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Maternal Knowledge and Practices Towards Basic House Sanitation in Simeulue District

[1]Diana Fingki, [2]Khairunnas Khairunnas

[1]Faculty of Public Health, Universitas Teuku umar, Indonesia
[2]Department of Nutrition, Faculty of Public Health, Universitas Teuku Umar, Indonesia
Corresponding author: Khairunnas, e-mail: khairunnas@utu.ac.id
Co-author: D.F e-mail: fingkidiana1@gmail.com
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Abstract

Basic Home Sanitation is an effort to make the house and its environment healthy. Houses with poor sanitation will facilitate the spread of infectious diseases, especially respiratory and digestive tract diseases. This study aims to assess the effect of a Mother's Knowledge about the Importance of Basic Household Sanitation on sanitation practices. The research method is a qualitative and quantitative method with a cross-sectional design. Sampling used the purposive sampling method and obtained 57 samples, namely homemakers. Data was collected using questionnaires and in-depth interviews by visiting residents' homes. Statistical analysis results show that waste management significantly affects maternal sanitation practices. While the qualitative results using NVIVO show that the people of Babul Makmur Village have a habit of managing waste by collecting waste in open trash cans. Some respondents immediately burned the garbage collected in their yards. Some throw garbage directly into the vacant land and burn it if the debris accumulates in large quantities. All wastewater generated from household activities and public bathing is discharged through sewers, leading to surrounding water bodies. we conclude that there is a need for community-based total sanitation socialization

Keywords: Basic Sanitation; Mother; NVIVO; Knowledge

Introduction

Indonesia is a developing country that has frequent health problems. Environmental health in Indonesia is still a concern because the implementation of basic sanitation in Indonesia is not yet optimal, marked by the high incidence of infectious diseases and infectious diseases in the community such as dengue fever, diarrhoea, leprosy, and hepatitis A (Sumantri, 2015).

Basic sanitation is the minimum sanitation needed to provide a healthy environment that meets health requirements and monitors various environmental factors affecting human health. Basic sanitation includes clean water and food processing facilities, latrine sanitation, wastewater management, waste management facilities, and personal hygiene by washing hands with soap. Basic sanitation is a tool that will determine the success of the environmental health development paradigm, which emphasizes the prevention aspect more than the treatment aspect (Picauly et al., 2013). Houses that do not meet health requirements will be closely related to environmental-based diseases, where the trend has been increasing recently. Environmentally based diseases are still the leading cause of death in Indonesia. Even in the group of infants and toddlers, environmental-based diseases account for more than 80% of the diseases suffered by infants and toddlers. This situation indicates that the coverage and quality of environmental health interventions are still low (Salimar et al., 2014).

Basic housing sanitation facilities are the minimum sanitation facilities needed to make a house healthy, while what is meant by the housing environment. This fundamental sanitation problem is a problem that is often encountered in rural areas, apart from the community's low economy, which is influenced by environmental factors such as behaviour and lack of Knowledge (Wilujeng, 2015). Basic housing sanitation that meets health

requirements is 1. House construction includes floors, walls, windows, ceilings, and ventilation. 2. Provision of clean water must meet health requirements, namely: physical, chemical, and bacteriological 3. For disposal of faeces, every house must have a family latrine in a gooseneck outhouse complete with a septic tank. 4. Disposal of wastewater such as public ditches and infiltration wells. 5. Disposal of garbage, garbage originating from households is disposed of in the trash/garbage bin provided by the cleaning service (Talitha NR, 2015)

Housing that does not meet the requirements of the five aspects above can lead to a high risk of disease transmission and environmental pollution, causing health problems that can affect public health and ecological health. Basic housing sanitation that does not meet health requirements will cause diseases related to the respiratory tract, namely ARI (Upper Respiratory Tract Infection) and other diseases such as diarrhoea, dysentery, and other diseases. This disease is caused by unhealthy housing conditions so that residents of the house do not feel comfortable because there are no available sanitation facilities (Yarmaliza, 2017)

