Randwick International of Social Sciences (RISS) Journal
Vol. 4, No. 3, July 2023 | Page: 679-686
ISSN Online: 2722-5674 - **ISSN Print**: 2722-5666
https://www.randwickresearch.com/index.php/rissj

Factors Associated Defecting Carelessly Habits in Muara Sipongi District, Mandailing Natal Regency

DOI: *https://doi.org/10.47175/rissj.v4i3.770*

| Ita Fitriyani Lubis[1,*] | Nurmaini[2] | Taufik Ashar[3] |

[1,2,3] Environmental Health Department, Public Health Faculty, Universitas Sumatera Utara, Indonesia

** itafitriyanilubis@gmail.com*

ABSTRACT

The achievement of proper hygiene and sanitation such as healthy latrine ownership is an aim of sustainable development from SDGs (Sustainable Development Goals). WHO data states that poor sanitation is one of the causes of death from diarrhea through water borne diseases to reach 3.4 million/years. This study aims to analyze the factors that affect defecating habits in Muara Sipongi Mandailing Natal District. The type of research is quantitative with cross sectional design. The population and samples are households that do not have as many as 200 households. The results showed that there was no relationship with income = 0.394 (P> 0.05), there was a relationship with knowledge, home distance and water availability of each value P = 0.001 (P <0.05) with the habit of defecation carelessly. It is advisable to the community to try to build latrines in every house or use facilities that have been provided from the local government such as public latrines so that there is no disease through feces. To each head of the family to encourage family members to defecate in their place and forbid neighbors to defecate carelessly near the house and in a stupid.

KEYWORDS

defecation carelessly; knowledge; distance; availability of water

INTRODUCTION

The achievement of proper hygiene and sanitation such as healthy latrine ownership is one of the goals of sustainable development from SDGs. It is a form of commitment of world leaders including Indonesia aims to end poverty, reduce inequality, protect the environment and achieve hygiene and sanitation that meet the requirements. It is hoped that this program will be achieved well by the end of 2030 (WHO, 2014).

Efforts to create the highest degree of public health can be done through Sustainable Development Goals (SDGs). The goals are ending the hope, the creation of equitable health and prosperity, ensuring the availability and sanitation, creating clean and affordable energy, creating a sustainable clean city, a clear legal action against climate change, protecting life in water and land and the creation of a sustainable partnership in accordance with its function (WHO, 2014).

Globally, decent sanitation is one of the goals that must be achieved. According to the Ministry of Health (Kemenkes RI, 2013) that sanitation is an important aspect in a health development whose aim is to improve the welfare of the community, lifestyle and comfort of daily life. As developing countries face problems in the field of sanitation and clean and healthy life behavior. WHO data 2010 in the Ministry of Health (Kemenkes RI, 2016) states that poor water quality and sanitation one of the causes of death from diarrhea through water borne disease reaches 3.4 million/years.

The WSP (Water Safety Plan) program carried out throughout the world is produced a framework of the concept of implementing the sanitation program so that the program goals are achieved. The concept framework of the program is known as sanitation, focus, opportunity, abilities, motivation (Sanifoam) and is the basis for planning and implementing in these countries to achieve program goals, namely changes in community behavior in efforts to improve sanitation and health.

The Sanifoam concept consists of basic concepts namely focus, opportunity, abilities and motivation. These four concepts underlie the factor of behavior change in the target of the sanitation program, namely the community. Sanifoam aims to analyze the results of formative studies, as a basis for new research design in determining the factor of behavioral change, understanding of factors that influence changes in behavior, focus on intervention as a factor of behavior change and increase the effectiveness and intervention of a factor aimed at behavioral change.

Stop Defecation carelessly is one of movement from *Sanitasi Total Berbasis Masyarakat* (STBM) or sanitary total based community. It is a community empowerment program in the field of sanitation where its activities are directed at changes in behavior from defecating carelessly (stop defecation carelessly) to a certain place (latrine) even in the simplest form in the form of holes or excavations that are given a luxurious toilet that can prevent unpleasant odors. Diarrhea can be caused by various environmental problems ranging from polluted water and the upheld flies that spread (Triyono, 2014). According to the Indonesian Ministry of Health India is the highest country in the world related to chapters carelessly, while Indonesia ranks afterwards (second place). This is the Indonesian government to pay attention through the STBM program.

