Associations between Occupational Factors and Community Leader Support with Latrine Ownership in Southwest Aceh

[1]Yulizar, [2]Heru Santosa, [3]Nurmaini, and [4]Sri Malem

[1]Student of Doctoral Program in Public Health University of Sumatera Utara, Medan.
[1]Lecturer Program in Public Health University of Teuku Umar, Meulaboh, Indonesia
[2,3,4]Lecturer FKM University of Sumatera Utara, Medan, Indonesia
Corresponding author: Yulizar, e-mail: yuli_88_07@yahoo.co.id

Abstract

More than 800 million people defecate in the open rather than using latrines. Although the global mortality rate from diarrheal diseases is declining, poor water and sanitation is responsible for hundreds of thousands of child deaths, as well as high rates of diarrhea, diarrhea-induced malnutrition and stunting in children to date. This study aims to see how the differences in occupation, income and support from community leaders in community groups who have latrines and those who do not. The method used in this study was Observational Analytic with a Cross Sectional approach with a sample of 100 respondents. The statistical tests used were Chi Square and Mann-Whitney. This research was conducted in 2021 in Southwest Aceh Regency. The results showed that there was no relationship between occupation (p=0.604) and support from community leaders (p=0.615) with latrine ownership. Latrine ownership is driven by behavioral factors that change with the support of various parties, both support provided in the form of facilities and support in terms of education provided.

Keywords: Dukungan Tokoh Masyarakat; Kepemilikan Jamban; Pekerjaan

Introduction

An estimated 673 million people in 2017 still defecated in the open, rather than in latrines or toilets. Open Defecation impacts the health of children and contributes to a large number of premature deaths. To date, infectious diseases have been one of the highest causes of morbidity in society, mainly due to diarrheal diseases such as cholera and dysentery. Excessive morbidity and mortality caused by diseases can still be largely avoided, when appropriate interventions are implemented. Experience has shown that, when these interventions are implemented in a timely and coordinated manner, mortality and illness are substantially reduced. Risk factors that promote infectious diseases clean water scarcity, poor sanitation (M. Atumyanbe, 2011)

Sanitation issues are one of the world's main concerns. The World Health Organization (WHO) explains that sanitation is an effort to control all factors of the human physical environment that will cause things that are detrimental to physical development, health, and endurance (Director General of PP and PL, 2011). Regarding open defecation, Indonesia is ranked second or in practice below India, with more than 51 million Indonesians still practicing open defecation (UNICEF, 2015). According to the data, more than 800

million people defecate in the open rather than using latrines. Although the global mortality rate from diarrheal diseases is declining, poor water and sanitation factors have a major influence on hundreds of thousands of child deaths, as well as high rates of diarrhea, diarrhea-induced malnutrition and stunting in children to date (Meyer, et.al., 2019).

A 2006 study by the Indonesia Sanitation Sector Development Program (ISSDP) showed that 47% of the population still defecates in rivers, ponds, gardens and open spaces. The Millennium Development Goals (MDGs) related to access to proper sanitation and safe drinking water in 2015 are 62.41% and 68.87%, while the achievement of access to proper sanitation in Indonesia based on BPS and Ministry of Public Works data in 2012 was 57.35%, while access to safe drinking water only reached 58.05%. Based on BPS analysis in 2007, there were an estimated 25 million Indonesians who still practiced open defecation, placing Indonesia as the country with the 3rd largest population practicing open defecation after India and Nigeria.

Basic sanitation is the minimum environmental health requirement that every family must have to fulfil their daily life (Ministry of Health of the Republic of Indonesia 2016). Basic sanitation consists of: clean water supply, faecal disposal, waste management, wastewater disposal. Based on the Regulation of the Minister of Health number 3 of 2014 concerning Community-Based Total Sanitation (STBM), it is stated that in the context of strengthening efforts for clean and healthy living behaviour, the spread of environment-based diseases, and access to drinking water and basic sanitation, it is necessary to implement community-based total sanitation. (Wika Putra, 2018).

