

The Relationship between Knowledge & Attitude and the Ownership of Healthy Toilets in Drien Kipah Village, Southwest Aceh Regency

Ulvani¹, Fakhurradhi Luthfi², Yulizar³

^{1,2,3} Faculty of Public Health, Teuku Umar University

ABSTRACT

The ownership of healthy toilets is a fundamental aspect of sanitation that should be universally embraced by all households. Data obtained from the Health Office of Southwest Aceh Regency, specifically from the Bineh Krueng Community Health Center, reveals that only 41.05% of households possess healthy toilets. This study aims to investigate the factors influencing the ownership of healthy toilets in Drien Kipah Village, Southwest Aceh Regency. This study employed a quantitative approach with a cross-sectional design, analyzing a population of 112 households. 32 households were selected using the simple random sampling technique as per Slovin's formula. Data collection was conducted through primary means, utilizing questionnaires. Furthermore, the analysis of the data involved both univariate and bivariate methods, employing the chi-squared test to discern relationships. The findings underscore that knowledge (p -value = 0.000), attitude (p -value = 0.000), education (p -value = 0.000), income (p -value = 0.006), and support from healthcare workers (p -value = 0.000) significantly correlate with the ownership of healthy toilets in Drien Kipah Village, Southwest Aceh District.

KEYWORDS: knowledge, attitude, education, income, healthcare worker support, healthy toilets.

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INTRODUCTION

Ownership of healthy toilets is a fundamental aspect of sanitation that should be upheld by every household. A deficiency in sanitary toilet ownership within households can lead to widespread open defecation practices, such as in ditches, rivers, and other open areas, consequently causing various forms of water and environmental pollution and facilitating the spread of diseases (Mukhlisin & Solihudin, 2020).

Data from the World Health Organization (WHO) estimated that 1.1 billion people in 2018 comprising 17% of the global population still engaged in open defecation. Notably, 81% of these individuals resided in the top 10 countries with the highest rates of open defecation. India ranked the highest with 58%, followed by Indonesia (12.9%), China (4.5%), Ethiopia (4.4%), Pakistan (4.3%), Nigeria (3%), Sudan (1.5%), Nepal (1.3%), Brazil (1.2%), and Niger (1.1%) (Hayana *et al.*, 2022).

The 2021 Indonesian Health Profile data reveals that 72.1% of households utilized permanent healthy toilets (Indonesian: *jamban sehat permanen* [JPS]), while 18.9% used semi-permanent healthy toilets (Indonesian: *jamban sehat semi permanen* [JSSP]), and 9.0% used shared

facilities. In the same year, 86.1% of Indonesian households had access to adequate sanitation facilities (healthy toilets). Yogyakarta Province emerged as the frontrunner, boasting 100% of households with access to proper sanitation, followed by South Sulawesi (99.4%) and Central Java (96.1%). Conversely, Banten Province recorded the lowest percentage of households with access to adequate sanitation (healthy toilets) (3.7%), trailed by Papua (56.5%) and West Papua (69.9%) (Indonesia's Ministry of Health, 2021).

According to data from the Health Office of Aceh Province, the percentage of household heads with access to adequate sanitation facilities (healthy toilets) in Southwest Aceh Regency in 2023 varied significantly across different community health centers (Indonesian: *Pusat Kesehatan Masyarakat* [PUSKESMAS]). The highest percentages were observed at Lembah Sabil Health Center (93.27%), Manggeng Health Center (92.83%), Babahrot Health Center (88.97%), and Lhang Health Center (87.41%). Following these, Tangan-Tangan Health Center (81.43%), Kuala Bate Health Center (80.97%), and Ie Mirah Health Center (80.10%) also showed relatively high percentages. Conversely, the lowest percentages were recorded at As Pinang Health Center (76.93%), Alue Sungai Pinang Health

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Center (75.56%), Sangkalah Health Center (69.45%), Blang Pidie Health Center (50.67%), Bineh Krueng Health Center (41.05%), and Susoh Health Center (10.81%).

