

FACTORS INFLUENCING OPEN DEFECACTION BEHAVIOR IN LENGKONG GUDANG TIMUR VILLAGE

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Abstract

Open defecation is disposing of feces or feces in ponds, forests, bushes, rivers, beaches, or other open areas that may cause the spread of contaminating the environment, soil, air, and water. We conducted this research in Lengkong Gudang Timur village, Serpong district. The subjects were people who did not have a septic tank. It was to analyze the factors that influence open defecation behavior. The type of research used is a quantitative research using quota sampling with observational survey methods and interviews using a questionnaire. The population in this study was 90 points/head of family with a sample of 50 points/head of family. The conclusion from the research results is that the causes of open defecation are due to lack of knowledge about Community-Based Total Sanitation, lack of clean and healthy living habits, low income, and the role and lack of support from community leaders. The results are to promote and intervene in open defecation-free behavior.

Keywords: *open defecation free, Community Based Total Sanitation, open defecation behavior factor*

Introduction

According to the Centers for Disease Control (CDC), worldwide, 780 million people still do not have access to improved water sources, and about 2.5 billion people (half of developing countries do not have access to adequate sanitation). Implementing Community-Based Total Sanitation (CBTS) with five pillars will facilitate efforts to increase access to better community sanitation and change and maintain the sustainability of clean and healthy living culture. Behavior change in Community-Based Total Sanitation is through a triggering method that encourages changes in the target's behavior community collectively and can build sanitation facilities independently according to their abilities (Ministry of Health of the Republic of Indonesia, 2014).

In this study, the people in Serpong District, Lengkong Gudang Timur Village, were the research subjects. The behavior of open defecation has a significant impact on environmental health, both for humans and other living things. Open defecation is an important thing to stop, according to one pillar of Community Based Total Sanitation (CBTS) entitled Stop Open Defecation. It refers to the Ministry of Health Decree No. 852/ Menkes/SK/IX/2008 concerning the National Strategy for Community-Based Total Sanitation. We refer STBM to as an approach to changing hygiene and sanitation behaviors through community empowerment with triggering methods (Ajisuksmo & Iustitiani, 2020). It is also to overcome the open-defecation behavior in the community, especially in Lengkong Gudang Timur village, Serpong

district. Therefore, the research to find out the factors that cause open-defecation behavior in the community at Lengkong Gudang Timur Village, Serpong District, is essential, since it is close to Jakarta the capital and tourism city.

Literature Review

According to the World Bank, 57 million Indonesians still practice open defecation, of which 40 million live in rural areas (Ministry of Health of the Republic of Indonesia, 2014). South Tangerang City is the second most populous city in Banten Province, with a population density of 11,875 people/km² (Central Statistics Agency, 2019). Community participation in waste management is still low (33%). Residents still dispose of kitchen and bathroom waste directly into gutters/rivers/streams (67%) (Ministry of Health of the Republic of Indonesia, 2019).

Open defecation is disposing of faeces in fields, forests, bushes, rivers, beaches, or other open areas. It contaminates the environment, soil, air, and water (Murwati, 2012). Open defecation behaviour contaminates environmental health and the health of food and beverages. If the environment, food, and drink are contaminated, it can have adverse effects on health, such as diarrheal and typhus (Dwiputra, K.O, 2019).

The impact of open defecation is not only for humans but also for all living things around the environment. One of them is the extinction of various species of flora and fauna, reduced soil fertility, and disturbing the environmental balance (Ministry of Health of the Republic of Indonesia, 2017).

Research Methodology

The type of research conducted included observational survey research, interviews and added several previous journal articles as supporting and complementary materials. The population in this study is the people of Lengkong Gudang Timur Village who do not yet have a septic tank.

