

## THE INFLUENCE OF LIFESTYLE AND FAMILY ATTITUDES REGARDING LATRINES IN PAYA SEUMANTOK VILLAGE, KRUENG SABEE DISTRICT, ACEH JAYA REGENCY 2023

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### *Abstract*

Nationally, only 39% of households use healthy habits, in urban areas (60%) it is higher than in rural areas (23%). The use of latrines is an important health problem in rural areas such as Paya Seumantok Village in Aceh Jaya Regency. Only 19.8% of households have their own toilet in Sukadunia Village. The sample was 196 housewives with children under five, which was carried out in November-December 2023. Data collection was carried out by direct interviews using a questionnaire. The research results showed that only 46.4% of families used latrines, while those who did not use latrines (53.6%) generally used rivers (55.2%) and ponds (38.1%) as a means of defecating. All the variables studied were significantly related, including education, knowledge, attitudes, latrine ownership, clean water facilities, development of community health center officers and support from village officials, Posyandu cadres & NGOs for latrine use. latrine with OR = 27.03 (5.224 – 139.912).

**Keywords:** Lifestyle, Blood Pressure, and Hypertension

### 1. INTRODUCTION

National development is health-oriented, encouraging community independence to live a clean and healthy life. The government is obliged to maintain and improve quality, equitable and affordable health services, maintain and improve the health of individuals, families, communities and the environment. The healthy environment program is related to the global commitment to realizing the Millennium Development Goals (MDG's). One of the goals of the MDGs is "ensure environmental sustainability" or ensure continued environmental development. This goal targets that by 2024 it will halve the proportion of the population who do not have access to safe drinking water and basic sanitation.

The success of health development can be seen from the increase in the level of public health, including through the indicators of Infant Mortality Rate and Under-Five Mortality Rate. The results of the 2021-2022 Indonesian Demographic and Health Survey (SDKI) state that the infant and toddler mortality rates in Indonesia are still quite high, namely 35 and 46 per 1,000 live births. When compared with Aceh Province, the infant and under-five mortality rates are higher than the national figures, namely 44 and 50 per 1,000 live births. The cause of the high death rate is infectious diseases such as diarrhea, acute respiratory infections (ARI), tuberculosis (TB) and malaria. Diarrhea is the first cause of death in infants. The results of the 1997 IDHS stated that the prevalence of diarrhea in children under five in Aceh was 12.7%. This figure is higher when compared to the national average, namely 10.4%.

Providing clean water can prevent diarrheal disease by 35% and the use of healthy latrines can prevent diarrheal disease by 28%. Morbidity and mortality rates due to diarrhea tend to increase with a decrease in latrine use. When toilet use reached its peak

in the Special Region of Yogyakarta (DIY), the diarrhea morbidity and mortality rates were seen to be the lowest, namely 100 and 17 cases per 100,000 population. In contrast, when the level of latrine use was at the lowest level in West Kalimantan, the highest diarrhea morbidity and mortality rates were seen, namely 940 and 166 per 100,000 population (Maubana & Theodolfi, 2022).

Ownership and use of healthy toilets is one of the indicators of the Clean and Healthy Living Behavior (PHBS) program for household management. Based on the results of the PHBS study, 3 nationally the percentage of households using healthy latrines is (39%), in urban areas (60%) much higher than in rural areas (23%). The percentage of households using healthy latrines in Aceh Province is slightly above the national average, namely 39.6% (Hayati et al., 2021). Meanwhile, the expected target by the end of 2021 is that 80% of families have access to a toilet.

## **2. RESEARCH METHODS**

This research uses a cross-sectional study design to determine predisposing factors, enabling factors and reinforcing factors related to family latrine use behavior. This research was carried out in Paya Seumantok Village, Sukakarya District, Aceh Jaya Regency in November – December 2023. The population in this study is all households who live permanently or have a tendency to live permanently in Sukawarni Village, Sukakarya District, Aceh Jaya Regency. The sample was housewives who had toddlers aged 12-59 months. The subject was chosen as a housewife because she was considered to know more about the behavior and habits of family members, including children under five, in using the latrine as a means of defecating. The sample size in this study was calculated based on the hypothesis test formula with a difference of 2 proportions. Based on this formula, the number of samples required is 196 samples.