Southwest Aceh (Abdya) is a newly formed district from South Aceh. Abdya has 9 subdistricts, 152 Gampoengs, and 34,080 households. In addition, Abdya also has 13 Community Health Centres (Puskemas) spread across 9 subdistricts. According to STBM Smart data up to 2020, in Abdya there are 5 villages that are still ODF or 3.29% of the total 152 villages. The distribution of ODF villages in Blang Pidie District has one verified village, namely Kuta Tinggi village, Susoh sub-district which was verified by Durian Jangek, Palak Hilir, Pinang and two-storey houses.

Based on the analysis of BPS data in 2017, only 36.3% of households in Abdya have access to proper sanitation. Abdya is also in the top 5 districts with the highest percentage of households free from open defecation in Aceh. There are 31.75% of households in Abdya that have private motorbikes but do not have family latrines, there are no households in Abdya that do not have latrines and motorbikes at the same time. The assumption is that the cause of open defecation is related to water scarcity in Abdya, but based on this BPS data analysis, there are 14% of households in Abdya that have water available but do not have private toilets (BPS Aceh Barat Daya analysis, 2017).

The lack of latrine ownership in households in Abdya District can be caused by various factors, including a lack of public understanding, a lack of support from existing community leaders to encourage the community to have latrines, and various other contributing factors. Therefore, researchers are interested in examining how the support of gampong government figures and religious figures, as well as the support of

health workers, affects latrine ownership in Southwest Aceh District in 2021.

Methods

The method used in this study is Observational Analytical with a Cross Sectional approach with a sample of 100 respondents. The 100 selected respondents were spread across sub-districts in the urban area of Southwest Aceh Regency, were randomly selected, had a monthly income of more than 2 million Rupiah, and owned a house. In this study, two analysis methods were used, namely Univariate and Bivariate Analysis. Univariate analysis is used to see a description of the frequency distribution of both the respondent characteristic data and the variables under study. Meanwhile, bivariate analysis uses the Chi-Square statistical test and the NPAR Test (Mann Whitney Test), because the sample data has an abnormal distribution. This study aims to determine the size of the difference between communities with and without toilets, based on the factors of total family income and community support.

Results

Univariat Analysis

Univariate analysis aims to see an overview of the percentage of research, both in the form of respondent characteristics and research variables. Based on the results of the univariate analysis in table 1, the characteristics of the 100 respondents spread across all districts of South West Aceh are described as follows. Based on Table 1, of the 100 people studied, there were 69 males (69.0%) and 31 females (31.0%) with an age range of 18-34 years as many as 65 people (65.0%), 35-50 years as many as 31 people (31.0%) and > 51 years as many as 4 people (4.00%). 26 respondents (26.0%) work as civil servants, 16 (16.0%) as employees, 7 (7.00%) as honorary teachers, 16 (16.0%) as students, 11 (11.00%) work as farmers, 7 people (7.00%) are self-employed, 3 people (3.0%) are traders, 3 people (3.0%) are housewives and 10 people (10.0%) work in other sectors. As for the level of education of the respondents, 12 people (12.0%) had a Master's/Doctorate degree, 68 people (68.0%) had a Diploma/Bachelor's degree, 14 people (14.0%) had a Senior High School/Madrasah Aliyah degree, 2 people (2.0%) had a Junior High School/Madrasah Tsanawiyah degree, 3 people (3.0%) were still at Elementary School/Madrasah Ibtidaiyah, and 1 person (1.0%) did not attend school. In terms of religion, 100 respondents (100%) were Muslim. As for the results of the analysis of the toilet ownership variable, 72 (72.0%) respondents had toilets, and 28 (28.0%) did not.

