Volume 20, No. 2, Juli 2023; Page: 313-320;

DOI: https://doi.org/10.31964/jkl.v20i2.671

# FACTORS RELATING TO THE BEHAVIOR OF LATRINE USE IN KLAPASAWIT VILLAGE, PURBALINGGA

## Alifka Deti Sri Maharani, Syifa Nurfadlilah Suhardi, Dwi Sarwani Sri Rejeki, Siwi Pramatama Mars Wijayanti

Soedirman University Department of Public Health Jl. DR. Soeparno, Karangwangkal, Banyumas, Central Java 53122 E-mail: alifkadsm56@gmail.com

## **Article Info**

## Article history:

Received February 01, 2023 Revised February 02, 2023 Accepted July, 01 2023

## Keywords:

Defecation Sanitation Toilet Public Health

## **ABSTRACT**

Factors Relating to The Behavior of Latrine Use in Klapasawit village, Purbalingga. Sanitation is crucial for environmental health as it helps reduce disease transmission and related health issues. In Indonesia, sanitation problems persist, often tied to socio-cultural factors, such as the habit of open defecation. In 2021, 83.28% of households in Central Java Province had adequate sanitation, while in Purbalingga Regency, it was 76.33%. Klapasawit Village, within the Kalimanah Health Centre's area, has yet to achieve an open defecation-free status. This study analyzes the factors influencing latrine use behavior in Klapasawit Village, Kalimanah District, Purbalingga Regency. This quantitative analytical research used a cross-sectional design. The population was the entire Klapasawit village, and the sample met specific criteria. Proportionate stratified random sampling was employed, resulting in 90 samples. Instruments included questionnaires, interviews, camera recorders, and secondary data forms. Univariate analysis revealed that the age group of 36-45 years (41.1%) dominated the community, with women making up the majority (45.6%). Most had a primary school education (33.3%) and were housewives (32.2%). Bivariate analysis showed no significant correlation between knowledge, attitudes, infrastructure, family support, and the role of health workers in latrine use in Klapasawit Village, Kalimanah District, Purbalingga Regency.

This is an open access article under the <u>CC BY-SA</u> license.



## **INTRODUCTION**

According to Hendrik L. Blum, public health status is influenced by four things: environment, behavior, health services, and enetics <sup>(4)</sup>. Sanitation is important for environmental health because it helps to reduce the risk of disease transmission and health problems. ThThe sanitation issue in Indonesia remains a socio-cultural issue, primarily due to the population's habit of defecating anywhere, including along the coast, riverbanks, ponds, or even in the bushes. <sup>(1)</sup>

The Sustainable Development Goals (SDG's) targets regarding guaranteed access to water and sanitation are used by the Ministry of Health of the Republic of Indonesia as a basis for achieving adequate and equitable basic sanitation. According to the Central Statistics Agency (BPS), in Indonesia alone in 2021, the percentage of households with adequate sanitation, ranging from access to clean water and healthy latrines to healthy homes, will be 69.27% (5).

For Central Java Province, the percentage of households with adequate sanitation in 2021 is 83.28%. Meanwhile, in Purbalingga Regency, the percentage of households with adequate sanitation in 2021 is 76.33%. 101 villages (42.26%) in Purbalingga Regency have implemented Open Defecation, or ODF (ODF). Meanwhile, the Kalimanah Community Health Centre's working area, Klapasawit Village, does not yet have a village stop defecation policy in place. In fact, from the data obtained, it is known that Klapasawit Village has many residents who have access to healthy latrines, with a total number of healthy latrine users of 3,368 people (70.8%), consisting of 200 people (4.2%) of communal latrine users and goosenecks. As many as 3,168 people (66.6%).

Environmental health encompasses several factors, including housing, sewage disposal, clean water supply, and wastewater disposal channels. If environmental factors, contaminated with bacteria and supported by unhealthy community behaviour, fail to meet health requirements, they can lead to health problems such as diarrhoea and negatively impact people's health conditions. Diarrhoea is an environmental-based disease that is influenced by clean water facilities, faeces disposal, and waste. These three factors will influence people's bad behavior or habits <sup>(13)</sup>. In 2019, 39.0% of deaths among children under five in Central Java Province were caused by diarrhea (14). Meanwhile, in Purbalingga Regency, diarrhoea is the biggest cause of death in babies aged 29–11 months <sup>(15)</sup>.