Source: Lawrence Green Theory

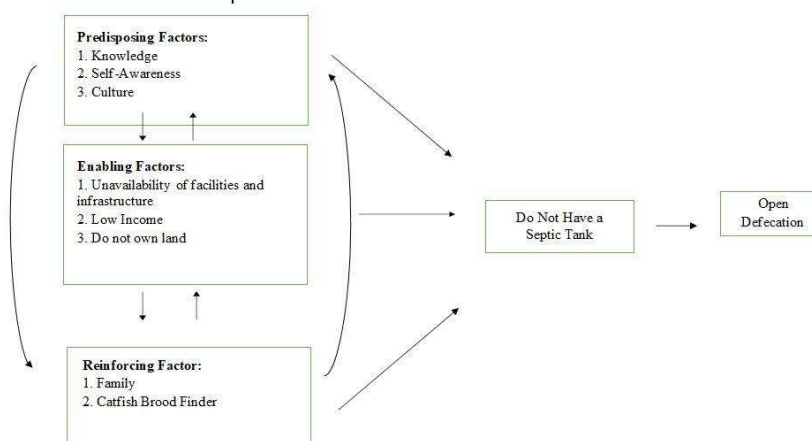


Figure: 1 Theoretical Framework

The sample in this study is a portion of the Lengkong Gudang Timur Village community who do not yet have a septic tank.

a) Inclusion Criteria

Inclusion criteria are the general characteristics of research subjects from a target population that is reachable and will be studied (Nursalam, 2017). The inclusion criteria in this study were as follows:

1. The people of Lengkong Gudang Timur Village do not have a septic tank.
2. The people of Lengkong Gudang Timur Village who defecate in the ponds.

b) Exclusion Criteria

Exclusion criteria are eliminating or removing subjects who do not meet the inclusion criteria for various reasons (Nursalam, 2017).

1. The people of Lengkong Gudang Timur Village who already have a septic tank
2. People from Lengkong Gudang Village who are not willing to be interviewed.

c) Sample Size

Sampling using Quota Sampling with a quota of 50 respondents.

Results and Discussion

Open defecation is the activity of defecating in fields, forests, bushes, rivers, beaches or other open places where it is allowed to spread and contaminate the environment, soil, air and water (Murwati, 2012). In this study there were 50 respondents from 90 points in Lengkong Gudang Timur Village who still did not have a septic tank and disposed of it in open land such as ponds. Respondents consisted of 23 men and 27 women with an age group of 1 teenager, 41 adults and 8 elderly. The status of the respondents consisted of 26 working people and 24 people not working and 35 respondents earning < Rp 3,000,000/month and 15 respondents earning \geq Rp 3,000,000/month. In India shifting social norms is promoting to reduce open defecation (Gauri, Rahman & Sen, 2023)

Table 1: Distribution of people's healthy lifestyle

No	Description	A		
		Never	Sometimes	Always
1.	Do you wash your hands using clean water after defecating?			50
2.	Do you wash your hands with clean water and soap after defecating?			50
3.	Do you use healthy latrines?	48		2
4.	Do you throw dirt into pond or running water?	50		

5.	Did you clean your latrines?		5	8	37
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Table 1 shows that 48 respondents have not implemented healthy latrines, and all still dispose of their faeces in ponds or running water. We should support Behaviour change in Community-Based Total Sanitation to encourage changes in the target's behaviour community. They could build sanitation facilities independently according to their abilities for an on-going project.

Table 2: Distribution of respondents' knowledge at Lengkong Gudang Timur Village about open defecation behavior

No.	Statements	A	
		T	F
1.	Stopping open defecation is one of the pillars of Community Based Total Sanitation (STBM)	10	40
2.	Open defecation is an unhealthy behavior	45	5
3.	Throwing feces into vacant land such as rivers, ponds, excavations, and so on is not an act of open defecation	23	27
4.	Open defecation has nothing to do with contaminating food and drink	26	24
5.	Open defecation behavior can cause environmental pollution	38	12
6.	Open defecation behavior can trigger a person to get diarrhea	33	17
7.	Defecating in a septic tank latrines is a way to avoid disease and bad odors	46	4
8.	The septic tank is a good place to collect sewage	46	4
9.	Determining the location of waste disposal does not have to consider the nearest water source	29	21
10.	The minimum distance between latrines/septic tanks must be >10 meters from a water source	45	5

Table 2 shows that as many as 40 respondents did not know that stopping open defecation is one of the pillars of Community-Based Total Sanitation. It could also be because the people in Lengkong Gudang Timur Village still do not understand Community-Based Total Sanitation. Then in the next question there were 27 respondents who did not know that defecating in open places such as rivers, ponds and others was included in open defecation. Even if it is accumulated, the community will get good knowledge, but the community still does not know things that are no less important as previously mentioned.

