Medical Staff Efforts in Building Environmental Communication Through Information Literation of Healthy Life Behavior for the Society in the Citarum River Flow (DAS) Region

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Abstract. This article is about the environmental communication in one of the Citarum Watersheds, specifically the village of Tarumajaya, Bandung regency. This research originated from facts and data that showed poor environmental hygiene conditions in the Citarum River, which had an impact on public health. The urgency of this research is to reveal the ongoing efforts to build environmental communication in the Tarumajaya village. This research used a case study method. Data collection techniques included observation, in-depth interviews, and documentation studies. Results revealed that there were ongoing efforts by medical staffs to build sustainable environmental communication in the village. The ongoing efforts were carried out through information literacy about healthy living behavior for the community in Tarumajaya village. As a conscious and role communicator, medical staffs continuously provide health information literacy about healthy living behaviors to the community in Tarumajaya village. There are four main points found as ongoing efforts in this research, which are: health literacy; socialization; communication media; and cooperation.

Keywords: Citarum, River, Tarumajaya Village,

1. Introduction

The Citarum River has become a public spotlight until now. This has attracted the attention of various groups, both domestic and foreign, from the Indonesian government, the private sector, NGOs, academics, researchers, and of course the community. Galih stated that the data from the world bank shows that the level of waste and pollution in the Citarum River is alarming. It was reported that some local residents around the Citarum River suffered from various skin diseases, from scabies to skin infections and disorders breathing due to inhalation of factory fumes. In addition, poor water quality due to waste and pollution also damages the crops of farmers [1].

Facts and results of observations had proven to find problems on the healthy behavior of the people in the Citarum river area. This is an element of urgency from the research conducted by the researchers, which is acknowledging real efforts that had been built by medical staffs that were in the region. Tarumajaya village is one of the locations of the research on environmental communication in the Citarum Watershed, which has a tourist attraction, Cisanti, as the main headwaters of the Citarum River. There is uniqueness in this research, Tarumajaya village is the only village that has a Village Maternity Post (Polindes), and the midwives here have active roles in the society. In addition, the novelty value of this research stands on revealing ongoing efforts by medical staffs, especially village midwives in the village of Tarumajaya.

The urgency value of this research gets even stronger with the statement of the Governor of West Java who acknowledge an environmental crisis that needed to be resolved in the Citarum river. In the article reported by Republika Online, Ridwan wrote about the Governor of West Java, Ridwan Kamil, who stated that the environmental crisis in West Java that had to be resolved was the Citarum River. Ridwan Kamil revealed that with the momentum of cohesiveness and leadership in West Java, he was optimistic that there would be a change for the Citarum watershed [2].

Researchers studied at some research literature that discussed environmental communication in Citarum. Bakti, Hafiar, & Budiana revealed the implementation of communication of local wisdom-based environmental activities in the Citarum watershed which was carried out through a personal approach to several social and religious leaders [3]. Furthermore, this approach used communication channels from groups, such as farmer groups, and forum community training or empowerment, which took place in a dialogic manner to achieve common ground and mutual agreement based on mutual trust between participants in environmental communication.

Bakti, Hafiar, Budiana, & Puspitasari in the focus of other environmental communications also stated that in the region there were four types of social institutions in terms of institutions related to religious activities including Majelis Ta'lim; then institutions related to economic activities such as arisan groups; third, institutions related to social activities, such as PKK groups; and finally the institutions involved in agricultural activities, namely a combination of farmer groups (Gapoktan) [4]. Moreover, they stated that there are several reasons for environmental activists utilizing social institutions that involve women are; as access (access) to implement flood disaster management programs, familiar, easy to cooperate with, and to expand networks. The role of environmental activists in the institution is as a communicator and facilitator in disseminating information and training on utilization of waste to the members of the institution.

Another study on environmental communication, Wahyudin also expressed his concern to address various environmental phenomena or problems. According to him, the pattern of handling local government that is still as it is now and the awareness of the people is still low, it is estimated that there will be no progress in building awareness of the community and industry towards environmental sustainability. In addition, efforts to build and preserve the environment must be carried out integrally between the government, NGOs, mass media, companies/industries and the community [5].

Halimatusaudah which also examined the upstream watershed of Citarum showed that institutional participation had succeeded in changing people's attitudes and behavior in not to dispose of household waste and waste industry into rivers again; Participatory institutions had not succeeded in changing the way the private sector dispose of industrial waste into rivers; and participatory institutions center had a more effective way of changing people's attitudes and behavior to be more concerned about the environment [6].