By examining the descriptions of the cases that occurred, this research aims to analyze the factors that influence the behavior of using toilets in Klapasawit Village, Kalimanah District, Purbalingga Regency. This research aims to increase public knowledge and awareness about toilet use, enabling people to independently carry out preventive measures such as maximizing toilet use. Additionally, it can serve as a reference material for regional government agencies and health service facilities to determine health programmes related to defecation behavior in healthy latrines, and to enhance the role of health workers in disseminating information about healthy latrines to the community.

## MATERIALS AND RESEARCH METHODS

This is a quantitative analytical study with a cross-sectional design. The population in this study were all residents of Klapasawit village. Sampling criteria used proportionate stratified random sampling with a total of 90 samples, taking into account inclusion and exclusion criteria. The instruments used consisted of questionnaires, interviews, image recording tools, and secondary data forms. Validity and reliability tests were conducted in Babakan Village, Kalimanah District, Purbalingga Regency with a small sample of 30 respondents who shared the same characteristics as the determined variables. Data collection was carried out using two data sources, namely primary data and secondary data. This research uses SPSS tools for univariate and bivariate data analysis.

# RESEARCH RESULTS AND DISCUSSION Univariate Analysis

**General Characteristics** 

Table 1. Characteristics of Respondents in Klapasawit Village in 2021

Age	Amount	Percentage (%)		
<25 years	5	5,6		
26-35 years old	7	7.8		
36-45 years old	37	41.1		

46-55 years old	26	28.9
56-65 years old	9	10.0
>66 years	6	6,7
Gender		
Man	41	45.6
Woman	49	54.4
Education		
elementary school	30	33.3
JUNIOR HIGH SCHOOL	29	32.2
SENIOR HIGH SCHOOL	26	28.9
D3/S1/S2	2	2,2
No school	3	3.3
Work		
Trader	12	13.3
Farm workers	27	30.0
Civil servants	1	1.1
Self-employed	13	14.4
IRT	29	32.2
Etc	8	8.9
Total	90	100

Based on table 1, it shows that the age of the majority of the Klapapawit village population is 36–45 years, namely 37 people (41.1%), 49 people (54.4%) are female, 30 people (33.3%) have elementary school education, and 29 people (32.2%)

## Knowledge

Based on the results of the Kolmogorov-Smirnov test, the test results were significant (p-value < 0.05), so the data was not normally distributed. The level of knowledge of the community in Klapasawit Village was categorised as good if the score was  $\geq$  median and as poor if the score was <median (median = 13.00).

Table 2. Respondents' Knowledge in Klapasawit Village in 2021

Knowledge	Amount	Percentage (%)
Good	40	44.4
Not good	50	55.6
Total	90	100

Based on Table 2, it shows that 40 respondents (44.4%) had good knowledge and 50 respondents (55.6%) had poor knowledge.

## **Attitude**

Based on the results of the Kolmogorov-Smirnov test, the test results were not significant (p-value > 0.05), so the data was normally distributed. The level of community attitudes in Klapasawit Village was categorised as good if the score was  $\geq$  mean and as poor if the score was  $\leq$  mean (mean = 49.42).

Table 3. Attitudes of Respondents in Klapasawit Village in 2021

Attitude	Amount	Percentage (%)
Good	42	46.7
Not good	48	53.3
Total	90	100

Based on Table 3, it shows that the attitudes of respondents were in the good category as many as 42 respondents (46.7%) and as bad as 48 respondents (53.3%).

#### Infrastructure

Based on the results of the Kolmogorov-Smirnov test, the test results were significant (p-value < 0.05), so the data was not normally distributed. Access to community infrastructure in Klapasawit Village was categorised as good if the score was  $\geq$  median and as poor if the score was  $\leq$  median (median = 9, 00)

Table 4. Respondents' Infrastructure in Klapasawit Village in 2021

Infrastructure	Amount	Percentage (%)
Good	36	40
Not good	54	60
Not good <b>Total</b>	90	100

Based on Table 4, it shows that 36 respondents (40%) met the requirements for good healthy latrines and 54 respondents (60%) were less good.