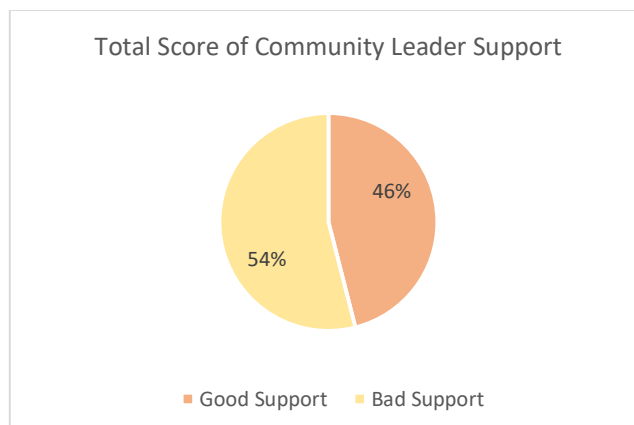


Figure 2: Distribution of Community Leader Support Total Score data.

Figure 2 showed that 23 respondents received good support and 27 respondents received poor support. From these data it is known that the support or role of community leaders is still uneven in Lengkong Gudang Timur village.

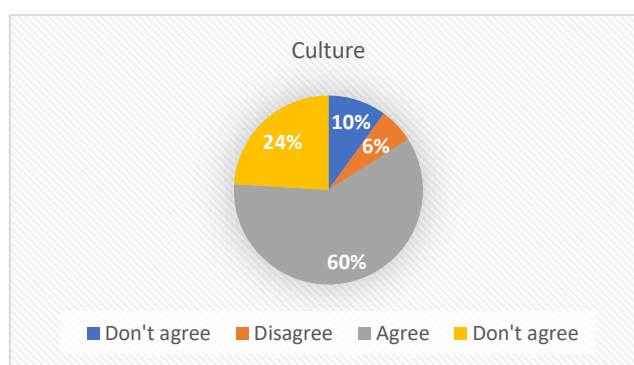


Figure: 3 Distribution of Culture's data

Figure 3 showed that 5 respondents disagreed, 3 respondents disagreed, 30 respondents agreed, and 12 respondents strongly agreed. From the data on the graphic it is known that we have been accustomed to defecating in ponds in our family since ancient times until now. This is an important point for us public health students to change the mindset of society to be better and more modern so that we can prevent environmental damage and prevent poor sanitation in the community.

Factors Causing Open Defecation Behavior

Open defecation behavior is behavior that occurs because it is based on knowledge and behavior. The previous research stated, the knowledge and attitude and role of health workers have a significant relationship in stopping open defecation (Kurniawati R. D. & Saleha A. M. 2020). However, the observation survey in this study reported, and in-depth interviews result from the people of Lengkong Gudang Timur Village, found that the factors that cause open defecation behavior were not only knowledge and behavior factors. It was found that other factors such as low income and the lack of role of community leaders also contributed to the development of open defecation behavior. Yogananth & Bhatnagar, (2018) found that structural and sociocultural determinant influenced

the use of toilet in Dharmapuri district of Tamil Nadu. Yulyani et al. (2021) suggested to promote policies ensuring that every house, owned or rented, must be equipped with sanitation facilities.

Conclusions

Open defecation is the act of defecating in ponds, forests, bushes, rivers, beaches or other open places where it is allowed to spread and pollute the environment, soil, water and water. It is a behavior caused by several factors such as lack of knowledge regarding community-based total sanitation, lack of implementation of clean and healthy living habits, low income and lack of the role of community leaders in the surrounding environment. If people's knowledge about personal health and environmental health is still lacking, it will affect people's healthy living behavior. Low income is another factor that affects the community behavior, since people's knowledge about personal health and environmental health is still low, the construction of septic tanks is still not yet a major priority in society. This causes a lack of support and activities in developing better personal health awareness and environmental health responsibility of the people at Lengkong Gudang Timur village, Serpong district. Therefore, the roles of community leaders such as neighborhood leaders, health cadres and health workers are essential. Coordination and collaboration among the leaders and the university research center are beneficial to intensify the socialization of Community-Based Total Sanitation in society, especially in Lengkong Gudang Timur village, Serpong district. Overcoming the root of the factors influencing the behavior will increase health awareness and develop a better public health atmosphere.