Primary data is data obtained by researchers from original sources. This primary data is the main data that will be processed and examined in collecting data in this research (Indra & Cahyaningrum, 2019). This primary data source was obtained from accurate data originating from Paya Seumantok Village as a place for research and research implementation. Secondary data is data obtained indirectly or data that was previously available, so researchers use this data as supporting material for research (Situmorang & Helmi, 2018). This secondary data source is obtained through media intermediaries (obtained and recorded by other parties), documents, files, book literature, and archives or direct news. This data is used to complete primary data.

Data were collected through structured interviews using face-to-face questionnaires, and observations of latrine ownership and the availability of clean water facilities (Kuncoro et al., 2021). The questionnaire had previously been tested by researchers on 30 households in different areas, to get an idea of the answers to the questionnaire filled out in order to improve the questionnaire. The village chosen as the location for testing the questionnaire was one of the villages in the Sukakarya District, namely Sukaindah Village, where the area has almost the same characteristics as Sukawarni Village. In collecting data, the researcher was assisted by 5 (five) interviewers, namely Lemahabang Bapelkes employees who had a health education background and had been previously trained. After the data was collected, data analysis was carried out in

stages starting from univariate, bivariate and multivariate analysis using a computer program.

### 3. RESULTS AND DISCUSSION

#### 3.1. Research Results (Sub-chapter)

**Table 1. Bivariate Analysis**

Variable	Category	P-value
<b>Predisposing Factors</b>		
Education	High	0,000
	Low	0,000
Knowledge	High	0,000
	Low	0,000
Attitude	Positive	0,000
	Negative	0,000
<b>Enabling Factors</b>		
Toilet ownership	Owned	0,000
	Not Owned	0,000
Clean water facilities	Available	0,000
	Not Available	0,000
<b>Strengthening Factors</b>		
Officer training	Available	0,000
	Not Available	0,000
Official support	Available	0,000
	Not Available	0.008

Based on the results of the bivariate analysis, it is known that all the independent variables studied are related to family behavior towards latrine use. Each of these variables can be explained in Table 1.

#### 3.1.1. Multivariate Analysis

**Table 2. Multivariate Analysis Results**

Variable	OR95 %	CI	P value
Mother's education	17,383	0.188 – 1610.137	0.217
Mother's knowledge	1,690	0.505 – 5.614	0.392
Mother's attitude	8,457	3,180 – 22,487	0,000
Toilet ownership	27,036	5,224 – 139,912	0,000
Clean water facilities	7,539	2,365 – 24,037	0.001
Officer training	4,480	1,408 – 14,254	0.011
Official support	2,783	1,154 – 6,714	0.023

The results of the multivariate analysis found five variables related to family behavior towards latrine use, namely the mother's attitude towards latrine, latrine

ownership, availability of clean water facilities, guidance in latrine use by community health center officers, and support from village officials, posyandu cadres and NGO. Of the five variables, the dominant factor related to family behavior towards latrine use is the latrine ownership variable with OR = 27, meaning that a family that has a latrine will have 27 times the chance of using a latrine compared to a family that does not have a latrine. Meanwhile, maternal education and maternal knowledge about toilets are confounder variables.

In the multivariate analysis, it was seen that maternal education and knowledge were not significantly related to family behavior in using toilets (p values 0.217 and 0.292). The variables that were significantly related to the family's behavior in using the latrine were the mother's attitude (p value = 0.000; OR = 8.5; 95% CI OR = 3.18-22.49); ownership of a latrine (p value = 0.000; OR = 27.04; 95% CI OR = 5.24 -139, 91); clean water facilities (p value = 0.001; OR = 7.54; 95% CI OR = 2.36 - 24.04); officer coaching (p value = 0.011; OR = 4.48; 95% CI OR = 1.41-14.25); support from authorities (p value = 0.023; OR = 2.7; 95% CI OR = 1.15-6.71). (See Table 2).