## Family support

Based on the Kolmogorov-Smirnov test results, the test results were significant (p-value < 0.05), so the data was not normally distributed. Family support in Klapasawit Village was categorized as good if the score was  $\geq$  median and as poor if the score was  $\leq$  median (median = 7.00).

Table 5. Family Support for Klapasawit Village Respondents in 2021

Family support	Amount	Percentage (%)
Good	36	40
Not good	54	60
Not good <b>Total</b>	90	100

Based on Table 4.5, it shows that 36 respondents (40%) had good family support and 54 respondents (60%) had poor family support.

## **Role of Health Workers**

Based on the Kolmogorov-Smirnov test results, the test results were significant (p-value < 0.05), so the data was not normally distributed. The role of health workers in Klapasawit Village was classified as good if the score was  $\geq$  median and as poor if the score was  $\leq$  median (median = 3.00).

Table 6. Role of Health Workers in Klapasawit Village in 2021

Role of Health Workers	Amount	Percentage (%)
Good	37	41.1
Not good	53	58.9
Total	90	100

Based on Table 6, it shows that the role of health workers in Klapasawit Village is in the good category as many as 37 respondents (41.1%) and as bad as 53 respondents (58.9%).

## **Latrine Use Behavior**

Based on the results of the Kolmogorov-Smirnov test, the test results were significant (p-value < 0.05), so the data was not normally distributed. Respondents' behaviour regarding latrine use in Klapasawit Village was categorised as good if the score was  $\geq$  median and as poor if the score was  $\leq$  median (median = 39.00).

Table 7. Respondents' Latrine Use Behavior in Klapasawit Village in 2021

Latrine Use Behavior	Amount	Percentage (%)
Good	33	36.7
Not good	57	63.3
Not good <b>Total</b>	90	100

Based on Table 7, it shows that the behavior of using toilets in Klapasawit Village is in the good category for 33 respondents (36.7%) and 57 respondents (63.3%) for poor behavior.

## **BIVARIATE ANALYSIS**

Knowledge Variables with Toilet Use Behavior

Table 8. Relationship between Knowledge Variables and Latrine Use Behavior in Klapasawit Village in 2021

		Latrine Use I	Behavior		To	_	
Knowledge	Not good	Good					P
	n	%	n	%	n	%	_
Not good	36	72.0	14	28.0	50	100	0.002
Good	21	52.5	19	47.5	40	100	- 0.092

Based on the results of the Chi-Square test analysis, it shows that the p value = 0.092, so the p value is > 0.05, which means that Ho is accepted, that there is no relationship between knowledge and latrine use behavior.

## Attitude Variables with Toilet Use Behavior

Table 9. Relationship between attitude variables and latrine use behavior in Klapasawit Village in 2021

		Latrine Use	To	P			
Attitude	Not good		Good				_
	n	%	n	%	n	%	_
Not good	34	70.8	14	29.2	48	100	0.174
Good	23	54.8	19	45.2	42	100	0.174

Based on the results of the Chi Square test analysis, it shows that the p value is 0.174, so the p value is > 0.05, which means that Ho is accepted and that there is no relationship between attitudes and latrine use behaviour.

## Variables of Infrastructure and Toilet Use Behavior

Table 10. Relationship between Facilities and Infrastructure Variables and Latrine Use Behavior in Klapasawit Village in 2021

		Latrine U	Jse Behavior			Total	_
Infrastructure	Not good		Good				P
	n	%	n	%	n	%	
Not good	36	66.7	18	33.3	54	100	- 0.562
Good	21	58.3	15	41.7	36	100	- 0.562

Based on the results of the Chi Square test analysis, it shows that the p value = 0.562, so the p value is > 0.05, which means that Ho is accepted, that there is no relationship between infrastructure and latrine use behavior.