Table 1. Results of the Analysis of the Characteristics of the Respondent Variables (Descriptive Analysis of Categorical Data)

No	Responden Characteristic	N = Sampel	%
1	Age		
	- 18 – 34	65	65,0 %
	- 35 – 50	31	31,0 %
	- > 50	4	4,0 %

2	Sex		
	- Male	69	69,0 %
	- Female	31	31,0 %
3	Job		
	- Civil Servants	26	26,0 %
	- Private Employees	16	16,0 %
	- Teachers	7	7,0 %
	- Students	16	16,0 %
	- Farmer	11	13,6 %
	- Self Employed	7	7.0 %
	- Traders	3	3,0 %
	- Housewives	3	3,0 %
	- Others	10	10,0 %
4	Educational Level		
	- Post Graduate	12	12,0 %
	- Under Graduate	68	68,0 %
	- Senior High School	14	14,0 %
	- Junior High School	2	2,0 %
	- Elementary School	3	3,0 %
	- Not in School	1	1,0 %
5	Agama		
	- Islam	100	100,0 %
	- Others	0	0
6	Latrine Ownership		
	- Yes	72	72,0 %
	- No	28	28.0 %

(Data Primer, 2022)

Based on the results of the analysis in table 2, it was found that the average income of the respondents was IDR 3,315,000, with a median income of IDR 3,000,000, a standard deviation of IDR 1,508,586, a minimum income of IDR 2,000,000 and a maximum income of IDR 8,000,000. Meanwhile, the Community Leader Support Score has a Standard Deviation value of 31.83 with an average value of 59.05, a median value of 50.00 with a minimum value of 10 and a maximum of 100.

Table 2. Analysis Results of Research Variables (Numerical Data)

No	Variabel	SD	Mean	Median	Min	Max
1	Total Household Income	1,508,586	3.315.000	3.000.000	2.000.000	8.000.000
2	Community Figure Support	31,83	59,05	50,00	10	100

(Primary Data, 2022)

Bivariat Analysis

Bivariate analysis is a statistical analysis in cross-sectional studies to see how variables are related, influence each other, and differ:

Table 3. Results of the Analysis of the Relationship between Occupation, Difference in Community Income and Community Leader Support with Latrine Ownership in the Community of Southwest Aceh

No	Variabel	Normality Test (Value of p>0,05)	P Value (Sig.P<0,05)
1	Job	0,0020	0,604
2	Total Household Income	0,0010	0,118
4	Community Figure Support	0,0013	0,615

(Primary Data, 2021) Normality Test Data: Kolmogorov Smirnov

No 1. Uji Chi Square, No.2 Uji N-PAR (Mann-Whitney) Ket: normal if P value >0,05

Based on the results of the analysis in Table 3, it can be described that the type of work using the Chi-Square test obtained a value of P = 0.604 (> 0.05), which means that there is no significant relationship between work and toilet ownership. In the community leader support variable, a value of P=0.615 (>0.05) was obtained, which means that there is no significant difference in the support of community leaders in both groups of people who have latrines and those who do not have latrines..

Discussion

Jobs with latrine ownership

In the bivariate analysis of the Chi-Square test related to the relationship between job and latrine ownership, a significant value of 0.604 was obtained, which means that there is no relationship between job and latrine ownership in the family. This study is in line with research also conducted by Lestari in 2015, in which the chi-square test results with = 0.05 obtained a p-value of 0.570 (p>α), which means that there is no relationship between the occupation of the head of the family and the family's ownership of latrines in Leuwikidang Village, UPTD Puskesmas Kasokandel, Majalengka Regency in 2014.

The characteristics of a person's work can reflect the income, social status, education, socioeconomic status, risk of injury or health disorders in a population group. Occupation is also a determinant of risk and exposure specific to a particular field of work and is a predictor of the health status and conditions in which a population works (Herlianto, 2006). and this study is also not in line with Hardinia's research conducted in Leuwikidang Village, Kasokandel District, which found that occupation does not affect the relationship with latrine ownership due to a lack of awareness or willingness to have a family latrine (Hardinia, 2008) and Lestari's research in 2015, which also found a significant value of no relationship between occupation and latrine ownership (Lestari, 2015).