Broadly the rate of villages Carrying Out STBM in 2021 was 77.3% expanded from the accomplishments of 2020 which was 73.1%. There are five areas that have come to 100% of Villages that have actualized STBM, Specifically the Bangka Belitung Islands, DKI Jakarta, DI Yogyakarta, South Sulawesi and Central Java. Whereas the area with the least rate are Papua (17.9%), West Papua (22.4%) and Maluku (32.2%). At that point the rate of the village Stop defecation carelessly in 2021 was 48.7%. Area with the most elevated rate of stop defecation carelessly village is in Yogyakarta (100%). South Sulawesi (96.3%) and Central Java (85.3%). Areas With the Rate of the Village of Stop defecation carelessly are Papua, West Papua and Gorontalo.

Based on the report above, there are still 685 villages in North Sumatra Province that have been verified Stop Defecation Carelessly or ODF (Open Defecation Free). The district with the highest percentage of the village Stop Defecation Carelessly is Pakpak Bharat Regency, followed by Langkat and Labuhan Batu Utara Regency. Then regencies/cities that do not yet have villages Stop Defecation Carelessly are Nias, Mandailing Natal, Tapanuli Tengah, Sibolga, Padang Sidempuan and Gunung Sitoli.

It is known that Mandailing Natal Regency is an area that has not implemented a Stop defecation carelessly in its village and is the lowest scope of the current. Geographically, Mandailing Natal Regency has 23 sub -districts where the highest ease of access to sanitation access is Sinunukan District (96 percent), Penyabungan (80 percent) and Nopan City (69 percent). Then the lowest achievements in sanitation access are Muara Batang Gadis District (0.8 percent), Muara Sipongi (4.6 percent) and East Penyabungan (9.2 percent) (Dinas Kesehatan Mandailing Natal, 2019). Muara Sipongi is the second lowest sanitation access rate, where only 2.88 percent has a permanent healthy latrine (JSP), 1.37 percent has a semi-permanent healthy latrine, 0.39 percent ownership of sharing toilets and those who are still defecating carelessly as many as 95.37 percent (Kemenkes RI, 2022).

Based on the results of a previous survey conducted by researchers as many as 30 households in Muara Sipongi District who did not have a latrine at home, as many as 70 percent recognized the limited costs to build latrines at home. The average education of the population is only 75 percent of junior high school graduates. This is in line with the knowledge of the population regarding the ownership of healthy latrines, as many as 87 percent of people do not understand environmental cleanliness, one of which has healthy latrines in the home environment. Residents also admit that they have received information about the prohibition of defecation carelessly both in rivers, gardens or land behind the house but until now still doing this every day. Purpose To analyze the factors related to defecating habits carelessly in Muara Sipongi Mandailing Natal District.

RESEARCH METHODS

This research is a quantitative study with a cross sectional study design. The population in this study was all family heads who did not have healthy toilets in their household in Muara Sipongi District. Then it will be directly interviewed by researchers in villages selected as research subjects.

The sample in this study was 200 family heads. Inclusion Criteria:

1. Men or female aged 17-65 years
2. Respondents who do not have a toilet in his house
3. Respondents are residents who live in the working area of Muara Sipongi Health Center.

Exclusion Criteria:

1. Respondents who do not have a toilet at home but do not settle down < 3 months.
2. Not willing to be a respondent
3. Respondents have been visited to be interviewed but not in place

Method of collecting data used primary or secondary data. Primary data is obtained directly from the results of data collection using a list of questions that have been made in obtaining data in the study, where the questionnaire is relevant and related to the research objectives. Secondary data obtained from data by collecting data through books, literature-literature, various articles sought through websites, magazines, and newspapers related to this research. For variable different as below;

Dependent variable

1. The behavior of people defecates:
    - No Defecation Carelessly
    - Defecation Carelessly

Independent variable

1. The level of knowledge:
    - Low
    - High
2. Revenue Level:
    - Low
    - High
3. Distance of the house to the chapter other than the toilet:
    - Near
    - Far
4. Availability of water at a chapter other than toilet:
    - Available
    - Not available

