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Access of Village Housewife to Information Technology in Utilizing Family Medicinal Plants — A Case Study of Leuwigoong, Garut Regency, West Java

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Abstract

This article examines how housewives in a rural village of West Java use information technology to get information on medicinal plants. Medicinal plants are one of the resources that have existed since ancient times, used by our ancestors to overcome health problems by using various kinds of plants. In family life, the housewives have a position to be responsible with health problems of the family, preventively and curatively. One way is by utilizing family medicinal plants. Today, however, information about medicinal herbs is very rare. This paper argues that the knowledge should be developed and disseminated in the community, especially for the housewives. By using a descriptive research and a quantitative survey this study found out that the housewives have mainly accessed radio and television channels to get information on medicinal herbal plants, and not from the internet, because the latter is considered as expensive.

Keywords: Family Health, Information Technology, Family Medicinal Plants

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1. Introduction

Medicinal plants are one of important components of human life, owing to its various kinds of benefits, whether as a nutritious source or as a medical reason. Even though the real efficacy of such plants has not been scientifically proven, but as an alternative to cure certain diseases, these plants have been used for generations through the study of traditional medicine and indigenous knowledge on the healing process [1].

However, in line with the development of medicinal knowledge which has ability to produce many types of drugs, the public's confidence in the value of herbal medicine is declining. One of the factors that led to the loss of public confidence in the efficacy of traditional medicines is a breakdown of knowledge about traditional medicines owned by the ancestors of Indonesian people. Indeed, the curative effects of modern medicine are noticeably faster when compared to the efficacy of herbal medicines. Nevertheless, traditional medicinal plants or herbs, which have very little side effects,

are not as widely used by the people who rely more on modern medicine despite the side effects [9].

The loss of indigenous knowledge on the management of natural resources (read: medicinal plants) will lead to the loss of traditional wisdom and culture. Koentjaraningrat in his book *Pengantar Ilmu Antropologi [Introduction to Anthropology]* (1993) says that there are seven elements in a culture: language, knowledge systems, social organization, systems and technology equipment of life, livelihood systems, religious systems and arts. The loss of such knowledge will lead to the loss of reference in the management of natural resources distinctively ethnic in character. Thus, we need to take the necessary steps to preserve the knowledge (ethno botany). In the Big Indonesian Dictionary (1999) ethnobotany is a science of botany regarding the use of plants in everyday life and indigenous tribal purposes.

The World Health Organization (WHO) has launched a healthy living program through a back-to-nature or return-to-nature slogans. The institute recommends the use of fibrous food ingredients of the plants, without the addition of dyes, flavor enhancers, aroma enhancers and artificial preservatives. On the 34th National Health Day in 1998, the government of Indonesia began to seriously develop medicinal familial plants (TOGA) as recommended by WHO with the expectation that the cause of diseases would be minimized and for those who were sick they could be quickly cured [10]. Therefore, conservation of plants and knowledge of medicinal plants needed to be preserved [15].

In the life of the village itself, knowledge of medicinal plants has already become a tradition. In one village in Garut district, West Java, knowledge of medicinal plants has been going on for generations by oral communication method. Knowledge of family medicine in this village is well grounded because there was a physician, the late H. Sudirja, who prescribed medicinal herbs to his patients. At that time a lot of people, even from abroad, visited the clinic. Now, the clinic is continued by his son, Enang.

Ideally, all information about these familial medicinal plants is open to everyone. Therefore, information, either in printed form or in electronic form, is needed and information also needs to be managed properly. Management of knowledge about medicinal plants can be managed structurally by the village council, in this regard by the village PKK (Family Welfare Empowerment) or community institutions so that whenever people need information about medicinal plants it will readily available.

Housewives or mothers are very important figures in rural households to participate in the conservation of the traditional knowledge of medicinal plants. This research is conductedto find out how the mothers of rural areas access information on family medicinal plantsso that they could be involved in both the cultivation of medicinal plants outside their homes, or even be involved in the preparation andusage of the medicinal plants.

No.	Media Type	N	%
1.	Own a Radio	45	90
2.	Own a Television	50	100
3.	Own a Gadget	5	10
4.	Not own a Radio, TV, Gadget	6	12
Total		50	100

Table 1: Media owning.

Meanwhile, the internet is the most effective medium for disseminating information about medicinal plants. However, not all levels of rural communities have access to the internet. Moreover, not all rural communities are communication technologyliterate. The question is: how can rural families access to information on medicinal plants?