Hansen also described environmental communication in and through a variety of news media, advertising, art, and entertainment as one of the main sources of public and political understanding of definitions, and problems related to the environment [7]. Environment,

Media and Communication examined the role of social, cultural and media politics as a public arena for images, representations, definitions and controversies about the environment.

Another study of the impact of the Citarum River on the surrounding environment, Muntalif, Chasanah, and Faza also revealed that the anthropogenic activity increased along the upper reaches of the Citarum River in Bandung Regency. The negative impact on water quality is caused by human activities; it can be a disruption to the aquatic ecosystem [8]. In addition, Radjabaycolle and Sumardjo also emphasized the importance of community participation in the management of Cikapundung watershed activities in Dago, starting from preserving management areas, watershed management, attitudes related to other factors [9].

In environmental communication studies, Brulle found another important aspect, namely the claim of environmental identity campaigns related to the issue of climate change [10]. Communicators that are experts and professional in delivering identity campaigns with effective ideas about environmental messages can effectively influence public opinion. It will support the legislative actions in fixing this problem. Brulle also stated that the involvement of the democratic civil society is the main thing as an effort for a successful social change.

Iskandar revealed about Greenpeace as an International Organization that focused on environmental issues in reducing toxic waste in watersheds [11]. The results of these studies indicate the role of Greenpeace as a world organization that cares about environmental issues by implementing the rule application and socialization functions that are expected to reduce toxic waste in the Citarum river flow. The Detox Campaign program in the Citarum River has not been carried out maximally, due to the lack of seriousness of the government and the lack of public awareness in controlling waste entering the Citarum river.

Skills in understanding and applying information about health problems are very important for this process and may have a major impact on health behavior and health outcomes. Improving health literacy can improve the ability and motivation of individuals to find solutions to personal and public health problems, and these skills can be used to overcome various health problems throughout life. The process that support health literacy is one of the main goals of health communication [12].

Based on the statements above, researchers found it to be interesting to acknowledge ongoing efforts made by medical staffs in building environmental communication through information literacy about healthy living behavior for the community in Tarumajaya village, Bandung regency. This research used a single case study method with an analysis of relevant communication theories related to the focus of the study.

2. Method

The research method used was a case study method. Referring to the literature from Creswell [13], the type of case study taken was a single case study because the researchers raised a single case, namely environmental communication in improving information literacy on healthy behavior for the community in the Citarum watershed, namely Tarumajaya village.

The data collection techniques in this research were by conducting observations, in-depth interviews, and documentation studies.

- 1) Observation
- 2) Interview
- 3) Documentation Study Search

The researchers used a snowball sampling technique to determine the informant who became the subject research. Informants chosen fit the criteria for the research, and then found other informants from the snowball sampling technique. The criteria in question were people

who were likely to be credible and influential and had a role in building environmental communication in the village. The l informants are:

- Wn, village midwife in Polindes Tarumajaya village
- Ym, the chairman cadre of Tarumajaya village
- Dd, the cadre of Tarumajaya village
- Ls, the cadre of Tarumajaya village
- Rj, medical staffs

3. Result and discussion

Robert Cox in his book Environmental Communication and the Public Sphere argued that environmental communication is a pragmatic and constitutive medium to provide an understanding of the environment for the society, it is likely like our relationship with the universe. This is a symbolic medium used to create environmental problems and negotiate differences in responses to environmental problems that occur. In other words, environmental communication is used to create understanding of environmental problems [14].

Referring to the concept above, researchers saw that the ongoing efforts made by medical staffs in the village of Tarumajaya were a concrete manifestation of building environmental communication. This means that these efforts were directed to create an understanding with the community regarding the importance of environmental problems in the region. The results of the research that had been carried out showed that there had been a continuous effort from medical staffs in the village of Tarumajaya, as one of the Citarum watersheds. These ongoing efforts were solely carried out to embody environmental communication in the region.

Based on the results of the interviews that had been conducted with the informants, the researchers found that there were ongoing efforts. Wn, as the main informant in this research, expressed his opinion in the interview quoted below:

"I think my active role is certainly not enough to build awareness of the importance of environmental communication in this village. But the people here can be told, which means that we need to be active in providing health information because the environmental communication in Citarum is certainly related to the health literacy of the people here. So, there needs to be0 continuous ongoing efforts. I just start by giving health information that continues wherever I am, such as in mosques when the mothers recite the Quran; the point is that the community must understand that this is very important." (Wn)

Based on the interview above, the researchers acknowledge that Wn as one of the medical staffs who played an important role in the village had a high concern to create a clean and healthy environment. This could only happen if the literacy about health information were well-publicized. Therefore, the ongoing efforts in providing health information by the medical staffs must be carried out consistently and continuously, not knowing time and place, even the health information could be delivered at mosques when people were reciting the Quran.