Data analysis method used univariate and bivariate analysis. Univariate is all research variables are conducted to get an overview of the variable level of knowledge, income level, distance to the place of chapters other than latrines, the availability of water in a chapter other than latrines and the behavior of people defecating is presented in the form of frequency distribution tables. In bivariate analysis is useful for seeing the relationship between independent variables (level of knowledge, income level, distance to the place of chapters other than latrines, and the availability of water in a chapter other than latrines) with the dependent variable (stunting incidence). The type of data is category with the analysis technique used is Chi Square. If the value of P <0.05 means there is a significant relationship between the two variables.

RESULTS AND DISCUSSION

Univariate Analysis Results

Table 1. Univariate Analysis Results

Variable	n=100	Percentage(%)
Revenue		
Low	61	30,5
High	139	69,5
Knowledge		
Low	152	76
High	48	24
Distance		
Near	111	55,5
Far	89	44,5
Water Available		
Less	111	55,5
Overflow	89	44,5
Income		
Low	73	36,5
High	127	63,5

In the knowledge variable as many as 61 respondents (30.5%) whose knowledge is lacking, while 139 respondents (69.5%) whose knowledge is good. Based on the income variable, it was found that as many as 152 respondents (76%) whose income was low, while the high income was 48 respondents (24%). Based on the house of 111 respondents (55.5%), the distance was far away while as many as 89 respondents (44.5%) were close to the distance. Based on the water availability variable, there were 111 respondents in the category of less than 111 respondents (55.5%), while the abundant category was 89 respondents (44.5%). Based on the behavioral variable of the respondent chapter, the Defecation Carelessly category was obtained as many as 73 respondents (36.5%), while the category was not defecation carelessly as many as 127 respondents (63.5%).

Bivariate Analysis Results

Relationship of Knowledge Level, Revenue Level, Home Distance to Bab and Availability of Water at the Chapter with the Behavior of People Defecation in Muara Sipongi District, Mandailing Natal Regency.

Table 2. Bivariate Analysis Results

Variable	Defecate						p. value	RP (95% CI)
	Yes		No		Total			
	n	%	n	%	n	%		
Income								
Law	53	26,5	99	49,5	152	100	0,394	0,837
High	20	10	28	48	48	100		(0,561-1,247)
Knowledge								
law	52	26	9	4,5	61	100	0,001	5,42
High	21	10,5	119	59	139	100		(3,7553-8,482)
Distance								
Near	65	32,5	46	52,3	111	100	0,001	6,515
Far	8	4	81	40,5	89	100		(3,303-12,851)
Water Available								
Less	10	5	101	50,5	111	100	0,001	3,115
Overflow	63	31,5	26	13	89	100		(2,242-4,327)

The chi-square test results show that of the 4 independent variables, there are 3 (three) variables that are significantly related to the defecation behavior, namely knowledge, home distance and water availability. This is indicated by the 3rd GIS-P value of the variable is 0.001 which is p. value smaller than 0.05.

Income

Based on the results of the study, it is known that the majority of income <Rp 2,800.00 with defecating habits carelessly of 26.5% and> 2,800.00 as much as 10%. Then the results of Chi Square at a significant value P = 0.394 (p value> 0.05) so that HA is rejected and Ho is accepted. This shows that there is no relationship between family income and habits of defecation carelessly.

The results of this study are not in line with research conducted by Salaiani (2017) that obtained the value of P = 0.00 (p-value <0.05) so that the null hypothesis is rejected, which means there is a significant relationship between the economic level/income with the exhaust practice Big water in Garuga Village, Mantoh District, Banggai Regency, Central Sulawesi Province. This study was in line with the research conducted by Sari (2018) in the Working Village of Ngadirojo District, Wonogiri Regency with the Chi Square test, the value of P = 1,007 was obtained, which means that there was no relationship between the level of opinion with the behavior of the family defecation in the village. So that Sari's research is in line with this research.