Based on researchers' observations, housing in the Babul Makmur Coastal Village still has straight walls, does not have ceilings, ventilation, dirt floors, no windows, and does not have proper latrines. The distance between the livestock barn and the residents' houses is close together so that the smell of livestock manure interferes with community activities. Clean water in the Babul Makmur Coastal Village, Simeulue Barat District, Simeulue Regency is insufficient for the community's daily needs. Hence, people use rainwater and river water for bathing and washing. People defecate carelessly because they don't have latrines, household waste is dumped in haphazard places, and garbage is scattered in people's yards because they don't have a temporary garbage collection site. This study aimed. Based on the observations, the author is interested in researching Mother's Knowledge about the Importance of Basic Household Sanitation in Babul Makmur Village, Simeulue Barat District (Dini et al., 2015)

Methods

The research method is a qualitative and quantitative method with a cross-sectional design. The research site is in the Babul Makmur Coastal Village, Simeulue Barat District, Simeulue Regency. The sample collection used the Purposive Sampling method and obtained 57 samples, namely homemakers. It collected data using questionnaires and in-depth interviews by visiting residents' homes one by one. Quantitative data analysis used Stata 14 software to analyze factors related to sanitation practices, while for qualitative data, we used NVIVO and then created a qualitative matrix. Qualitative method using source triangulation.

Data collection was carried out by researchers and assisted by field enumerators. The questionnaire used in this study is valid and tested in the field. Before conducting data collection, we also gave informed concern to the respondents as a form of consent to conduct interviews. The questionnaire consists of sections to obtain information under the following headings: 1).basic information such as age, mother's occupation, mother's education, and the number of household members; 2). household information, 3). clean water information, 4). The family toilet, 5) landfills, and 6). waste management. We used this information to assess the socioeconomic status of the family. The hygiene and sanitation questionnaire included several closed-ended questions related to the environment, food, and personal hygiene, which helped assess the mother's current Knowledge and practice regarding the three aspects of hygiene (Wilujeng et al.,2013)

Results

Table 1. Distribution of Characteristics

Variable	f	%
Mother's Age		
24-29 Years	42	42,11
30- 39 Years	38	38,60
40-49 Years	14	14,04
< 50Years	5	5,26
Mother's Job		
Contract employees	2	3,51
Teacher	1	1,75
IRT	54	94,74
Education Level		
SD	23	40,35
junior high school	14	24,56
senior High School	15	26,32
DII	4	7,02
Bachelor	1	1,75
Number of Family Members		
2 -3	8	14,04
4- 6	42	73,68
> 7	7	12,28
Amount	**57**	**100**

Source: *Primary Data, 2021*

Table 2. Household Information of The Family

Variable	f	%	Chi-Square
Clean water			3.72*
Dug Well Water	4	7,02	
Well Water	8	14,04	
River water	-	0	
PDAM water	45	78,95	
Family Toilet			5.94NS
There is	54	94,74	
There is no	3	5,26	
Garbage dump			9.55**
There is	16	28,07	
There is not any	41	71,93	
Waste Management			4.86*
Own	13	22,81	
Do not have	44	77,19	
Total	**57**	**100**	

Source: *Primary Data, 2021*

Discussion

Mother's Knowledge About Basic Household Sanitation

Most people in Babul Makmur Village, especially respondents, do not know the meaning of sanitation or basic sanitation. This ignorance occurred because there was no counselling and prior information notification from the sub-health centres in the village. But the community knows about the five pillars of sanitation in the household, which will be investigated if each post is described. Some have implemented several pillars in the household well, although not yet perfect. Several pillars have been implemented by most of the respondents, namely ownership of family latrines and clean water treatment.

Mother's Knowledge About the use of clean water

Based on the study results, it can be seen that the source of clean water for the community in Babul Makmur Village, Simeulue Barat District, comes from PDAM located in each house. The community generally uses pure water for bathing, washing, and cooking. As for drinking water, people typically use water sourced from springs/showers and refilled gallons of water. Even though it is sourced from a spring/shower, the water is still cooked before consumption, while from supplied gallon water, not all users cook drinking water before consumption because they feel it is safe for consumption.

