

Behavioral Analysis of Community Members Consuming Drinking Water from Springs in Alitta Village, Mattiro Bulu District, Pinrang Regency

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Abstract. Water is an important element for human survival, clean water, and potable water are two things that are not the same but often exchanged. Not all clean water is drinkable, but drinking water is usually from clean water. This study aims to explore the behavior of the community to consume drinking water from a spring source without being cooked in Alitta Village, Mattiro Bulu District, Pinrang Regency. This study uses a qualitative method with a phenomenological approach. The data collection techniques used are in-depth interviews. The results showed that the attitude of the community was still using protected springs as a source of drinking water even though it was not treated first, the tendency of people to be happy or like to drink water without processing, this was caused by taste factors and the threat of a disease was almost invisible the problem does not need to be taken seriously. This habit has the support of the surrounding community including community leaders, the existence of equality of behavior and the mechanism of control and social sanctions that have not been formed so that the behavior is considered natural. As well as the convenience that supports and strengthens the obstacles possessed such as time, energy, and costs so that people are still encouraged to consume drinking water without being processed first. For this reason, the role of health workers is needed to build an understanding of the community and periodically monitor the quality of drinking water.

Keywords: water, drinking water, community

1 Introduction

Water is a vital need that is never separated from daily human activities. Water is an important element for human survival.

Along with the development and population growth, the problem of clean water has become a global problem both in terms of quality and quantity. Clean water and potable water are two things that are not the same but are often exchanged. Not all clean water is drinkable, but potable water usually comes from clean water. Drinking water is household drinking water that goes through a process of processing or without processing that meets health requirements and can be drunk directly. According to Sandra, 2007, drinking water is water that can be drunk directly without being cooked first. While clean water is water that is used for daily use, fulfills health requirements, and can be taken after being cooked first [1].

Drinking water has good quality if it meets several standard parameters including; physical parameters, biological parameters, chemical parameters, and radiological parameters. Drinking water quality requirements up to supervision must be considered in the Regulation of the Minister of Health of the Republic of Indonesia Number 492/MENKES/PER/IV/2010. Based on the 2013 Riskesdas data, the proportion of households that do water treatment before drinking by province. The proportion of households that treat water before drinking in Indonesia is 70.1%. The highest five provinces with households processing water before drinking are North Maluku (92.7%), East Nusa Tenggara (90.6%), Maluku (87.8%), Central Java (85.9%), and Bengkulu (85.8%) while the lowest five provinces are West Nusa Tenggara, Riau Islands, DKI Jakarta, Bali, and Bangka Belitung [2], [3].

In developing countries such as Indonesia, especially in rural areas, one simple way to treat clean water and drinkable is to cook it first [4]. But it is different from the people in the village of Alitta, Mattiro Bulu District Pinrang Regency, where the community uses springs as the main source of drinking water through pipelines which are channeled into a reservoir and drunk without being processed first so that the potential risk of health problems.

Based on preliminary observations, the location of springs in Alitta village is approximately ± 2 Km from the residents' village, as for the number of springs as many as 3 points, around the source of the spring a wall is built and closed so that it can withstand seepage of rainwater and animal disturbance. However, over time the physical condition of the springs has begun to be damaged, where when the field observations are found there is one of the tubs which has been damaged in the closing part, indicating that there is a potential for seepage in the event of heavy rainfall, considering the location of the spring below the foothills. Apart from that, the cleanliness around the three points of the shelter is less noticed.

A study of the risk of diarrhea by Hairani, 2017 shows that there is a significant relationship between mother's knowledge and habits in cooking drinking water with the incidence of diarrhea in infants from the results of the analysis showing the highest OR variable of knowledge is 23.864 and the lowest is 3.093, while the variable drinking water behavior has an OR value (168,000), meaning that the child is 168 times more at risk of diarrhea than the mother who is cooking water for drinking [5].

One approach to understanding and predicting community behavior is through the Theory of Planned Behavior (TPB) approach. According to this theory, a person's behavior can be influenced by intention. The intention is a sign or indication of one's readiness to display behavior and is considered to be an antecedent that precedes behavior. According to Ajzen 1991 [6], intention is influenced by three behavioral determinants, namely: first the attitude towards behavior is a person's belief about the results of a particular behavior whether the behavior has positive or negative consequences, a second subjective norm, that is someone's perception of the other person or environment that influences him will approve or reject the behavior, and perceived behavioral control that is a person's belief in controlling certain behaviors and estimating about the ease or difficulty of displaying the behavior [7].