Based on data from the Health Office of Southwest Aceh Regency in 2023, in the Tangan-Tangan District, specifically at Bineh Krueng Health Center, there were 5 villages where open defecation was still practiced. Among them, Suak Nibong Village has 163 households, of which 40 have permanent healthy toilets (JSP) and 50 have semi-permanent healthy toilets (JSSP). Drien Kipah Village has 112 households, with 64 having permanent healthy toilets (JSP) and 4 having semi-permanent healthy toilets (JSSP). Bineh Krueng Village has 245 households, with 95 having permanent healthy toilets (JSP) and 40 having semi-permanent healthy toilets (JSSP). Furthermore, Drien Jalo Village has 120 households, with 60 having permanent healthy toilets (JSP) and 20 having semi-permanent healthy toilets (JSSP). Lastly, Padang Bak Jok Village has 160 households, with 60 having permanent healthy toilets (JSP) and 25 having semi-permanent healthy toilets (JSSP).

Based on the aforementioned data, researchers are intrigued to investigate the factors associated with the ownership of healthy toilets in Drien Kipah Village, Southwest Aceh Regency.

METHODS

This study employed a quantitative research approach with a cross-sectional design, which involved simultaneous data collection of both the dependent variables (i.e., knowledge, attitude, education, income, and support from healthcare workers) and the independent variable (i.e., ownership of healthy toilets). This design aimed to identify the factors associated with the ownership of healthy toilets in Drien Kipah Village, Southwest Aceh Regency.

The population for this study comprised all household heads in Drien Kipah Village, Southwest Aceh Regency, totaling 112 households.

The samples consisted of 32 household heads from Drien Kipah Village, Southwest Aceh Regency, selected using the simple random sampling technique, and the sample size was determined by applying Slovin's formula.

RESULTS

The analysis of data obtained from questionnaires completed by 32 respondents in Drien Kipah Village, Southwest Aceh Regency, yielded the following findings.

Univariate Analysis

Table 1. Frequency Distribution of Respondents Based on the Level of Knowledge in Drien Kipah Village, Southwest Aceh Regency

Knowledge Level	Frequency	Percentage (%)
Poor	12	37.5

Good	20	62.5
Total	32	100

Source: Processed Data, 2024.

From the table above, it is evident that out of 32 respondents studied in Drien Kipah Village, Southwest Aceh Regency, 37.5% are categorized as having poor knowledge, while 62.5% are categorized as having good knowledge.

Table 2. Frequency Distribution of Respondents Based on the Level of Attitude in Drien Kipah Village, Southwest Aceh Regency

Attitude Level	Frequency	Percentage (%)
Negative	15	46.9
Positive	17	53.1
Total	32	100

Source: Processed Data, 2024.

The table above indicates that out of 32 respondents studied in Drien Kipah Village, Southwest Aceh Regency, 46.9% were found to have a negative attitude, while 53.1% were found to have a positive attitude.

Bivariate Analysis

Table 3 illustrates that among individuals with poor knowledge, 55.5% lack access to a healthy toilet, whereas 44.5% of those with good knowledge do not possess one. Conversely, among individuals with poor knowledge, 14.2% have access to a healthy toilet, while 85.8% of those with good knowledge have one.

The chi-squared test with $\alpha = 0.05$ between knowledge and ownership of toilets yields a p -value of 0.043. This statistical analysis demonstrates a significant relationship between knowledge and ownership of healthy toilets in Drien Kipah Village, Southwest Aceh District.

Table 4 illustrates the correlation between individuals' attitudes and their possession of healthy toilets in Drien Kipah Village, Southwest Aceh District. The data demonstrates that among those with a negative attitude, 78% do not have a healthy toilet, whereas 22% of those with a positive attitude lack possession. Conversely, among those

Table 3. The Relationship between Knowledge and Ownership of Healthy Toilets in Drien Kipah Village, Southwest Aceh Regency

Healthy Toilet Ownership	Knowledge				Total		
	Poor		Good				
	N	%	N	%	N	%	
No Ownership	10	55.5	8	44.5	18	100	0.043
Ownership	2	14.2	12	85.8	14	100	

Source: Processed Data, 2024.

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with a negative attitude, only 7% have a healthy toilet, while a significant majority of those with a positive attitude (93%) do possess one.