## Family Support Variable with Toilet Use Behavior

Table 11. Relationship between family support variables and latrine use behavior in Klapasawit Village in 2021

		Latrine U	Jse Behavior			Total	
Family support	Not good		Good				P
	n	%	n	%	n	%	
Not good	39	72.2	15	27.8	54	100	0.55
Good	18	50.0	18	50.0	36	100	

Based on the results of the Chi Square test analysis, it shows that the p value is 0.055, so the p value is > 0.05, which means that Ho is accepted and that there is no relationship between family support and latrine use behaviour.

Variables of the Role of Health Workers with Toilet Use Behavior

Table 12. Relationship between health worker variables and latrine use behavior in Klapasawit Village in 2021

Role of Health Workers	Latrine Use Behavior				Total		
	Not good	Good					_ P
	n	%	n	%	n	%	_
Not good	35	66.0	18	34.0	53	100	0.678
Good	22	59.5	15	40.5	37	100	

Based on the results of the Chi Square test analysis showing a p value of 0.678, it can be concluded that the p value is > 0.05, which means Ho is accepted, so there is no relationship between the role of health workers and latrine use behaviour.

## **Knowledge**

Knowledge arises from the process of sensing a specific object. Knowledge, or cognitive ability, is a very important domain in shaping a person's actions. If the knowledge formed is sufficient knowledge for health, then this will be reflected in the behavior patterns of the community  $^{(6)}$ . Based on the results of our research using bivariate analysis and the chisquare test, we obtained a p value of 0.055 > 0.05. This indicates that there is no significant correlation between the respondents' understanding of latrine use behavior and This is not in line with research conducted by Apriyanti (2019)  $^{(7)}$ , which states that knowledge has an OR of 3.077. This means that respondents with good knowledge are able to use the latrine 3.077 times more frequently than those with less knowledge.

## **Attitude**

According to Notoatmodjo (2012), attitude is a reaction or response that is still closed from a person to a stimulus or object. According to Bimo (2003), attitudes are formed in the development of an individual because individual experience factors have a very important role in forming the attitudes of the individual concerned. Based on the results of our research using bivariate analysis and the chi-square test, we obtained a p value of 0.174 > 0.05. This shows that there is no relationship between respondents' attitudes towards latrine use behavior. This is not in line with research conducted by Tarigan (2008) <sup>(9)</sup>, who said that after carrying out a multivariate analysis with a logistic regression test, it turned out that attitude had a small effect on latrine use because the p value was <0.05 (0.037), meaning that there was an influence of attitude on latrine use

## Infrastructure

The KBBI defines means as any tool that can be used to achieve aims or objectives, including media tools. Infrastructure is everything. Infrastructure serves as the primary support for the implementation of various processes such as business, development, and project

management. The research we conducted using bivariate analysis and the chi-square test yielded a p value of 0.052 > 0.05. This shows that there is no relationship between respondents' infrastructure and latrine usage behavior. This aligns with Tarigan's (2008) research <sup>(9)</sup> which found no correlation between latrine conditions and latrine use participation, as evidenced by the p value of >0.05 (0.215).

## Family support

Ahmadi (2004)  $^{(10)}$  asserts that the family serves as a crucial platform for interactions between individuals and groups, serving as the initial social group, with children as its members. Family support refers to the interpersonal behavior patterns, traits, and activities associated with an individual in a specific situation and position. Based on the results of the research we conducted with bivariate analysis using the Chi-square test, we obtained a p value of 0.055 > 0.05. This shows that there is no relationship between the respondent's family support and latrine use behavior. This is not in line with research by Apriyanti (2019) (7), which states that family support is related to latrine use with an odds ratio value of 4.553 (95% Cl) (1.818-10.818). This means that good family support allows respondents to use the family latrine 4.553 times more than respondents who have good family support. not enough.

## **Role of Health Workers**

According to the Republic of Indonesia Law on Health No. 36 of 2014, health workers are individuals who dedicate themselves to the health sector and have acquired knowledge and skills through health-related education, particularly for certain types that require authority to carry out health efforts. Health workers play a crucial role in enhancing the quality of health services in the community, enabling individuals to enhance their awareness, motivation, and capacity to lead healthy lives, thereby contributing to the development of socially and economically productive human resources. Health workers have several officers whose work is interrelated, namely doctors, dentists, nurses, midwives, and other medical personnel.  $^{(11)}$ . Based on the results of the research we conducted using bivariate analysis using the chi-square test, we obtained a p value of 0.678 > 0.05. This shows that there is no relationship between the role of the respondent's health workers and their latrine use behavior. This is in line with research conducted by Tarigan (2008) (9), which says that the role of health workers is not related to family participation in using toilets because the p value = 0.079 > 0.05, meaning there is no relationship between the role of health workers and family participation in using toilets.