Knowledge

In knowledge, 26 % respondent defecated carelessly. From the results of the analysis of family knowledge data with defecating behavior in the Chi Square test at a significant value P = 0.001 (p value <0.05) so that HA is accepted and Ho is rejected. This shows that there is a relationship between knowledge and habits of defecation carelessly. This study is in line with Aini et al research (2023) about the behavior of defecating carelessly where the value of P = 0,000 (<0.05), which means there is a relationship between knowledge with the behavior of Defecation Carelessly in the community of Talisayan River.

Knowledge is the result of tofu after sensing of a particular object. Knowledge is a very important domain in shaping a person's actions. If the formation that is formed is sufficient

knowledge for health, it will be reflected in the pattern of behavior of the people (Notoatmodjo.2010)

The results of this study are in line with the research conducted by Ibrahim et al (2012) regarding the factors related to the use of latrines in Pintu Langit Jae Village, Padangsidimoa District, Angkoloa Julu, which was obtained that there was a relationship between the head of the head of the family with the use of latrines (p = 0,000) in Padangsidimpuan Angkola Jalu. Researchers concluded that health promotion related to the use of latrines should be socialized optimally and optimally so that in order to move and empower the community, namely through continuous and continuous giving information to follow the development of the target, which is expected to be the target (respondents) change from not knowing to know, conscious from knowing to and from wanting to be able to carry out introduced behaviors (Bathija, Geeta V., Sarvar, Rana, 2017). According to Kurniawati (2017) cognitive knowledge is a very important domain for the formation of an action, practices based on knowledge will be more lasting than practices that are not based on knowledge.

House Distance

Based on the results of the study, it is known that respondents are close to home with a defecation habit (Defecation Carelessly) as much as 32.5%. From the results of the analysis of the distance data from the house with Defecation Carelessly behavior in the Chi Square test at a significant value P = 0.001 (p value <0.05) so that Ho is rejected and Ha is accepted. This shows that there is a relationship between the distance of the house and the chapter other than the toilet with the habits of defecation carelessly.

This research of Qudsiyah (2015) states that the distance of the house to the chapter other than the toilet also affects a person in behavior. This is evidenced by the results of the study showing that there is a relationship between the distance of the house to the chapter other than the toilet with the high number of Open Defectaion (OD).

Water Availability

Based on the results of the study, it is known that the availability of water at the abundant defecation with the defecating habits (Defecation Carelessly) is 31.5%. From the results of data analysis of water availability with the behavior of defecation carelessly in the Chi Square test on a significant value P = 0.001 (p value <0.05) so that HA is rejected and Ho is accepted, this shows there is a relationship between the availability of water and the habits of defecating carelessly (Defecation Carelessly).

This research is in line with research conducted by Triyono (2014) about the factors related to the behavior of fishermen in the village of Tanjung Pasar, Tangerang Regency, Banten Province. The study showed that there was a relationship between the availability of facilities such as the availability of water with negative or positive bowel movements. This is because the abundant ownership of clean IAR at home becomes the main factor of a person to choose to defecate or defecate carelessly.

This study is in line with the research conducted Indriyani, Y., Yuniarti, Y., & Nur Latif, R. (2016). that the availability of clean water shows the p value of 0.013 (p <0.005) which means there is a significant relationship between the availability of clean water and the behavior of Defecation Carelessly.

CONCLUSIONS

1. There is no relationship between the characteristics of income and defecating habits in Muara Sipongi District, Mandailing Natal Regency with the acquisition of p-value value of 0.394 (α> 0.05)

2. There is a relationship between family knowledge with habits of defecation carelessly in Muara Sipongi District, Mandailing Natal Regency with the obtaining p-value value of 0.001 (α <0.05)
3. There is a relationship between the distance of the house and defecating habits in Muara Sipongi District, Mandailing Natal Regency with the obtaining p-value value of 0.001 (α <0.05)
4. There is a relationship between water availability with defecating habits in Muara Sipongi District, Mandailing Natal Regency with the obtaining p-value value of 0.001 (α <0.05)

Suggestion

1. To health workers
   a. In order to make efforts and efforts to increase public awareness about defecating carelessly, giving support to the community to change behavior
   b. Conduct more intensive sociations to the houses of the community and monitor routinely every development of community behavior
2. To the people of Muara Sipongi District so that the community tries to build latrines in every house or use facilities that have been provided from local governments such as public latrines or public toilets so that there is no disease through feces. It is advisable to each head of the family to encourage family members to defecate in their place, and forbid neighbors to defecate carelessly near the house and carelessly places.
3. For further researchers, it is expected that further researchers can explore other factors that do not yet exist in this study that might affect the habits of people defecating carelessly.