### 3.1.2. Univariate Analysis

Around 46.4% of respondents stated that their families used toilets and 53.6% stated that their families did not use toilets as a means of defecating. Families who do not use latrines mostly use rivers/streams (55.2%), ponds (38.1%), ditches (3.8%) and gardens/rice fields (2.9%) as places to defecate. The predisposing factors in this study consisted of three variables including maternal education, maternal knowledge and maternal attitudes towards toilets. The description of possible factors in this research consists of two variables, namely ownership of a latrine and availability of clean water facilities. Toilet ownership was divided into two, namely having (own latrine) as many as 44 respondents (22.4%) and not having (shared, public or non-existent latrine) as many as 152 respondents (77.6%). The availability of clean water facilities was divided into two, namely 149 respondents (76.0%) and 47 respondents (24.0%) without it (Mukhlisin & Solihudin, 2020).

Strengthening factors consist of two variables, guidance on latrine use by community health center officers and support from village officials, posyandu cadres and NGOs. Guidance on latrine use by community health center officers (19.9%), with support from village officials, posyandu cadres and NGOs (53.1%). This study used a cross-sectional design, so the results obtained cannot provide an explanation of the causal relationship. However, it only shows the relationship between the independent and dependent variables which are studied simultaneously.

The research results show that the proportion of latrine use (46.4%) in Paya Seumantok Village is slightly higher compared to research conducted by Kasnodihardjo (2019) where only 33.5% of the population in Subang Regency disposed of human waste in the latrine. This condition can be explained by the fact that in 2023 Paya Seumantok Village has been declared a Model Healthy Village in Aceh Jaya Regency, so the higher proportion of latrine use compared to the national average (39%) and Aceh Province (39.6%) is probably due to there is support from village officials, posyandu cadres and non-governmental organizations (NGOs) or community health center officers in the form of invitations, appeals or providing information about environmental health so that people

will behave in a clean and healthy lifestyle, including using latrines as a means of defecation for the family. whether owned, shared or public latrines (Messakh et al., 2019).

The research results show that families who do not use latrines mostly use streams/streams (55.2%) and ponds (38.1%) as a means of defecating for the family (Agustina et al., 2022). This could be one of the causes of river water and soil pollution in Sukadunia Village. As a result of the researchers' interviews with several respondents, it was found that the reason they did not use latrines as a means of defecation was because their families did not have their own latrines. Apart from that, the location of public toilets is relatively far from where they live compared to existing rivers or ponds.

Education is a basic human need which is very important for developing oneself, because with higher education a person can have better knowledge (Sumiarni, 2019). The results of this study prove that maternal education has a close relationship with family behavior regarding latrine use, where mothers with high education have the opportunity to use a latrine 17.4 times compared to mothers with low education (Caesar & Riza, 2019). This shows that the higher the mother's education, the wider her knowledge and insight, so that the role of mother's education greatly influences the family's behavior towards using the latrine as a means of defecating (Murni et al., 2020). This supports research conducted by Suherman,8 who said that there is a relationship between education and the family's unwillingness to use the latrine, where respondents with low education have a risk of not wanting to use the latrine during defecation compared to those who highly educated.

Based on the results of further analysis, it is known that maternal education is a confounder variable in the relationship between latrine ownership and family behavior towards latrine use (Hayana et al., 2020). This condition can be explained by the fact that the mother's education plays a very large role in latrine ownership in a family. The results of this study prove that the majority of highly educated mothers (80.0%) have their own family toilet. This can also explain that a mother in a household has a big role in taking care of the household, caring for, educating, protecting her children and maintaining the health of her family.