From the description above, the question that arises is why people still consume drinking water without being processed first, therefore this study aims to analyze in depth the behavior of community members consuming drinking water from springs in the village of Alitta, Mattiro Bulu District, Pinrang Regency. Other paragraphs are indented .

2 Materials and Methods

The location of this research is located in Alitta Village, Mattiobulu Subdistrict, Pinrang Regency. These locations were chosen because it is one of the villages where people still consume drinking water without being cooked first. The type of research used is qualitative research with a phenomenological approach, which focuses on the discovery of facts about a social phenomenon, which aims to obtain answers or in-depth information about a person's experience of a particular phenomenon in life from the person who experienced it [8]. The first paragraph after a heading is not indented.

The informants in this study were obtained through *purposive sampling*. The informants involved in this study were the Village Head, the environmental health section of the Mattiro Bulu Health Center, community leaders, and the local community. Data collection was conducted through *in-depth interviews* and analyzed using *Content Analysis*.

3. Results and Discussion

3.1 Attitude Regarding the Behavioral

In the Theory of planned behavior explains that a person's behavior will arise because of the intention to behave. The theory of planned behavior is specific to a person's specific behavior and all behaviors in general. One's intention to behave can be predicted by three things: attitudes toward behavior, subjective norms, and perceived behavioral control).

Attitude Regarding the Behavior is the result of a person's beliefs about what happens when they do it (expected results), combined with their assessment of whether the attitude is good or bad. Attitude is considered as the first antecedent of behavioral intention. Attitudes are positive or negative beliefs to display a certain behavior. These beliefs or beliefs, called behavioral belief, are weighed based on the evaluation results of their consequences (outcome evaluation). These attitudes are believed to have a direct influence on intention to behave [7]. From the results of the study, it was shown that attitude was formed based on the belief of Alitta, where the community agreed that although the water was not treated first, it did not adversely affect their health and they believed that the water they consumed had been safe and suitable for consumption. The attitude of the Alitta community has survived based on the knowledge and experience of the community so far, where this habit was initiated since the previous parents before them and this habit has survived for generations.

In a peri-urban community in the Dominican Republic, one of the most common reasons for not purifying drinking water, among caregivers who knew about the connection between water and diarrhea, was that their children were old enough to drink untreated water. More than a third of all respondents had already stopped or planned to stop boiling water by the time their child reached two years of age [9]. Similarly, in a peri-urban shantytown in Peru, mothers were observed letting older children drink unboiled water more often than they let their younger children [10].

In a subsequent study, McLennan 2000b found that water treatment, primarily by boiling, was almost universal when children were babies [11]. After infancy, the percentage of respondents who boiled their water decreased, but chlorination increased. Among those that had stopped purification, the mean age of children at discontinuation was 14.8 months. Among those who were still treating water by any method, the mean projected age at which

they planned to stop treating water was about 4.5 years. In general, attitudes have three components, namely: cognitive, effective, and action tendencies (conative) [12]. The cognitive component is an aspect of attitude that relates to an individual's assessment of an object or subject. Information that enters the human brain, through the process of analysis, synthesis, and subsequent evaluation will produce new values that will be accommodated or assimilated with the knowledge that already exists in the human brain. New values that are believed to be true, good, beautiful, etc., will ultimately affect emotions or affective components of individual attitudes. Therefore, the affective component can be said as an individual's feeling (emotion) towards the object or subject, which is in line with the results of the assessment while the tendency component (conative) facts about the individual's desire to do an act by his beliefs and desires. A person's attitude towards an object or subject can be positive or negative. The manifestation of attitude can be seen from someone's response, whether he accepts or rejects, agrees or disagrees with the object or subject.

The tendency of the community to assume that water originating from the source of the spring is clean is characterized by the physical characteristics of the water, where the water is colorless, tasteless, and odorless. This indicates that the knowledge of the Alitta community is still limited to the criteria of physical clean water, which is not inherent, tasteless, and odorless. Whereas according to the Regulation of the Minister of Health of the Republic of Indonesia Number 492/MENKES/PER/IV/2010 concerning the requirements for drinking water quality, drinking water is safe for health, i.e., if drinking water meets physical, microbiological, chemical and radioactive requirements contained in mandatory parameters and additional parameters.

Nevertheless, one of the efforts made by the community so far to reduce the risk of consuming drinking water without being processed is by sedimentation in a reservoir, i.e., water flowing from a spring through piping will be accommodated in a reservoir and allowed to stay overnight for the substance dissolved in water will be at the bottom of the tub, according to people's experience this method is considered effective and efficient by most people, besides that the taste is fresh and cold.