REFERENCES

Aini, et al. (2023). Faktor-Faktor yang Berhubungan dengan Perubahan Perilaku Stop Buang Air Besar Sembarangan (BABS) pada Masyarakat Bantaran Sungai Talisayan. *Jurnal Fakultas Kesehatan Masyarakat Muhammadiyah Kalimantan Timur, 9 (1), 22-29.*

Bathija, Geeta V., Sarvar, Rana. (2017). Defecation practices in residents of urban slums and rural areas of hubballi, Dharwad: a cross sectional study. *International Journal of Community Medicine and Public Health, 4*(3), 724- 728.

Dinas Kesehatan Mandailing Natal. (2019). Profil Kesehatan Kabupaten Mandailing Natal. Semarang: Dinas Kesehatan Jawa Tengah.

Ibrahim, et al. (2012). Faktor-Faktor yang berhubungan dengan pemanfaatan jamban di desa Pintu Langit Jae Kecamatan Padangsidempuan Angkola Julu Tahun 2012. *Jurnal Fakultas Kesehatan Masyarakat USU.* Accessed on March 7, 2023.

Indriyani, Y., Yuniarti, Y., & Nur Latif, R. (2016). Kajian Strategi Promosi Kesehatan Sanitasi Total Berbasis Masyarakat (Stbm) Di Kelurahan Tirto Kecamatan Pekalongan Barat Kota Pekalongan. *Unnes Journal of Public Health, 5*(3), 240-251. https://doi.org/10.15294/ujph.v5i3.11286

Kemenkes RI. (2022). Strategi Sanitasi Total Berbasis Masyarakat. Jakarta: Depkes RI.

Kemenkes RI. (2016). PMK Nomor 3 Tahun 2014 tentang Sanitasi Total Berbasis Masyarakat (STBM). Jakarta: Kemenkes RI.

Kemenkes RI. (2013). Riset Kesehatan Dasar. Jakarta: Depkes RI

Kurniawati, Linda. (2017). Faktor-Faktor yang Berpengaruh terhadap Perilaku Kepala Keluarga dalam Pemanfaatan Jamban di Pemukiman Kampung Nelayan Tambaklorok Semarang. *Jurnal Univers*

Notoatmodjo, S. (2010). Ilmu Perilaku Kesehatan. Rhineka Cipta

Qudsiyah, W.A., Pujiati, R.S., Ningrum, P.T. (2015, May). Faktor-Faktor yang Berhubungan dengan Tingginya Angka Open Defectaion (OD) di Kabupaten Jember (Studi Kasus di Desa Sumber Kalong Kecamatan Kalisat). *e-Jurnal Pustaka Kesehatan*, 3(2), 362-369.

Saliani, Halenita. (2017). Faktor-Faktor Yang Berhubungan Dengan Praktek Buang Air Besar Masyarakat Di Desa Garuga Kecamatan Mantoh Kabupaten Banggai Provinsi Sulawesi Tengah. *Jurnal Kesehatan Masyarakat. 2017. 5*(2) : 1-20*)*

Sari. (2018). Analisis implementasi program penyediaan air bersih dan sanitasi total berbasis masyarakat pilar pertama STOP BABS (Buang Air Besar Sembarangan) di desa Gunung Baringin Kecamatan Barumun Tengah Kabupaten Padang Lawas, Skripsi Fakultas Kesehatan Masyarakat Universitas Sumatera Utara, Medan

Triyono, A. (2014). Faktor-Faktor yang Berhubungan dengan Perilaku Buang Air Besar Masyarakat Nelayan di Kampung Garapan Desa Tanjung Pasir Kabupaten Tangerang Propinsi Banten. *Forum Ilmiah. 11*(3). 365-374

WHO/UNICEF. (2014). Joint Monitoring Programme for Water Supply and Sanitation. Progress on Sanitation anda Dringking-water: 2014 Update. WHO Press, Geneva.