In addition to water sourced from taps and eyes water, there are still primarily small communities using water from dug wells for their daily needs. Based on research, these people more often use water sourced from springs for drinking because the quality of water sourced from springs is more apparent and fresher and, when consumed, also tastes better and is safer to finish even though it is not cooked because it is directly sourced from mountain springs. In addition, PAM water connected to houses has a hotter temperature because the water content at the bottom of the soil in Babul Makmur Village is hot, so there is a hot spring in the area.

Based on observations, the community's water has met the physical requirements, namely, no smell, no taste, and no colour, so safe for consumption (Proverawati and Eni, 2012). However, it still has to be processed or cooked before consumption. Based on the STBM Verification Pocket Guide (2013), the water treatment can be one of the following, namely boiling water (boiling 1-3 minutes), filtering water, sodic (sun), and disinfection (e.g., with chlorine) (Akhter & Bloem, 2014)

All respondents carried out processing based on observations, namely boiling water until it burned. In addition, respondents also know that the treatment of boiled water is reasonable to protect water from contamination or contamination, namely by closing drinking water containers and cleaning containers regularly even though people primarily clean containers (thermos, kettles, teapots, and water bottles). others) if it starts to look dirty (slippery) (Permenkes RI No. 3 of 2014).

Mother's Knowledge About Family Latrine Ownership

People in Babul Makmur Village still have the habit of open defecation. It can be noted that many people who waste water ample in public latrines that type of pit latrine that is in the public baths. The sampling latrine is the simplest type because its manufacture does not require too much cost and does not require land to manufacture a septic tank (Mubarak & Chayatin, 2009). However, the *cemplung* latrine in Babul Makmur Village is made in a modern form, safe and comfortable to use.

The condition of the construction of the building is made like a public bathroom, usually by having walls, roofs, and perfect ventilation to prevent inappropriate views (Akhter & Bloem, 2014). However, according to a study, the difference with room baths public generally, pit latri ne which is located in the village of Babul Makmur made with the condition that only limited high wall insulation with 1-1.5 meters for each room where the disposal and there is a small tub made of cement and

ceramic tiles that are continuous or without insulating walls for every room that contains clean water sourced from springs. For the position of the latrine, each room is made of ceramic which is intentionally not tight or, in other words, given a hole + about 100 cm for a place to defecate that is not connected to the septic tank. However, the dirt is directly plunged and carried now by the water flowing under the disposal, with the final destination is to a body of water such as a river. Using a bathroom with a sinkhole is still a habit of the people of Babul Makmur Village, which is difficult to change. This happened not because there was no public understanding about open defecation but because of the lack of funds from the government and the condition of the people who already felt comfortable and safe doing this habit, making it difficult to change it.

Based on research, several communities in Babul Makmur Village already have family latrines in each of their homes. From 57 respondents, it was found that around 54 houses had one toilet in each house, and three places did not have one, so they had to use public latrines for defecation and defecation. However, the 54 respondents did not use the toilet for every elimination but still used the cemplung latrine in public baths for their daily activities. The latrine in the house is only used if circumstances and conditions do not allow it to go to a public bathing place. Based on the results in the field, the latrines owned by the people of Babul Makmur Village have met the criteria for a good toilet, which are generally the type of squat gooseneck latrine and already have a septic tank but do not have a cover on the lavatory and some are latrines with a toilet. Most latrine constructions have floors made of cement and ceramic, so they are watertight, and walls are made of durable materials such as bricks or walls and have secure and sturdy doors and walls to protect the wearer from inappropriate views.

In some houses that have latrines, flies, cockroaches, and rats can be found around the toilet, so sometimes it disturbs the comfort of the latrine user. Several latrines were found to have puddles of water around them. This happened because the position of the toilets was not suitable, and it could create pools of water. The presence of these two things around the latrine can cause a smell that attracts insects to breed so that it can transmit several diseases to family members in the house, especially if the toilet does not use a lid on the hole. But the community has understood to use the latrine properly. Almost all latrines houses have provided clean water in reservoirs/buckets and cleaning tools around the toilets to be cleaned every day and after using the latrine (Arifin, 2014).