Another health medical staff Rj, that had a role in promoting health at the health center society stated efforts that were done for the society. Below is the interview quote:

"Yes, it is true that we need to provide continuous health information to the villagers, because that is our duty too, especially for me who holds the health promotion working group. The effort is to give information about health to the people here. Usually we invite the cadres for training. We also invite people from school for training so that they can do various activities with the students at school related to health information. Community leaders are

also involved in this, village heads. The main reason is to build coordination for the health of the people here. This will also lead to a healthy environment" (Rj)

Based on the results of the interviews and observations above, the researchers revealed that ongoing efforts were made to build environmental communication in the village. Table 1 below summarizes the efforts mentioned:

Table 1. Ongoing Efforts in Building Environmental Communication

No	Ongoing Efforts	Main Points
1.	As a communicator that is aware and has a role, village midwives provide health information literacy about healthy living behaviors for the community in Tarumajaya village	Health literacy
2.	Literate the public about the importance of implementing healthy behaviors in one of the upstream areas of the Citarum River	Health literacy
3.	Arrange a schedule on socialization activities to provide education and health information literacy	Socialization
4.	Arrange contents of messages related to healthy living behavior in the village of Tarumajaya	Health literacy
5.	The use of media or tools in the form of bulletin boards, drawings or pamphlets posted on the Polindes and Village offices	Media
6.	Involve cadres in each working group to help disseminate the health information	Cooperation

(Source: Research result)

Referring from the table above, the researchers saw that the ongoing effort emphasized in realizing environmental communication in Tarumajaya village was by grouping these points. That is, there are several points that are the main points in creating public health, which will also have an impact on a clean and healthy environment. These points are health literacy, socialization, media, and collaboration. In this case, health literacy is a message or the main information that needs to be conveyed so that environmental communication can be realized. Health literacy can be given to the community in the form of socialization as a facilitator, as well as using media tools, such as pamphlets, bulletin boards, pictures posted on the Polindes. In addition, aspects of cooperation between cadres, medical staffs, and stakeholders also play an important role in realizing environmental communication in the region. In the picture below, the researchers describe these points.

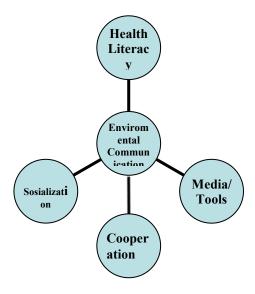


Figure 2. Environmental Communication in Tarumajaya Village

(Source: Research result, 2018)

They are referring to Kanozia [15] which reveals the existence of environmental communication that has an impact on health literacy. This research clearly focused on exploring the potential of communication strategies and approaches to increase environmental awareness. To achieve this millennium goal, media organizations must play an important role in generating environmental literacy and increasing the level of understanding of the impact of environmental problems on humans. There are some media channels, newspapers, and radio stations that directly or indirectly affect human life, even their lifestyle, eating habits and how they live. It is said that the maximum number of channels gave less importance to environmental problems and concerns. This paper is also an effort to understand the role of the regional press, media society and local dialects for the successful implementation of environmental conservation campaign [15].

The results of the research conducted by the researchers are in line with the research of Kanozia [15] which shows the impact of environmental communication on health literacy. This research showed that the aspect of health literacy was one of the main points which were an important element in building environmental communication in the Tarumajaya village.

Though, if this research is viewed from the theory of social construction on the reality of Burger and Luckman [15], there is a phenomenon that is relevant to the assumptions of the theory. For Berger and Luckman [16], the reality of everyday life is an orderly reality. The reality of everyday life seems to have been objectivated; it has been formed by order of objects since before someone is present. In this case, the language used in daily life is constantly used as an objectivation tool that makes the order meaningful.

The reality of everyday life is intersubjective, understood together by the people living in society as a reality experienced. In this research, the reality of life that is intersubjective is the understanding of the informants about the importance of sustainable efforts in building environmental communication in the village of Tarumajaya. Although the reality of everyday life is an intersubjective world, it does not mean that one person with another person always

has the same perspective. Everyone has different perspectives in looking at the shared world which is intersubjective. This can be seen in this research that the intersubjective world in question is an understanding of the importance of health information literacy as a message conveyed to the community, to create a sustainable environmental communication in the village.

4. Conclusion

Based on the results, the researchers found that there were ongoing efforts by medical staffs to build environmental communication in Citarum. The ongoing efforts were arranged in several points, namely health literacy; media; socialization; and possible cooperation between medical staffs, the community, and other stakeholders.

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