These results are in line with Lestari's 2015 research, which found that income is not closely related to the ownership of toilets in a house. However, this study is not in line with research conducted in India on urban communities where the main cause of open defecation is access to water and sanitation facilities. (Wankhade K, 2015) as well as other research that found the fact that social factors such as caste, level of education, and family income actually influence latrine ownership (Shakya HB, 2015). In India, due to low income levels, the use of shared toilets is a common practice among communities in areas where more than

16 households use the public toilets that have been built (Busienei, et.al. 2019).

Building toilets at the household level is very important to eliminate open defecation. Interventions carried out by the Ministry of Health have always focused on individual-level determinants such as attitudes and behavior, rather than considering all the social determinants that may be related to toilet ownership (Jain A, et.al. 2019). Public toilets built by the government are often very inadequate and of low quality, and once provided, there is no maintenance (Abubakar, 2018). The provision of public toilets can slightly reduce but not end the problem of open defecation among low-income groups living in urban areas. An interesting thing from the latrine ownership data is that there are people who already have latrines but still practice open defecation (4.7%) because of the habit that has been carried out and they usually live near rivers (Yulyani, et.al. 2021).

According to the researchers' assumptions, the motivation related to owning a toilet in a house is not only determined by employment status, which reflects the social status of the community in its group. The better and more famous a person is in their job, the better their understanding of the importance of having a toilet at home should be, but the presence or absence of a toilet in a house is driven by behavioral awareness and understanding of the importance of having a toilet in a house. Work means talking about family income too, income does not guarantee the existence of a toilet in a family if it is not accompanied by a good understanding and awareness of the behavior of each family member. Facts on the ground also show that in Southwest Aceh Regency there are still families with middle and upper-middle incomes who do not have private toilets.

Support from Community Leaders with Toilet Ownership

From the results of the observation analysis using the N-PAR Test (Mann-Whitney), the difference in the support of community leaders for people who have toilets or who do not have toilets was 0.604 (p-value > 0.05), which means that there is no significant difference in the support of community leaders for both groups, those who have toilets and those who do not. This study is in line with the research of Barliansyah et al., 2019, that community leaders are still lacking in supporting the cessation of indiscriminate defecation (68.1%). The results of the multivariate analysis show that there is no influence of the role of community leaders on latrine ownership. The statistical test results obtained a value of p = 0.794 > 0.005, where indiscriminate defecation is not caused by a lack of support from community leaders. Research by Kholilah Samosir et al. in 2019 also found a significance value of 1,000 or > 0.05 between the attitude variable and family latrine ownership. The absence of a relationship in this study also concluded that there were still many respondents with good attitudes who did not have healthy latrines (Samosir et al., 2019).

However, the results of the study are not in line with research conducted by Puji Eka Mathofani in 2020 regarding the relationship between the role of community leaders and latrine ownership (p value = 0.000 <0.05), which statistically means that there is a significant relationship between the support of community leaders and household ownership of healthy latrines. Influential local community leaders can be role models

and examples to be followed in all actions by the head of the family and other family members in the community group in the local area because of every action and word (Mathofani, 2020).

According to the researchers' assumptions, this could happen because the desire of every household to have a healthy toilet in the area is not solely due to the support of community leaders, but because the habit of defecating anywhere is still common among people living in the Southwest Regency of Aceh. This is similar to the opinion of Larosa (2018), that the ownership of a healthy toilet is closely related to people's behavior in using toilets. Because basically everyone will need a toilet as a place to defecate at any time. So the need for a qualified toilet is very important, this is because the use of unqualified toilets, even if they have toilets, will have an impact on the health of the environment and the health of families living around landfills (Larosa, 2018).

Conclusion

People with work or family backgrounds who receive support from community leaders regarding the ownership of toilets are not the reason for whether or not the family has a toilet. However, the ownership of toilets is driven by behavioral factors that change with the support of various parties, both support provided in the form of facilities and support in terms of education provided. Cross-sectoral related agencies are expected to continue to promote and raise awareness of the importance of toilet ownership. The government must promote policies that ensure that every home, whether owned or rented, must be equipped with sanitation facilities. This program can work well if it involves the community, local stakeholders, and landowners. Suggestions for further research should determine the extent of the city government's commitment to improving access to sanitation, reducing the number of people.

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