2. Method

A questionnaire survey was administered toa sample of mothers in Leuwigoong village of Karanganyar Sub District of Garut with the object of research is the mothers or housewives, citizens of Leuwigoong Villlage of Karanganyar Sub District of Garut Regency, West Java.

In this study, the determination of the number of informants was based on purposive sampling referring to the criteria established by the authors. The data collection techniques used included: questionnaire, interview, and document analysis. Furthermore, the data analysis stage was done by observation and field notes.

3. Findings and Discussion

Based on the pre-survey on 15 housewives in Leuwigoong village of Karanganyar Sub District of Garut, the data obtained shows that as many as 7 people (46.67%) did not know the benefits of medicinal plants, as many as 5 people (33.33%) said that they knew about the benefits medicinal plants, and as many as 3 people (20%) said that they knew how to use medicinal plants. Does this problem occur because the village women could not access the information on medicinal plants? Let's see how the ownership of the media is by the community of Karanganyar village.

Media ownership by villagers in Karanganyar, as shownbelow, points to the villagers' accessibility to information on medicinal plants.

Karanganyar village communities' ownership of radio and television are very high; this is because they have a level of ability to buy the technology media. Meanwhile, other media such as the gadget is still regarded as an expensive item, so that the accessibility to information can only be via radio or television.

No.	Information Accessibility	Category	Amount	%
1.	Information Source			
		Formal	32	64.00
		Non-formal	37	74.00
2.	Information Kind			
		Oral information	32	64.00
		Writing information	15	30.00
3.	Searching Frequency			
		High	19	38.00
		Middle	17	34.00
		Low	33	66.00
4.	Seeking Way			
		In Mass Media	15	30.00
		Posyandu	29	58.00
		Asking Neighbor	45	90.00
5.	Searchable Subject	Medicine Plant	29	58.00
6.	Searchable Time			
		Morning	28	56.00
		Noon	28	56.00
		Night	06	12.00
7.	Hours amount of Searching			
		< 1 hour	36	72.00
		> 1 hour	25	50.00

Table 2: Mothers' access to information technology utilizationin family medicinal plants.

Accessibility is the users (respondents)' information activity in getting information through the procedures and mechanisms established. Indicators of accessibility to information that were observed in this study are source of information, the type of information, the frequency of the search, how to search, subject search, time search, and the number of hours of searches in each visit.

The figure above shows that the most widely used source of information is the non-formal resources (74.00%). This is due to the source of the information obtained by mothers is often spontaneous in nature, asking each other, so it by word-of-mouth, and not recorded. If no event of their families needs to be addressed directly related to medicinal plants, they always ask a neighbor or someone who is considered as knowledgeableon the efficacy of the medicinal plants, while they usually get formal sources of informationwhen any PKK activity (IHC) is held. In general, the housewives prefer to ask their neighbors (90.00%), and then go to the place where people in the

health field are in the post of integrated service (58.00%)to searching for information in the mass media (30.00 %).

The frequency of searching for information about the benefits of medicinal plants was relatively low, 66.00%. Determination of low category is associated with the mothers' hours and days working, because of their work in the workplace (for most of them help her husband becoming farmers and taking care of their children all at once). Although a lot of information indirectly related to their needs can be searched for on the internet, such as recipes, healthy living, beauty, how to grow crops even news and infotainment, for the sake of children's education and help the learning process, mothers can also access information relating to the psychology of children as well as educational materials exam questions and materials to assist the school via the internet. However, it has not apparently happened in the countryside. Rural people are more interested in instantly asking by word-of-mouth and then practicing it immediately. Nearly no one writes their stories when the debriefing process happens.

The length of time mothers take to perform information searches is affected by several factors, including low levels of ability and their knowledge of medicinal plants, as well as the amount of information sought so as to confuse them to make their choice. In this study, 72.00% of mothers of households take less than 1 hour for each search, or including into low category.

It is because those women prefer to have oral communication with others, especially the specialists of medicinal herbal plants such as the one who has special clinic of herbs. The information coming from the specialist, is finally circulated among villagers, particularly, the housewives. Here, then, traditional, intimate media of oral communication is more accessible than modern, remote media such as electronic media and the internet.

4. Conclusion

The result of this research leads to a conclusion that the housewives at a village of West Java mainly access information about medicinal plants from radio and television. The other media such as internet was still considered as expensive medium, so that the information they got was not explorative. The housewives are capable of understanding the efficacy of medicinal plants, although development of their knowledge about medicinal plants is hampered by their lack of access to information technology due to the costs incurred and technical skills involved in accessing the internet.

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