Mother's knowledge about toilets has a significant relationship with family behavior towards toilet use. Based on the results of the correlation test, it is known that mothers with high knowledge about latrines have a 1.7 times chance of using latrines compared to mothers with low knowledge about latrines. This finding is in line with research by Widaryoto (2021) which states that there is a relationship between the knowledge of the head of the family about latrines and the practice of using latrines in Kepahiang District, where respondents with good knowledge have a 56.9 times chance of using latrines compared to respondents with less knowledge. Good.

Based on the results of further analysis, it is known that the variable maternal knowledge about toilets is a confounder variable regarding the relationship between maternal education and family behavior towards toilet use. This condition can be explained by the fact that mothers who have high knowledge about toilets are generally highly educated mothers. This is probably because highly educated mothers find it easier to understand (comprehension) and are able to correctly interpret known objects followed by an application process in everyday life. So, the higher the mother's education, the higher her knowledge which can influence the family's behavior regarding latrine use. It is proven that 93.3% of highly educated mothers have high knowledge about latrines.

On the other hand, it turns out that many low-educated mothers have high knowledge about latrines (77.9%) but the knowledge they have is not applied in terms of using latrines. This may be due to the fact that low-educated mothers' knowledge about latrines is high, but this knowledge is merely know-how without any detailed explanation about the benefits and uses of using healthy latrines for their families. The low ownership of toilets in Paya Seumantok Village could be the reason why families do not use toilets even though they have high knowledge about toilets (Ridwan, 2019). Apart from that, the lack of understanding among mothers about healthy latrines is probably because the majority of mothers (80.1%) did not receive guidance on the use of latrines by community health center staff.

The mother's attitude towards toilets is a predisposing factor in family behavior towards toilet use. The results of the study showed that there was a significant relationship between the mother's attitude towards the latrine and the family's behavior towards using the latrine (OR = 8.5), meaning that a mother who had a positive attitude towards the latrine had 8.5 times the chance of using the latrine compared to a mother who had a positive attitude towards the latrine. negative towards latrines. This finding is in line with Suherman's research which states that the attitude of the Head of the Family (KK) towards the latrine is related to the family's unwillingness to use the latrine, where HHs who have a positive attitude are more willing to use the latrine (57.85%) than those who do not use it (37, 98%). Likewise, Zaahara's research<sup>10</sup> states that there is a positive relationship between the mother's attitude towards environmental cleanliness and the mother's healthy living behavior in the family. The more positive the mother's attitude towards environmental cleanliness, the higher the quality of the mother's healthy living behavior in the family.

Toilet ownership in Paya Seumantok Village turns out to be very low (22.4%) when compared to latrine ownership in Aceh Jaya Regency (56.02%) and Aceh Province (60.5%). The results of the analysis further show that latrine ownership is very closely related to family behavior regarding latrine use (OR = 27.04), meaning that families that have a latrine are 27 times more likely to use a latrine as a place to defecate compared to families that do not have one. toilet. This research found that as many as 32.2% of families who did not have their own toilet wanted to use shared toilets or public toilets in the village as a means of defecating. This means that there is still a willingness among families who do not have their own toilets to use latrines as defecation facilities. This is not in accordance with research by Suherman (2020) in Walantaka District, Serang Regency, where as many as 51.6% of families did not want to use a latrine even though they had their own latrine.

#### 4. CONCLUSION

From the description above, it can be concluded that the behavior of using latrines as a means of defecation in Paya Seumantok Village, Krueng Sabee District, Aceh Jayama Regency is still not healthy because most families do not have latrines and are accustomed to using rivers or ponds. Family behavior towards latrine use is influenced by 3 (three) main factors, namely predisposing factors (mother's education, mother's knowledge about latrine, mother's attitude towards latrine), enabling factors (toilet ownership, availability of clean water facilities) and reinforcement (coaching by community health center staff,

support from village officials, posyandu cadres and NGOs). Maternal education and maternal knowledge about toilets are confounder variables. The enabling factor, namely ownership of a latrine, is the dominant factor related to family behavior towards using a latrine, where a family that has a latrine will have a 27.04 (5,224 – 139,912) chance of using a latrine compared to a family that does not have a latrine.

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