## CONCLUSIONS AND RECOMMENDATIONS

According to the results of the univariate analysis, the community in Klapasawit Village, Kalimanah District, Purbalingga Regency is dominated by the age group 36–45 years (41.1%), with the largest gender being female (45.6%), elementary school education (33.3%), and having a housewife job (32.2%). According to the results of the bivariate analysis, there is no relationship between knowledge, attitudes, infrastructure, family support, and the role of health workers with latrine use in Klapasawit Village, Kalimanah District, Purbalingga Regency. It is advisable for the residents of Klapasawit Village, Kalimanah District, Purbalingga Regency, to adopt the practice of using a latrine every time they defecate. Family members and the community can play a crucial role in reminding each other about the importance of using a latrine every time they defecate, thereby preventing the spread of diseases. random defecation. Local health centres, as public health service facilities, can begin providing information through various intensive outreach and counselling activities to influence community knowledge, thereby promoting a change and improvement in behaviour regarding the importance of using healthy latrines.

#### REFERENCES

- 1. Aryani. Prosedur Klinik keperawatan pada Mata Ajar Kebutuhan Dasar Manusia. In: Trans Info Media. Jakarta; 2009.
- 2. Purbalingga DKK. Profil Kesehatan Kabupaten Purbalingga Tahun 2022. In: Dinkes Purbalingga. Purbalingga; 2022.
- 3. Kalimanah P. Profil Kesehatan Puskesmas Kalimanah Tahun 2022. In: Puskesmas Kalimanah. Purbalingga; 2022.
- 4. Notoatmodjo S. Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta; 2012.
- 5. BPS. Persentase Rumah Tangga Menurut Provinsi dan Memiliki Akses terhadap Sanitasi Layak 1993-2022. In: Badan Pusat Statistik. Jakarta; 2022.
- 6. Notoatmojo S. Promosi Kesehatan dan Perilaku Kesehatan. In: Rineka Cipta. Jakarta; 2012.
- 7. Apriyanti, L., Widjanarko, B., Laksono B. Faktor-Faktor yang Mempengaruhi Pemanfaatan Jamban Keluarga di Kecamatan Jatibarang Kabupaten Brebes. J Promosi Kesehat Indones. 2019;14(1):1–14.
- 8. Bimo W. Pengantar Psikologi Umum. In: ANDI. Yogyakarta; 2003.
- 9. Tarigan E. Faktor-faktor yang Mempengaruhi Partisipasi Keluarga dalam Penggunaan Jamban di Kota Kabanjahe Tahun 2007. Universitas Sumatra Utara; 2008.
- 10. Ahmadi. Sosiologi Pendidikan. In: Rineka Cipta. Jakarta; 2004.
- 11. Undang-Undang Republik Indonesia Nomor 36 Tahun 2014 Tentang Tenaga Kesehatan. In.
- 12. M. Dewi, M. F. Indah, and N. I. Ishak, "Balita Di Wilayah Kerja Puskesmas BatiBati Kabupaten Tanah," Kesehat. Masy., 2020.
- 13. Qisti, DA., Putri, ENE., Fitriana, H., Irayani, SP., Pitaloka, SAZ. Analisis Aspek Lingkungan dan Perilaku Terhadap Kejadian Diare Pada Balita di Tanah Sareal. Jurnal Innovasi Penelitian. 2021;2(6):1661-1668
- 14. Dinkes Jateng. Profil Kesehatan Provinsi Jawa Tengah Tahun 2019. In Dinkes Jateng. Semarang; 2019
- 15. Dinkes Purbalingga. Laporan Kinerja Dinas Kesehatan Kabupaten Purbalingga Tahun 2022. In LKjlP Dinkes Purbalingga. Purbalingga; 2022