The family latrine has a septic tank far from the community's clean water source, namely dug wells located on vacant land between several residents' houses. And fortunately, the septic tank has never polluted the ground surface around the house because it is complete. The septic tank drain is separate from the bathroom, and dishwasher wastewater drains are channelled into open and closed sewers in the yard. However, the ownership of a latrine in each place cannot rule out the possibility of respondents not defecating in the bathroom where the public bath is located and leaving this habit. However, this habit has never caused a dangerous incident to disturbing the people's health of Babul Makmur Village.

Mother's Knowledge About Household Waste Management

The community in Babul Makmur Village manages waste by collecting garbage in open trash cans. The trash cans used by most of the respondents are plastic waste and trash baskets without covers. Trash cans that do not have lids can become breeding grounds for vectors and rodents to become a medium for spreading disease (Slamet, 2004). In addition, the community also does not separate organic and inorganic waste so that all waste gets the same treatment.

Household waste produced every day is collected in an open trash can placed in the house's yard. Once gathered, some people will immediately burn the rubbish accumulated in the back or the front yard of the house, mostly throwing trash into vacant land located rather far apart from the human settlements and then burning if the garbage has piled up in a number of the lot. There is also direct garbage in any place around his house or on the side of the road when he wants to go to the fields, even though only a tiny part of the community. This happens because there are no garbage collectors assigned to the area, and there is no fee collection for throwing garbage on any vacant land, even anywhere. There is no safe treatment for the waste (100%), such as hoarding junk in holes, turning waste into compost, or reusing but directly burned at the garbage collection point. Improper waste management will cause environmental pollution, especially from insects and rodents' disease vectors. These vectors will multiply rapidly and become a chain of disease transmission for humans (Ningrum, 2013).

According to Slamet (2004), vectors are insects that spread disease, so their presence is alarming for humans. One of the diseases that vectors can transmit is dysentery caused by S. Shigae carried by the Musca Domestica fly, pest caused by Pasteurella Pestis carried by the X rat flea, and many other infectious diseases (Dwiyatmo, 2007). In addition, the management of garbage that is not good may interfere with the aesthetics and freshness of the air surrounding communities due to certain gases produced from the decomposition of waste by microorganisms that cause odour in the surrounding area.

Mother's Knowledge About Household Liquid Waste Management

Disposal of household wastewater should not be disposed of carelessly. According to Soeparman & Suparmin (2002), household wastewater consists of 3 basic fractions, one of which is faeces. The stool is the most dangerous fraction because it contains pathogenic microbes, which are the media as a breeding ground and breeding ground for infectious disease germs (e.g., germs/bacteria, viruses, and worms). According to Suriawiria (1996), one of the processing of human faeces is to use a septic tank and its absorption. The effluent that enters the vessel/tank will settle, separated between the liquid and the solid.

Based on the research, household wastewater originating from bathrooms, latrines, used laundry, and kitchens in Babul Makmur Village is directly discharged into the yard without any prior treatment. The final destination of the liquid waste disposal channel for each household empties into a water body—namely, the river around the village of Babul Makmur. In addition to household waste, wastewater from washing and excreta disposal and urine from public baths are disposed of carelessly, emptying into the surrounding river. In addition to emptying into water bodies, there is also a household wastewater disposal channel directly discharged into the rice fields or pond behind the house. There is no special treatment for household waste treatment. The sewerage from the bathroom, laundry, kitchen, and the latrine is made separately, and in most of the respondents' houses, as much as 58% never cause odours and puddles in their yard, but around 43% of The respondent's houses created a pool of water and caused a smell in the yard of his house. This happened because 75% of respondents' houses had sewerage in an open state (75%) and closed (25%), causing odours and puddles of water around them.

The indiscriminate disposal of waste can pollute the environment around the river and kill the biota in the river. It can become a breeding ground for disease seeds that can infect humans if there is contact with river water (Entjang, 2014).

Conclusion

The study results suggest that improvements in mothers' environment and personal hygiene practices can significantly contribute to maternal sanitation practices. Thus, socialization among mothers in Simeulu District about community-based total sanitation is needed.

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Author Contributions and Competing Interest

All of the names listed above did research and wrote articles together. all agree with the name as the correspondent and author member.

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