The motivation of people to consume drinking water without being processed is formed by behavioral factors of belief, namely the belief of community members effective about positive behavior, where the behavior of society as a whole and every day form automatically emotional feelings like the taste of water. Weighed based on the results of the evaluation of the consequences (outcome evaluation), which is based on the experience of the people who are accustomed to drinking water without being processed, they believe that even if the water is not treated it does not have a significant negative impact on their health, so the community currently does not pose a threat the community does not take it seriously.

3.2 Subjective Norm

In addition to the Attitude Regarding the Behavior factor, people's behavior is also influenced by subjective norms. Subjective norms are defined as a person's perception of the pressure from the surrounding environment to do or not conduct behavior. Subjective norms are determined by a combination of a person's beliefs about agreeing and disagreeing with someone or a group that is considered important for the individual towards a behavior (normative beliefs), and the motivation of an individual to comply with that (motivation to comply) [7].

According to Sarwono S. (2004), humans as social beings, are not separated from society [8]. To maintain its existence, humans as social beings who always live in a group can

certainly have ties to a norm. Norms that always affect every human development, norms that form the basis or basis in decision making. Humans as social beings prove the existence of subjective norms where one's decision making is influenced by views or an abstract boundary which aims to accept someone in a group.

In adjusting its behavior to community norms, individuals typically see the reference group, namely the group that is used as a reference or role model for individuals, as well as the behavior of the Alitta community in terms of consuming water from a spring without processing, influenced by people around who are considered influential like their parents, uncles, community leaders and religious leaders, where the influence of the people around him forms a motivation in him to adjust to the behavior of the people who are used as role models so that the environmental norms prevailing in Alitta Village are related to the behavior of consuming drinking water from springs without being processed either written or unwritten. Based on the results of the study, the formation of drinking water without being treated is caused by the role of those closest to them such as parents or husbands, friends, or other close relatives who suggest doing so, indicating that the behavior is supported by the people around them even someone motivated because there are references or references from the leaders of old people who were trusted. This is in line with what was expressed by Snehandu B. Karr in [13], he said that one of the determinant factors that influence a person's behavior is due to the support of the surrounding community (social support).

In one's life in society, the behavior of these people tends to require legitimacy from the surrounding community. If the behavior of consuming drinking water without cooking is contradictory or does not get support from the community, then he will feel less or uncomfortable, at least a rumor or talk of the community.

From the informant's information, it was found that so far the behavior of people who consume drinking water without being processed has never received negative views from other communities, such as feeling uncomfortable because of gossip or discussion, this is due to the mechanism of control and social sanctions that have not been formed, due to equality of behavior in terms of consuming drinking water, so that the behavior of consuming unprocessed drinking water is considered still something natural.

4. Perceived Behavioral Control (PBC)

Perceived behavioral control also influences people's behavior so far. Perception of self-control is defined as a function based on control beliefs, namely a person's belief about the presence or absence of supporting or inhibiting factors from being able to emerge behavior. Belief can be obtained from the individual's previous experience of a behavior, information that an individual has about a behavior that is obtained by making observations on knowledge possessed by himself or others known to individuals, and also by various other factors that can increase or decrease individual feelings about the level difficulty in carrying out a behavior. The more individuals feel a lot of supporting factors and a few inhibiting factors to be able to perform a behavior, the greater the control they feel for the behavior and vice versa, the fewer individuals, feel the supporting factors and many inhibiting factors to perform a behavior, the individual will tend to perceive themselves difficult to do these behaviors [7].

Based on the results of the study, community members felt that there was a factor that facilitated support, but there were more inhibiting factors where the community felt the lack of

availability of power and opportunities owned by community members, such as time, cost and energy so that people preferred to consume drinking water without processed rather than consuming drinking water through processing first. The reason for the informants in this study was that the community did not process first, namely where the time and energy of the informants were consumed a lot to work, so they were overwhelmed to divide their time and energy, besides being influenced by cost factors where the community believed that if they did first processing like cooking water requires a high cost because cooking water requires LPG gas because it is difficult to use firewood because it is rarely found, although it is difficult to get it because it takes time because the distance needed is far enough to get it, other factors that can reduce feelings of community members regarding the level of difficulty in carrying out a behavior because of the assumption that the problem caused is not apparent, other than that it is also strengthened by normative beliefs, namely the public belief that the behavior of consuming drinking water without being processed is not a problem by others. The first paragraph after a heading is not indented.

5. Conclusions

Attitudes are formed based on people's beliefs and the support of various layers of society, as well as the strength of perceived barriers that form the intention of the community to use protected springs as a source of drinking water even though it is not processed first. For this reason, the role of health workers or related institutions is needed to build understanding with the community, and periodically monitor water quality in prevention efforts as early as possible.

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