



The Relationship Between Knowledge, Attitudes and Actions with the Provision of Clean Water in Hamlet 16 Bagan Percut, Deli Serdang Regency

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Article Info

Article history:

Received 11 July, 2024

Revised 19 September, 2024

Accepted 12 October, 2024

Keywords:

Clean Water, Knowledge,
Clean Water Provision,
Attitude, Action

ABSTRACT

It is important to investigate how knowledge, attitudes, and behaviors are connected to the provision of clean water to understand the health behavior of environmental communities. These three elements are interrelated and interconnected. Good knowledge of clean water can form a positive attitude towards the importance of keeping water clean, which in turn can encourage individuals or groups to take actions that support the better provision of clean water for the community. In Hamlet 16 Bagan Percut Sei Tuan, the researcher aims to find out knowledge, attitudes, and behaviors through the provision of clean water. There were 300 participants in the study, and 51 samples were randomly selected for the study. This study uses a cross-sectional design and a descriptive model as the quantitative technique. With a P value of $0.001 < 0.05$, there is a strong relationship between knowledge and the availability of clean water. With a P value of $0.167 < 0.05$, there was no real correlation between knowledge and the availability of clean water. Action and availability of clean water were significantly correlated, with P values of $0.001 < 0.05$. It is hoped that the community in Hamlet 16 Bagan Percut Sei Tuan will be more in providing clean water because the behavior, awareness, and active participation of the community directly affect the success and sustainability of clean water supply efforts.

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INTRODUCTION

Water is the existence of many people depending on natural resources, which must be preserved both in quantity and quality so that it can still be useful for life itself. Water is used for various purposes in daily life, including cooking, washing, bathing, and drinking. It is also widely used in the commercial, industrial, and agricultural sectors. Its existence must be maintained thoroughly considering the importance of its function. (Azizah, 2022).

Community action is an important factor in solving the problem of access to clean water. Planning, implementing, and improving clean water initiatives with community involvement can have a number of positive impacts. We can guarantee equitable access to resources and foster a desire for clean water management by strengthening the role of communities. Community involvement in obtaining clean water in Medan City is influenced by several variables. The first is public knowledge and understanding of the importance of clean water. To increase public understanding of the importance of clean water management and its impact on health and quality of life, effective education and publicity are needed. In addition, economic considerations are also important. Access to clean water at affordable prices is a challenge for many residents of Medan City due to financial limitations. To meet the need for clean water, the government must make policies that encourage the availability and retention of public funding. (Nanda, 2023).

Clean water has been used or given to residents of Hamlet 16 Bagan Percut, Percut Sei Tuan District, Deli Serdang Regency (PDAM). The source mentions that there is a certain time that has been determined when the air runs out or dies, that is, when it approaches sunset until almost nightfall. However, the coastal towns of Percut have begun to accept water blackouts as a matter of course, and they always collect as much

water as they can, for example at the time before the water is turned off (Winda, 2023).

Based on a survey in Hamlet 16 Bagan Percut, all residents are still using drilled wells. Based on the results of interviews with village heads, actions such as water treatment techniques such as filtration, disinfection, and waste management to ensure that the water distributed is clean and safe for consumption have not been implemented due to the lack of knowledge and residents in the Bagan Percut Hamlet area.

Knowledge and attitude are components of a person's behavior. Human behavior encompasses attitudes, which are embodied or reflected in behavior. The tendency to behave in a way that shows liking or disliking an object is called attitude. Individual morality is built through the creation of harmony between information and attitudes, where knowledge comes first and attitudes follow, and knowledge is one of the factors that strengthen attitude change. (Idhar Darlis, 2024). From the background, the researcher's goal is to find factors related to the provision of clean water in Hamlet 16 Bagan Percut Sei Tuan.

METHODOLOGY

Quantitative methods were used for this study with a descriptive model with a cross sectional. Knowledge and attitude are components of a person's behavior. Human behavior encompasses attitudes, which are embodied or reflected in behavior. The tendency to behave in a way that shows liking or disliking an object is called attitude. Individual morality is built through the creation of harmony between information and attitudes, where knowledge comes first and attitudes follow, and knowledge is one of the factors that strengthens attitude change.

The hypothesis is rejected if the p-value < 0.05 , which means there is a significant relationship (H0 is rejected). Conversely, if the p-value > 0.05 , this indicates the absence of a significant relationship (H0 fails to reject).

RESULTS

A questionnaire regarding the availability of clean water in the hamlet was distributed as part of this study in Hamlet 16 Bagan Percut Sei Tuan. Table 1 shows the participant attributes.

Table 1. Distribution of Respondent Characteristics

Gender	Sum	Frequency
Man	22	43,1
Woman	29	56,9
Age		
0-20	1	2
21-50	47	92,2
51 and above	3	5,9
Education		
PT	1	2
SD	17	33,3
SMA	23	45,1
JUNIOR	9	17,6
Not Finishing School	1	2
Total	51	51

The research conducted in Hamlet 16 Bagan Percut regarding the provision of clean water with a total of 51 respondents, the characteristics of the respondents can be seen in table 1. Gender frequency was 22 (43.1%) Male and 29 (56.9%) Female. At the age of most respondents aged 21-50 with 47 people (92.2%), followed by 51 and above 3 people (5.9%) and 0-20 age 1 person (2%). In education, most of the high school graduates were 23 people (45.1%), followed by 17 elementary school graduates (33.3%), junior high school graduates 9 people (17.6%), and PT 1 person (2%).

In table 2. Showing the level of knowledge of the community in Hamlet 16 Bagan Percut Sei Tuan regarding the provision of clean water.