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References

- Ajisuksmo, C. R., & Iustitiani, N. S. (2020). The Implementation of Community Based on Total Sanitation among Fisherman Families in West Java. *KEMAS: Jurnal Kesehatan Masyarakat*, 16(2), 225-232.
- Dianri, D. A. (2020). *Faktor-faktor yang Berhubungan dengan Perilaku Buang Air Besar Sembarangan di Desa Silam Kecamatan Kuok Tahun 2020* (Doctoral dissertation, Universitas Pahlawan Tuanku Tambusai).
- Febriani, W., Samino, S., & Sari, N. (2016). Faktor Yang Mempengaruhi Perubahan Perilaku Stop Buang Air Besar Sembarangan (BABS): Studi Pada Program STBM Di Desa Sumbersari Metro Selatan 2016. *Jurnal Dunia Kesmas*, 5(3).
- Gauri, V., Rahman, T., & Sen, I. K. (2023). Shifting social norms to reduce open defecation in rural India. *Behavioural Public Policy*, 7(2), 266-290.
- Indah, F. P. S., Ismaya, N. A., Puji, L. K. R., Hasanah, N., & Jaya, F. P. (2021). Penerapan Program Sanitasi Total Berbasis Masyarakat (STBM) dengan Kejadian Diare pada Balita. *Jurnal Ilmiah Kesehatan*, 20(1), 10-15.

- Khairunnisa, M. *Potensi Daya Dukung Lingkungan terhadap Kemampuan Partisipasi Masyarakat dalam Pengelolaan Limbah di Kampung Sanitasi Rawa Mekar Jaya, Tangerang Selatan Tahun 2020* (Bachelor's thesis, UIN SYARIF HIDAYATULLAH JAKARTA-FIKES).
- Krisna Octavianus Dwiputra. (2019, October 9). *Dampak Buruk BAB Sembarangan bagi Kesehatan*. *Klikdokter.com*; *KlikDokter*. <https://www.klikdokter.com/info-sehat/berita-kesehatan/dampak-buruk-bab-sembarangan-bagi-kesehatan>
- Murwati, M. (2012). *Faktor Host Dan Lingkungan Yang Mempengaruhi Perilaku Buang Air Besar Sembarangan/(Open Defecation)* (Doctoral dissertation, Program Pascasarjana Undip).
- Kurniawati, R. D., & Saleha, A. M. (2020). *Analisis Pengetahuan, Sikap dan Peran Petugas Kesehatan dengan Keikutsertaan dalam Pemicuan Stop BABS*. *Jurnal Ilmu Kesehatan Masyarakat*, 9(02), 99-108.
- Kurniawati, R. D., & Saleha, A. M. (2020). *Analisis Pengetahuan, Sikap dan Peran Petugas Kesehatan dengan Keikutsertaan dalam Pemicuan Stop BABS*. *Jurnal Ilmu Kesehatan Masyarakat*, 9(02), 99-108.
- Sumartawan, N. A. (2019). *The Effect Of Basic Life Support Health Education Toward Students' knowledge In Providing Emergency Care On Cardiac Arrest Case At Smk N 2 Sukawati In 2019* (Doctoral Dissertation, Politeknik Kesehatan Kemenkes Denpasar Jurusan Keperawatan).
- STBM - Detail Berita. (2013). *Kemkes.go.id*. <http://stbm.kemkes.go.id/app/news/6681/apa-yang-terjadi-jika-bab-di-tempat-terbuka-dan-bisa-dilihat-oleh-orang-lain>
- STBM - Detail Berita. (2014). *Kemkes.go.id*. <http://stbm.kemkes.go.id/app/news/7902/2030-tidak-ada-lagi-praktek-babs>
- Webmaster. (2016). *Pusat Krisis Kesehatan Kementerian Kesehatan RI*. *Kemkes.go.id*. <https://pusatkrisis.kemkes.go.id/dampak-penceraman-lingkungan-terhadap-kehidupan>
- Yogananth, N., & Bhatnagar, T. (2018). Prevalence of open defecation among households with toilets and associated factors in rural south India: an analytical cross-sectional study. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 112(7), 349-360
- Yulyani, V., Febriani, C. A., Shahrudin, M. S., & Hermawan, D. (2021). Patterns and determinants of open defecation among urban people. *Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal)*, 16(1).