the family is expected to change the behavior of open defecation in the family. A good attitude if supported by supporting facilities and infrastructure will result in an action, in this case the use of latrines. The better the attitude of the individual in using the latrine according to its use (12).

According to the researcher's assumptions, based on the results of the study, it can be seen that the majority of the people studied have good attitudes and a small part of the community has a less or less attitude towards the behavior of people who regularly/have used open defecation (BABS). Besides that, it can also be seen that people who have a good attitude are found that half of them still/have done open defecation and half have never done open defecation. This result is almost the same as the knowledge of the community according to the researcher's view that there are several factors that influence the behavior of the community to do open defecation even though their attitude is categorized as good in this study. This factor is the socio-economic condition of the community where people with low socio-economic conditions will have an impact on the ownership of the family latrine itself, by not having a family latrine it will have an impact on the behavior of the community will defecate openly in rivers, gardens and so on. Another factor that influences people's behavior to practice open defecation is the habit factor, where people who live and settle on the banks of the river are most likely to practice open defecation in the river.

Analysis of Educational Factors with open defecation behavior

The results showed that respondents with higher education (SMA/PT) were 55 people (64.0%) with positive open defecation as many as 27 people (31.4%) and negative defecation as many as 28 people (32.6%) while respondents with high education low (SD/SMP) as many as 31 people (36.0%) with positive defecation as many as 29 people (33.7%) and negative defecation as many as 2 people (2.3%).

Widowati's research (2015) states that the percentage of respondents with higher education with open defecation behavior is less than the percentage with low education so that statistically there is a relationship between education and open defecation behavior. Respondents with low education have a behavioral risk of 4.230 times greater for open defecation (BABS) behavior than respondents with higher education.

According to the researcher's assumptions based on the results of the study, it can be seen that the majority of respondents are educated in the high category (SMA/College) and the

minority of respondents are low-educated (SD/SMP) with most of the people's behavior remaining/have practiced open defecation and only 2 respondents with low education are never do open defecation. From the results of this study, it can also be seen that respondents who are in the category of higher education (high school/college) half of whom still/have had open defecation, if viewed based on the characteristics of the respondents, it is known that the majority of people with higher education education behave well by not doing open defecation. In this case, the respondent's high education (University) is reflected in his knowledge and good understanding as well as his socio-economic where he has a good job and earns above the minimum wage. So that with a sufficient socio-economic will have an impact on having good household facilities by having their own family latrine. It is different with respondents who are in the educated category when viewed from the characteristics of respondents who have an equivalent high school education. With a lower-middle socioeconomic level and an average livelihood as unskilled laborers, street vendors and residing in settlements along rivers and agricultural areas, it is likely that they will continue to defecate indiscriminately even though the respondent's education level is equivalent to high school. This reflects that a person with a high school education or equivalent does not reflect not to do open defecation, other factors greatly influence the person to do open defecation, including the level of income that only provides for the needs of daily life so that it has an impact on meeting other additional needs such as building their own family latrine. Besides that, the location of residence also greatly influences the community to carry out open defecation even though they have an equivalent high school education level. Where it is still found that people who live on riverbanks or in plantation areas still practice open defecation in rivers and plantations by planting them. This has become a habit of the community to do open defecation.

It can be concluded that a person's habits can change according to the knowledge or level of education obtained. The development of understanding obtained on the bench of education affects someone who can give birth to appropriate attitudes and behavior in society. / in the environment.

Analysis of Income/Socio-Economic Factors with open defecation behavior

The results showed that respondents who had a high income/social economy (\geq Rp. 2,700.00) were 32 people (37.2%) with 9 people having positive defecation (10.5%) and 23 people having open defecation (26, 7%) while respondents who have low income/social economy ($<$ Rp. 2,700,000) are 54 people (62.8%) with positive open defecation as many as 47 people (54.7%) and negative open defecation as many as 7 people (8, 1%).

The results of Alhidayat's research (2016), show the results of chi square obtained pValue 0.046 smaller than (0.05). This shows that there is a significant relationship between income and open defecation habits in the work area of the UPTD Puskesmas Kampar Kiri Hulu II 2016. Analysis of the close relationship between the two variables obtained the Odd Ratio (OR) = 2.045 (95% CI = 1.063-3.937). These results indicate that people with low incomes are at risk of having open defecation 2 times more than people with high incomes.

Social status is a set of rights and obligations that a person has in his society. People who have high social status will be placed higher in the structure of society than people with low social status. Economic improvement aims to increase income per capita (economy) to combat poverty, and can affect the increase in people's access to higher education. Highly educated people can influence the increase in the ability to prevent disease, increase the ability to see and improve health (4).

A person's economic status determines the availability of the necessary facilities for certain activities, so that this socioeconomic status influences changes in behavior in a person. The level of income is related to the economic status of the family which will affect the health status of the community. The economy is a measure of the level of welfare of a society. Because the economy is a determining indicator of community behavior in meeting daily needs including the use of family latrines (13)

According to the researcher's assumptions based on the results of the study, it can be seen that the majority of respondents have low income (less than the minimum wage) with most of the behavior of the community continuing/have practiced open defecation and very few who do not practice open defecation and a small proportion of respondents who have high income (largely from the minimum wage) with most of them never defecate indiscriminately. In the opinion of researchers, community income can be reflected by purchasing power or ownership of facilities/support facilities for daily needs used by the community. Just as people with high incomes will be able to meet their needs such as ownership of their own family latrines, so that defecation is carried out in family latrines, not by defecating in any place. In contrast to the case with low-income communities, where to cover their daily needs, they feel a little lacking, it will also have an impact on the procurement of other needs such as the procurement of family latrines that require money for construction, so that the need for ownership of the family's own latrine will be canceled and will have an impact on a sustainable basis with the behavior of the community itself to continue/have had open defecation.