Table 2. Univariate Data

Knowledge	Sum	Frequency
Good	34	66,7
Bad	17	33,3
Attitude		
Good	45	88,2
Bad	6	11,8
Action		

Good	23	45,1
Bad	28	54,9
Clean Water Supply		
Qualify	17	33,3
Not eligible	34	66,7
Total	51	100

In table 2. It can be seen by the level of knowledge of the community in Hamlet 16 Bagan Percut regarding the provision of clean water based on the level of good knowledge of 34 (66.7%) people, and the level of bad knowledge of 17 (33.3%) people. It can be seen from the attitude of the community in Hamlet 16 Bagan Percut regarding the provision of clean water based on a good attitude of 45 (88.2%) people and a bad knowledge level of 6 (11.8%) people. It can be seen by the actions of the community in Bagan Percut Village regarding the provision of clean water based on good community actions 23 (45.1%) and bad actions 28 (54.9%). It can be seen that the provision of clean water meets the requirements of 17 (33.3%) and the provision of clean water for 34 people (66.7%).

Table 3. Bivariate Data

Variable	Clean Water Supply				Sum	Pvalue
	Available		Not Available			
	n	%	n	%		
Knowledge						
Good	17	50	17	50	54	100
Bad	14	100	0	0	14	100
Attitude						
Good	6	100	0	0	6	100
Bad	28	62,2	17	37,8	43	100
Action						
Good	6	26,1	17	73,9	23	100
Bad	28	100	0	0	28	100
Total					51	100

In table 5. The results showed that knowledge and availability of clean water were related, with a P value of $0.001 < 0.05$ indicating that the two variables were related. An attitude Pvalue of 0.167 or more than 0.05 indicates that there is no relationship between attitude and the availability of clean water. The Pvalue value of the activity obtained was $0.001 < 0.05$ which indicates that there is a relationship between actions and the availability of clean water.

DISCUSSION

The Relationship between Knowledge and Clean Water Supply

In this study, a correlation was found between knowledge and the provision of clean water, with a P value of $0.001 < 0.05$ which indicates that the two variables are related. With 34 people (66.7%) having good knowledge and 17 people (33.3%) having bad knowledge. The lack of knowledge in Hamlet 16 Bagan makes the provision of clean water in this village still not qualified.

Adequate knowledge of the importance of clean water for health is key in motivating action to provide clean water. This includes an understanding of clean water sources, how to maintain water quality, and the adverse impacts that contaminated water can have.

The conclusion of this study shows the lack of knowledge of the people of Hamlet 16 Bagan Percut in providing clean water which makes access to clean water supply in this hamlet unqualified and if not managed properly, the water treatment and distribution system can become a source of microbiological or chemical contamination, which can cause outbreaks of diseases such as cholera, dysentery, and skin diseases.

Relationship between Attitude and Clean Water Supply

In this analysis, it was obtained with the attitude of the community in Hamlet 16 Bagan Percut regarding the provision of clean water based on the good attitude of 45 (88.2%) people and the bad attitude of 6 (11.8%) people. There was no relationship between attitude and the availability of clean water, which was shown by a Pvalue value of 0.167 or greater than 0.05.

A person's mindset is influenced by what he knows about something. A person's attitude can be positive or negative depending on how they interpret the situation. A positive attitude can motivate a person to act in a certain way when necessary, while a bad attitude will make them avoid such actions.

Willingness to participate in community initiatives to provide clean water and understanding the benefits of clean water for daily life are two characteristics of a positive attitude towards the provision of clean water. These attitudes include moral, social, and environmental aspects that influence individual behavior regarding clean water.

Based on the results of the research on the attitude of the community in accessing the supply of clean water, it is good. Even so, there is no correlation between sentiment and the availability of clean water.

The attitude of the community is important to provide clean water because the behavior, awareness, and active participation of the community directly affect the success and sustainability of clean water supply efforts. People who are aware of the importance of clean water tend to use water wisely, comply with regulations related to sanitation and waste management, and support government or organizational policies and programs that aim to maintain the quality and availability of clean water. The active participation of the community also helps in problem reporting, infrastructure maintenance, and the implementation of water conservation activities, all of which are essential to ensure that clean water remains available to everyone.

Relationship of Action with Clean Water Supply

Knowledge, attitudes, and actions are important elements for the community in providing clean water. As a source of life and a means of preventing diseases including cholera, dysentery, typhoid, worms, skin diseases, and poisoning, water has several positive impacts on the environment (Situmorang, 2023). In the study on action, a relationship with a Pvalue value of 0.000 was obtained with 23 people (45.1) having good actions and 28 (54.9) people having bad actions.

Actions are concrete steps taken by individuals or groups to provide, manage, and maintain the availability of clean water. This could include participation in water source cleanup programs, investments in water treatment infrastructure, reducing water waste, and supporting policies that support access to clean water for all. (Malau, 2020).

Community action is important in the provision of clean water because the behavior and active participation of individuals and communities play a key role in maintaining, managing, and improving the quality and availability of clean water. Actions such as the wise use of water, the implementation of good sanitation practices, correct waste management, and support for environmental initiatives and policies, help prevent contamination of water sources and ensure that clean water infrastructure is functioning properly. In addition, community participation in water resource conservation and maintenance programs is also very important for the sustainability of clean water supply, which ultimately supports the health and well-being of all family members.

CONCLUSION

Research conducted on the community in Bagan Percut Village regarding the provision of clean water can be concluded:

Knowledge and availability of clean water were significantly correlated with P values of $0.001 < 0.05$.

With a P value of $0.167 < 0.05$, there was no real correlation between knowledge and the availability of clean water.

With a P value of $0.001 < 0.05$, there is a considerable relationship between activities and the availability of clean water.

SUGGESTION

For the community in Hamlet 16 Bagan Percut Sei Tuan to increase knowledge, attitudes, and actions in providing clean water.

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