The statistical analysis using the chi-squared test with $\alpha = 0.05$ reveals a p -value of 0.000, indicating a strong association between attitude and ownership of healthy toilets in Drien Kipah Village, Southwest Aceh Regency.

DISCUSSION

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The results of the chi-squared test from 32 respondents in Drien Kipah Village, Southwest Aceh Regency reveal a p -value of 0.043, which is less than 0.05. This indicates a significant correlation between knowledge and ownership of healthy toilets in Drien Kipah Village, Southwest Aceh Regency.

This finding aligns with research conducted by

knowledge about the benefits of healthy toilets are more likely to take action to acquire and utilize them effectively.

Knowledge is an essential factor in efforts to improve the management of healthy toilets. With adequate knowledge, individuals have a better understanding and capability to implement proper management practices, including maintenance in case of damage, and ensuring cleanliness to prevent environmental contamination.

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The results of the chi-squared test from 32 respondents in Drien Kipah Village, Southwest Aceh Regency indicate a p -value of 0.000, which is less than 0.05. This indicates a significant correlation between attitude and ownership of healthy toilets in Drien Kipah Village.

These findings are consistent with research conducted by Yahya (2018), which identified a relationship between attitude and family toilet ownership among

Table 4. The Relationship between Attitude and Ownership of Healthy Toilets in Drien Kipah Village, Southwest Aceh Regency

Healthy Toilet Ownership	Attitude				Total		P-Value
	Negative		Positive		N	%	
No Ownership	14	78	4	22	18	100	0.000
Ownership	1	7	13	93	14	100	

Source: Processed Data, 2024.

Apriyanti, Widjanarko *et al.* (2018) in Jatibarang District, Brebes Regency, which also found a significant correlation between knowledge and ownership of healthy toilets (p -value = 0.014).

According to Notoatmodjo, knowledge is the result of human awareness of an object through the sensory process. Behavioral changes towards better health can occur by reducing cultural stigma through providing understanding about the importance of toilet usage alongside enhancing community knowledge.

This study is aligned with research conducted by Widyastutik (2017) titled “*Factors Associated with Ownership of Healthy Toilets in Malikian Village, West Kalimantan.*” The research reveals a significant correlation between good knowledge and ownership of healthy toilets, with a p -value of 0.037. This indicates a notable relationship between knowledge and ownership of healthy toilets.

Moreover, Sumiarni (2019) concluded that there is a significant relationship between knowledge and ownership of healthy toilets, as evidenced by a chi-squared test result yielding a p -value of 0.000, which is less than 0.05. She added that knowledge plays a crucial role in understanding the use and ownership of healthy toilets. Individuals with good

communities in Ponci Hamlet, Polewali Village, Bulukumba Regency, with a p -value of 0.000.

Furthermore, this study aligns with research by Putra and Selviana (2019) on “*Factors Associated with Ownership of Healthy Toilets in Empakan Village, Kayan Hulu District,*” which concluded a significant relationship between attitude and ownership of healthy toilets, also with a p -value of 0.000.

Additionally, this study correlates with research conducted by Wirdawati & Dewi (2021) on “*Factors Associated with Ownership of Healthy Toilets in Penyak Lalang Village, Sintang Regency,*” which also found a significant relationship between attitude and ownership of healthy toilets, with a p -value of 0.000.

Apart from that, this study is consistent with the research conducted by Fitri & Putri (2016) in Baru Semerah Village, Sitinjau Laut District, Kerinci Regency, which identified a correlation between attitude and ownership of healthy toilets (p -value = 0.013). The findings of this study indicate that the majority of household heads with unfavorable attitudes do not own toilets.

According to Anwar (2017), attitude refers to the readiness to act towards a specific object. An individual’s attitude and beliefs are formed based on acquired

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information, which is then interpreted with existing convictions.

CONCLUSIONS

The research findings demonstrate a significant correlation between knowledge & attitudes and the ownership of healthy toilets in Drien Kipah Village, Southwest Aceh Regency.

RECOMMENDATIONS

The community must recognize the importance of using healthy toilets. Moreover, health workers or village authorities should enhance sanitation programs to promote increased ownership of healthy toilets. Health workers can undertake crucial activities, such as community awareness campaigns, to emphasize the significance of owning a healthy toilet.

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