Analysis of latrine ownership factors with open defecation behavior

Based on the results of the study, 44 people (51.2%) had a latrine with a positive open defecation as many as 16 people (18.6%) and a negative defecation as many as 28 people (32.6%) while the respondents who did not have a latrine were 42. 40 people (48.8%) with positive defecation (46.5%) and 2 people with negative defecation (2.3%).

The results of this study are in line with research conducted by Febry Talakua (2020), the results showed that of the 34 respondents who did not have a latrine against the category of open defecation behavior as many as 34 respondents (100.0%), while of the 8 respondents who had a latrine to the category of not behaving in open defecation as many as 8 respondents (100.0%). The results of the chi-square test obtained $-value = 0.000 < 0.05$. Based on the results of the chi-square statistical test in this study that there is an effect of latrine ownership with open defecation behavior, this proves that open defecation habits are also influenced by latrine ownership, but there are still many respondents who have latrines who continue to practice open defecation habits that have been entrenched.

Availability of latrines is the availability of latrine facilities that are owned and used as a place to dispose of and collect human waste/unclean which is commonly called a latrine or WC, so that the excreta is stored in a certain place and does not become the cause or spread of disease and pollute the residential environment. One way to prevent disease from multiplying and to keep the environment clean and healthy is to build latrines in every house. Because the latrine is one of the basic human needs. So it is expected that each individual to use the latrine facilities to defecate. The use of latrines will be beneficial to keep the environment clean, comfortable and odorless (14).

According to the researcher's assumptions, based on the results of the study, it can be seen that half of the respondents studied have their own family latrines with most of the defecation carried out in the family latrine and do not defecate in the open/outside the latrine, only a small

proportion of respondents who defecate not in the latrine, according to the researcher, This could be due to the respondent's settlement being on the riverbank or working in a garden that is far from home and possibly due to the respondent's habit of having or not having a latrine. Meanwhile, respondents who do not have a family latrine, most of whom do defecation outside the latrine, only a small proportion do defecate in the latrine. According to the observations of researchers in several hamlets in the village of Jawa Behind, public/shared latrines have been built for the needs of the community, but this condition does not change the behavior of the community to use these latrines because according to some respondents stated that in public/shared latrines sometimes queues often occur in the community. the use of these latrines so that people defecate in the river or in the garden even behind the resident's house. In this case the researcher can also explain that every family who does not have a family latrine is due to their inability to buy materials for making latrines, so they use rivers, vacant land (gardens and backyards) and artificial ponds as places to dispose of feces.

Factor Analysis of the Role of Health Workers with Open Defecation Behavior

Based on the results of the study, it was found that the role of health workers who supported as many as 31 people (36.0%) with positive defecation as many as 9 people (10.5%) and negative defecation as many as 22 people (25.6%) while the role of health workers who did not support as many as 55 people (64.0%) with positive defecation as many as 47 people (54.7%) and negative defecation as many as 8 people (9.3%).

The results of this study are not in line with the research conducted by Wahyu Afiatul Qudsiyah (2015). The results of the analysis showed that there was no relationship between the support of health workers and the high number of OD. The role of officers in the low-enough category has a 2,400 times greater chance of having a high number of OD compared to those in the good category, although the results show no relationship.

Health workers are the most important factor in influencing behavior change. With health promotion carried out by health workers, people are more motivated and interested so they tend to change their behavior. In improving public health can be done by way of health promotion (health promotion). Health promotion itself can be done by means of training in the community, transforming knowledge and providing support to the community (4).

According to the researcher's assumptions based on the results of the study, it can be seen that the majority of health workers' roles are low for the Stop open defecation program, with most of the community's behavior being positive for open defecation compared to a small number of negative open defecation. According to researchers, the role of officers in this case is not to support the community to stop open defecation, but some people have not received counseling or education from health workers about clean and healthy living behavior and maintaining environmental sanitation. So that people who have not received counseling from health workers still/have done open defecation. Meanwhile, the role of health workers who support the Stop open defecation program is to the community, with most of them having implemented the program to defecate in family latrines or public/shared latrines. The support of community leaders and health workers can increase public awareness in using latrines and can also encourage changes in community behavior so that they can live clean and healthy behaviors. The higher or the absence of changes in open defecation behavior may be the absence of social sanctions such as reprimands, warnings in society created by the community itself about the open defecation behavior.

Based on information obtained by researchers from health workers, outreach activities about environmental health to the community are carried out once a month, which is a program from

the local health center. This activity was carried out in all villages under the working area of the Langsa Kota Health Center. However, in the field, not all communities are involved in environmental health outreach activities. The environmental health promotion program has become a permanent program that will continue to be carried out in the future by the Langsa City Health Office and Langsa City Health Center.

4. CONCLUSION

The most dominant factor influencing the behavior of the open defecation community, namely education has a significant effect of 12.3 times on open defecation behavior, and the ownership of latrines has a significant effect of 12.5 times on open defecation behavior. It is hoped that the people of the village of Behind Java will always seek information about environmental health more broadly so that all respondents, especially the general public, can understand and know the negative impacts that can be caused by open defecation for the health of individuals and the general public and have awareness and response. It is better to prevent and always maintain a healthy and clean environment as a preventive measure against sources of disease that have a negative impact on health.

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