Health Information Literacy: The Case of Depok Residents

Laksmi

Dept. of Library and Information Science Faculty of Humanities University of Indonesia, Indonesia E-mail: laksmi@ui.edu

Abstract

This paper is the result of a study on health information literacy of Depok residents. This study is based on a phenomenon experienced by the Indonesian people, where many diseases occur and continue every year, such as avian influenza and dengue hemorrhagic fever. Awareness of health issues and the way to access information are important in an individual's health information literacy. This research identifies the health information literacy of Depok residents in the following areas: their perception on health, their ways of searching for information, and the obstacles they face to get information. This research uses quantitative method and collects data through a survey. The data are analysed using interpretative method, based on cultural perspective. The result shows that health information literacy of Depok residents is basically categorized as "competent". They have the knowledge however they do not always practise the knowledge. They do not pay too much attention on health information. To be healthy, they believe that they can rely on good feeling, happiness, and the religious ritual, such as praying and fasting. Their health problems are supported by indigenous knowledge that is inherited from their forefathers. They believe in traditional medicine and other spiritual healing. Besides that, medical care is not the first priority due to their lack of awareness on health issues, lack of health information and poverty.

Keywords: Health information; Information literacy; Religious belief; Indigenous knowledge; Cultural perspective; Indonesia.

1. Introduction

Health, which is defined as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity (Bhatia, 2007), is important for human being. Unfortunately, Indonesian people apparently do not have this concept. The Minister of Health, Siti Fadillah Supari says that the health condition in Indonesia is poor (*Menkes*, 2007). Indonesia health index is ranked at 112 of 175 nations in the world. Indonesian Department of Health notes that 54% of the infant mortality rates are caused by malnutrition, and the remaining percentage are caused by diarrhea, isolated stenosis of the pulmonary artery (ISPA) and small pox. Every year, many cases of certain diseases appear continuously, such as avian influenza, dengue hemorrhagic fever (DHF) and micro bacterium tuberculosis (TB). WHO (1998) indicates that the mortality rate caused by 'malaria', pregnancy and giving birth, and pandemic HIV/AIDS, including eleven million of children under 5 years old, is high in the developing countries. It could be assumed that people's awareness on health issues has not been developed yet, because of the lower quality of education, lack of information provision on health, and their state of living in poverty.

Depok (Figure 1), one of the emerging small city in Indonesia, is a reflection of an urban society. Based on the 2006 census, Depok has 1.3 million people. In 2001, when it was not a very organized city, the population was 1,204, 687 people, with a population growth of 3,7% per year. Depok now has 6 districts, namely Limo, Sawangan, Pancoran Mas, Beji, Sukmajaya, and Cimanggis (Sejarah Kota Depok, 2006). This small city, built in 27 April 1999, is claimed as having not enough *Puskesmas* (community health center).

According to the Department of Health, each *puskesmas* serves 30 thousand residents. Depok should have 43 *puskesmas*, however the residents are actually served by 28 *puskesmas* (Purwanti, 2006). Besides, Depok has been declared as one of the cities with a high pollution causing waste in the form of household rubbish.



Figure 1. Map of Depok City (shaded are), Indonesia

This research explores health literacy from cultural perspective. There is no single definition for culture. Some scholars state that culture is a system of knowledge; a set of understandings or meanings shared by a group of people; and a system of symbols (Saifuddin, 2005; