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# Analysis Of Community Behavior Factors Influence The Use Of Healthy Latrines In The Work Area Of Langsa Kota Public Health Center

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**ABSTRACT**

The challenges faced by Indonesia in relation to health development, particularly in the fields of hygiene and sanitation are still very large. Data from the Ministry of Health in 2019 shows that the national use of healthy latrine facilities in Indonesia is 87.81% and Aceh is included in the top 10 in the use of healthy latrine facilities at 79.42%. The purpose of the study was to determine the effect of knowledge, attitudes, income, support from health workers, support from community leaders and dominant factors on the low use of healthy latrines in the work area of the Langsakota Health Center in 2021.The research method uses an analytical survey with a cross-sectional approach design. The research population was 38,759 people with a sampling technique using accidental sampling of 100 people. Data analysis used univariate, bivariate with chi-square test and multivariate with binary multiple linear regression.The results of the bivariate study showed that the p-value of knowledge was 0.000, attitude was 0.004, income was 0.000, health worker support was 0.000 and support from community leaders was 0.000, while multivariately the knowledge sig value was 0.006, attitude was 0.007, income was 0.001, support health workers is 0.047 and the support of community leaders is 0.003.There is an influence of knowledge, attitude, income, support from health workers, support from community leaders and income are the dominant factors for the low use of healthy latrines in the work area of the Langsakota Health Center in 2021. For this reason, it is recommended that the puskesmas increase outreach activities on the use of healthy latrines, collect data on families who have latrines or not and involve community leaders to change community behavior related to the use of healthy latrines

**Keywords:** Behavior, Low Utilization of Healthy Latrin

## INTRODUCTION

The degree of health is influenced by various multifactors such as environmental conditions, community behavior, health services and genetics. Various scientific circles generally argue that the determinant of the degree of public health, in addition to environmental conditions, is community behavior.

The World Health Organization (WHO) in 2019 reported that 2 billion people still do not have basic sanitation facilities such as toilets or latrines. Of these, 673 million people still defecate in open places, such as in road ditches, into bushes or into open bodies of water (3). The percentage of the population who defecate in the open is Mexico (8%), Malawi (63%), Colombia (15%), Indonesia (48%), Pakistan (50%), Nigerian (51%), Timor Leste (74%), Haiti (76%), Ethiopia (90%) and Chad (91%) (WHO, 2019).

The challenges faced by Indonesia in relation to health development, especially in the fields of hygiene and sanitation are still very large. For this reason, it is necessary to carry out an integrated intervention through a total sanitation approach. The government changed the approach to national sanitation development from a sectoral approach by providing hardware subsidies which so far have not provided the leverage for changes in hygienic behavior and increased access to sanitation, to a community-based total sanitation approach that emphasizes 5 (five) changes in hygienic behavior which are in one pillar. is there a stop open defecation (SBS). The SBS pillar contains cultivating defecation behavior and providing defecation facilities that meet the requirements.

Data from the Ministry of Health in 2019 shows that the national use of healthy latrine facilities in Indonesia is 87.81%. The description of the lowest use of healthy latrine facilities is in Papua Province (53.74%), West Kalimantan (71.91%), Central Kalimantan (73.27%), North Maluku (74.19%), Maluku (74.57% ), Gorontalo (79.12%), Central Sulawesi (79.35%), Aceh (79.42%), West Sumatra (79.44%) and West Java (82.23%) (6). Compared to the previous year, 2018 showed that access to sanitation or healthy latrine facilities globally showed a fairly rapid increase. In 2018 in Indonesia, the percentage was 69.27% (7). However, in Aceh province, proper sanitation has experienced a decline in position which in 2018 was not among the 10 lowest provinces in terms of ownership of healthy latrines but in 2019 was included in the lowest province in access to healthy latrines.

Sanitation improvement must be pursued by the government so that the goals of national commitments and sustainable development goals can be achieved in accordance with the agreed targets of countries in the world. The contents of the Sustainable Development Goals (SDGs) are in line with the sixth goal that by 2030 achieve access to adequate and equitable sanitation and hygiene for all, and stop the practice of open defecation. In the National Medium-Term Development Plan (RPJMN) 2020-2040, the

percentage of villages/kelurahan that stop defecating openly (SBS) is based on 3 criteria, namely (1) All people have defecated only in safe and proper latrines and disposed of feces/baby droppings. only to safe and proper latrines, (2) There is no visible human feces in the surrounding environment and (3) There is a general monitoring mechanism made by the community to achieve 100% of the heads of households having proper and safe latrines (Sudra et al., 2021).

Based on these indicators, it shows that the Indonesian government must move quickly to be able to achieve indicators both nationally and globally in accordance with the mandate contained in the RPJMN and SDGs. Sanitation problems cannot be separated from the environment and community behavior in improving health status (Wijayanti & Maulana, 2019).

## METHODS

This study is a quantitative study with an analytical survey design with a cross-sectional approach. The existence of research using analytic surveys, the research will explore how and why the phenomenon occurs by determining the exposure (exposure) and outcome (disease outcome) simultaneously on each research subject (Swarjana et al., 2015). The research population was 38,759 people in the working area of the Langsa Kota Health Center in 2021. The sample is 100 respondents based on the Slovin formula, the researcher uses accidental sampling technique, then the way to collect respondent data is as follows: Every patient who comes to visit the Puskesmas will be used as a sample, the sample is an adult patient and has their own latrine. If the required number of respondents has been met, then the data collection process is stopped and then data analysis is carried out.

## RESULTS AND DISCUSSION

### Univariate Analysis

Table 1. Frequency Distribution of Respondents' Characteristics of Using Healthy Latrine in the Working Area of the Langsa Kota Health Center in 2021

| Gender | **Frequency** | **Percentage (%)** |
|---|---|---|
| Man | 48 | 48 |
| Woman | 52 | 52 |
| Age | | |
| 19-24 years old | 1 | 1 |
| 25-30 years | 22 | 22 |

| | | |
|---|---|---|
| 31-36 years old | 33 | 33 |
| 37-42 years old | 6 | 6 |
| 43-48 years old | 17 | 17 |
| 49-54 years old | 14 | 14 |
| 55-60 years old | 3 | 3 |
| 61-66 years old | 4 | 4 |
| Education | | |
| junior high school | 6 | 6 |
| senior High School | 84 | 84 |
| PT | 10 | 10 |
| Work | | |
| Does not work | 35 | 35 |
| Work | 65 | 65 |

Based on the table above, it shows that based on the characteristics of the respondents, there are 48 men (48%) and 52 women (52%). For ages 19-24 years as many as 1 person (1%), 25-30 years as many as 22 people (22%), 31-36 years as many as 33 people (33%), 37-42 years as many as 6 people (6%), 43-48 years as many as 17 people (17%), 49-54 years as many as 14 people (14%), 55-60 years as many as 3 people (3%) and 61-66 years as many as 4 people (4%). For junior high school education as many as 6 people (6%), high school as many as 84 people (84%) and PT as many as 10 people (10%). For work not working as many as 35 people (35%) and working as many as 65 people (65%).

Table 2. Frequency Distribution of Respondents' Knowledge in the Langsa Kota Health Center Working Area in 2021

| **No** | Knowledge | **Frequency** | **Persentage (%)** |
|---|---|---|---|
| 1 | Not enough | 48 | 48 |
| 2 | Well | 52 | 52 |
| | Total | 100 | 100 |

Based on the table above, it can be seen that from 100 respondents there are 48 people (48%) who have less knowledge, and 52 people (52%) who have good knowledge.

Table 3. Frequency Distribution of Respondents' Attitudes in the Langsa City Health Center Working Area in 2021

| **No** | Attitude | **Frequency** | **Persentage (%)** |
|---|---|---|---|
| 1 | Not enough | 58 | 58 |
| 2 | Well | 42 | 42 |
| | Total | 100 | 100 |

Based on table 4.5. above it can be seen that from 100 respondents there are 58 people (58%) who have a poor attitude, and 42 people (42%) who have a good attitude.

Table 4. Frequency Distribution of Respondents' Income in the Work Area of the Langsa Kota Health Center in 2021

| **No** | Income | **Frequency** | **Persentage (%)** |
|---|---|---|---|
| 1 | Low | 46 | 46 |
| 2 | Tall | 54 | 54 |
| | Total | 100 | 100 |

Based on the table above, it can be seen that from 100 respondents there are 46 people (46%) who have low incomes and 54 people (54%) who have high incomes.

Table 5. Distribution of the Frequency of Health Officer Support in the Langsa Kota Health Center Working Area in 2021

| **No** | Health Officer Support | **Frequency** | **Persentage (%)** |
|---|---|---|---|
| 1 | Not enough | 53 | 53 |
| 2 | Well | 47 | 47 |
| | Total | 100 | 100 |

Based on the table. above it can be seen that from 100 respondents there are 53 people (53%) who have less support from health workers and 47 people (47%) who have good health care workers.

Table 6. Frequency Distribution of Community Leaders' Support in the Langsa City Health Center Working Area in 2021

| **No** | Community Leader Support | **Frequency** | **Percentage (%)** |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 1 | Not enough | 49 | 49 |
| 2 | Well | 51 | 51 |
| | Total | 100 | 100 |

Based on the table above, it can be seen that from 100 respondents there are 49 people (49%) who have less support from community leaders and 51 people (51%) who have good support from community leaders.

Table 7. Distribution of Frequency of Use of Healthy Latrine in the Working Area of Langsa City Health Center in 2021

| **No** | Community Leader Support | **Frequency** | **Percentage (%)** |
|---|---|---|---|
| 1 | No | 55 | 55 |
| 2 | Yes | 45 | 45 |
| | Total | 100 | 100 |

Based on the table above, it can be seen that from 100 respondents there were 55 people (55%) who did not use healthy latrines and 45 people (45%) who used healthy latrines.

**Bivariate Analysis**

The cross tabulation between Knowledge, Attitude, Income, Support of Health Officers and Support of Community Leaders with the Use of Healthy Latrine in the Working Area of the Langsa City Health Center in 2021 can be seen in the following table:

Table 8. Cross-tabulation results on the relationship between knowledge and the use of healthy latrines in the Langsa Kota Puskesmas working area in 2021

| Knowledge | **Healthy Use of Latrine** | | | | **Total** | | **P value** |
|---|---|---|---|---|---|---|---|
| | **No** | | **Yes** | | | | |
| | **f** | **%** | **f** | **%** | **f** | **%** | |
| Not enough | 44 | 44 | 4 | 4 | 48 | 48 | 0,000 |
| Well | 11 | 11 | 41 | 41 | 52 | 52 | |
| Total | **55** | **55** | **45** | **45** | **100** | **100** | |

Based on the table above, it can be seen that from 48 people (48%) who have less knowledge by not using healthy latrines as many as 44 people (44%) and using healthy latrines as many as 4 people (4%),

while out of 52 people (52%) who have good knowledge by not using healthy latrines as many as 11 people (11%) and using healthy latrines as many as 41 people (41%)

From the results of the chi-square analysis in the attachment of the chi-square test table, the relationship between knowledge and use of healthy latrines in the Langsa City Health Center Work Area in 2021 is known that the probability value (0.000) <sig =0.05. The results of this analysis meet the criteria for the relationship hypothesis, so it can be seen that knowledge has a significant relationship with the use of healthy latrines.

Table 9. Cross-tabulation results of the relationship between attitudes and the use of healthy latrines in the Langsa City Health Center Work Area in 2021

| Attitude | **Healthy Use of Latrine** | | | | **Total** | | **P value** |
|---|---|---|---|---|---|---|---|
| | **No** | | **Yes** | | | | |
| | **f** | **%** | **f** | **%** | **f** | **%** | |
| Not enough | 38 | 38 | 20 | 20 | 58 | 58 | 0,013 |
| Well | 17 | 17 | 25 | 25 | 42 | 42 | |
| Total | **55** | **55** | **45** | **45** | **100** | **100** | |

Based on table 4.9. From the above, it can be seen that from 58 people (58%) who have a bad attitude by not using healthy latrines as many as 38 people (38%) and using healthy latrines as many as 20 people (20%), while from 42 people (42%) who have a healthy attitude. good by not using healthy latrines as many as 17 people (17%) and using healthy latrines as many as 25 people (25%).

From the results of the chi-square analysis in the attachment of the chi-square test table, the relationship between attitudes and the use of healthy latrines in the Langsa City Health Center Work Area in 2021 is known that the probability value is (0.013) <sig =0.05. The results of this analysis meet the criteria for the relationship hypothesis, so it can be seen that attitudes have a significant relationship with the use of healthy latrines.

Table 10. The results of the cross-tabulation of the relationship between income and the use of healthy latrines in the working area of the Langsa City Health Center in 2021

| Income | **Healthy Use of Latrine** | | | | **Total** | | **P value** |
|---|---|---|---|---|---|---|---|
| | **No** | | **Yes** | | | | |
| | **f** | **%** | **f** | **%** | **f** | **%** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Low | 42 | 42 | 4 | 4 | 46 | 46 | 0,000 |
| Tall | 13 | 13 | 41 | 41 | 54 | 54 | |
| Total | **55** | **55** | **45** | **45** | **100** | **100** | |

Based on the table above, it can be seen that from 42 people (42%) who have low income by not using healthy latrines as many as 42 people (42%) and using healthy latrines as many as 4 people (4%), while of 54 people (54%) who use healthy latrines. have a high income by not using healthy latrines as many as 13 people (13%) and using healthy latrines as many as 41 people (41%).

From the results of the chi-square analysis in the attachment of the chi-square test table, the relationship between income and the use of healthy latrines in the Langsa City Health Center Work Area in 2021 is known that the probability value (0.000) <sig =0.05. The results of this analysis meet the criteria for the relationship hypothesis, so it can be seen that income has a significant relationship with the use of healthy latrines.

Table 11. Cross-tabulation results on the relationship between health worker support and the use of healthy latrines in the Langsa Kota Puskesmas working area in 2021

| **Health Officer Support** | **Healthy Use of Latrine** | | | | **Total** | | **P value** |
|---|---|---|---|---|---|---|---|
| | **No** | | **Yes** | | | | |
| | **f** | **%** | **f** | **%** | **f** | **%** | |
| Kurang | 43 | 43 | 10 | 10 | 53 | 53 | 0,000 |
| Baik | 12 | 12 | 35 | 35 | 47 | 47 | |
| **Total** | **55** | **55** | **45** | **45** | **100** | **100** | |

Based on the table above, it can be seen that from 53 people (53%) who have less support from health workers by not using healthy latrines as many as 43 people (43%) and using healthy latrines as many as 10 people (10%), while from 47 people (47%) ) who have good health care workers support by not using healthy latrines as many as 12 people (12%) and using healthy latrines as many as 35 people (35%).

From the results of the chi-square analysis in the attachment of the chi-square test table, the Relationship between Health Officer Support and the Use of Healthy Latrine in the Langsa City Health Center Work Area in 2021, it is known that the probability value (0.000) <sig =0.05. The results of this analysis meet the criteria for the relationship hypothesis, so it can be seen that the support of health workers has a significant relationship with the use of healthy latrines.

Table 12. Cross-tabulation results on the relationship between community leaders' support and the use of healthy latrines in the Langsa Kota Puskesmas working area in 2021

| Community Leader Support | Healthy Use of Latrine | | | | Total | | P value |
|---|---|---|---|---|---|---|---|
| | No | | Yes | | | | |
| | f | % | f | % | f | % | |
| Not enough | 42 | 42 | 7 | 7 | 49 | 49 | 0,000 |
| In accordance | 13 | 13 | 38 | 38 | 51 | 51 | |
| Total | **55** | **55** | **45** | **45** | **100** | **100** | |

Based on the table above, it can be seen that from 49 people (49%) who have less support from community leaders by not using healthy latrines as many as 42 people (42%) and using healthy latrines as many as 7 people (7%), while from 51 people (51%) 13 people (13%) have good support from community leaders by not using healthy latrines and 38 people (38%).

From the results of the chi-square analysis in the attachment of the chi-square test table, the Relationship between Community Leader Support and Use of Healthy Latrine in the Langsa City Health Center Work Area in 2021 it is known that the probability value (0.000) <sig =0.05. The results of this analysis meet the criteria for the relationship hypothesis requirements, so it can be seen that the support of community leaders has a significant relationship with the use of healthy latrines.

**Multivariate Analysis**

Multivariate analysis was carried out to see the effect of each independent variable and jointly on the dependent variable,

Table 13. Selection of Variables that Become Model Candidates in the Logistics Regression Test Based on Bivariate Analysis

| **No** | Variable | **p value (sig)** |
|---|---|---|
| 1 | Knowledge | 0,000 |
| 2 | Attitude | 0,004 |
| 3 | Income | 0,000 |
| 4 | Health Officer Support | 0,000 |
| 5 | Community Leader Support | 0,000 |

Table 13. shows all variables have p value <0.05. Thus the 5 (five) variables are eligible to enter the multivariate model.

Table 14. Results of the First Stage of Multiple Logistic Regression Analysis

| No | Variable | B | p (Sig) | Exp (B) | 95% C.I | |
|---|---|---|---|---|---|---|
| | | | | | Lower | Upper |
| 1 | Knowledge | 2,664 | 0,006 | 14,348 | 2,118 | 97,184 |
| 2 | Attitude | 2,864 | 0,007 | 17,523 | 2,183 | 140,635 |
| 3 | Income | 3,872 | 0,001 | 48,042 | 4,606 | 501,101 |
| 4 | Health Officer Support | -2,394 | 0,047 | 0,091 | 0,009 | 0,972 |
| 5 | Community Leader Support | 3,409 | 0,003 | 30,221 | 3,128 | 291,938 |
| | Constant | -6,407 | 0,000 | 0,002 | | |

**DISCUSSION**

Knowledge is the most important basic component to shape a person's behavior in doing or acting. Knowledge will provide a basis for a person to do what is in his mind and according to what he believes to be true. Good knowledge will be displayed with good behavior in accordance with the theory of Achmadi (2013) which explains that without knowledge a person does not have a basis for making decisions and determining actions against the problems at hand.

Attitudes are related to responses or responses that are reflected in knowledge that cannot be seen from actions but from special characteristics that a person displays in receiving information. Someone who receives an information or stimulus will cause symptoms as a response to accept or not accept whether consciously or not. It can be seen from the research which shows that as many as 42% of respondents are well behaved with 25% using healthy latrines. Generally, respondents who already have good knowledge will accept that the information is true, so they behave well towards the use of healthy latrines in their homes. In accordance with the theory Achmadi (2013) describes that there are 3 components of attitude, namely trust, emotional life and the tendency to act. Trust is formed from the information he receives or knowledge that he believes is true so he shows it with a good attitude. However, from a good attitude, 42% found 17% who did not use healthy latrines. This is because the level of respondents in accepting attitudes is still at the basic stage or accepting but there is no attempt

to take action coupled with knowledge that is still limited to knowing, of course, it will affect the level of attitude(Wijayanti & Maulana, 2019)

Income is associated with the family's ability to be able to access the needs of both food, clothing and housing and even health. Income contributes for sure to provide convenience for families related to the provision of families to make family latrines not only available with the conditions as they are but in accordance with health and the requirements for building healthy latrines. This can be seen from 54% of respondents with income according to 41% using healthy latrines. The results of this data show that the higher the level of family income, the more he will fulfill other needs such as healthy latrines and make it easier for him to use healthy latrines so he does not need to ride or at least he thinks about the ease of using healthy latrines to provide these facilities at home.

Health worker support relates to how health workers make changes to their behavior through communication to provide health education. The existence of efforts from health workers by providing health education through counseling can be an alternative to improve community behavior in utilizing healthy latrines. However, of the 47% of respondents who received support from health workers, 12% did not use healthy latrines. This is related to the lack of evaluations carried out by health workers regarding the counseling provided(Fitri & Putri, 2016).

The support of community leaders is related to how the roles and behaviors displayed by these figures change people's behavior (Susanti et al., 2020). If in the extension process, in addition to paying attention to communication and characteristics, even evaluation of the success of the extension program can be assisted by the role of community leaders. This can be seen from as many as 51% of respondents who received good support from community leaders with 38% using healthy latrines. The data shows that the role shown by community leaders, namely the local RT/RW coordinates with the government to build healthy latrines in the form of assistance for the construction of septic tanks, RT/RW collects data related to community latrine facilities, RT/RW plays an active role in conducting counseling and coordination with health officials, while the role of religious leaders in addition to attending their counseling is also at the recitation event will insert personal and environmental hygiene on the sidelines of their lectures. External factors such as community leaders will create a little coercion to follow their policies, besides that they will become role models in the community, so that good or bad the information will certainly be followed by the community.

Income is the dominant factor for the low use of healthy latrines in the work area of the Langsakota Health Center in 2021. This is because income will affect the fulfillment of health facilities that can be reached by the community.

**CONCLUSION**

Although good knowledge, good attitude, support from health workers in informing about healthy latrines, even if they are not supported by an adequate economic level, this becomes an obstacle for families to meet the needs of health facilities.

**SUGGESTION**

It is recommended to the Health Office to add environmental health workers at the Langsa City Health Center so that it can increase the reach of environmental health services in the work area of the Langsa City Health Center. The health office is expected to coordinate with the Puskesmas and community leaders to evaluate the shortcomings of each health program, especially the STBM program, so that each indicator of the program can be achieved.

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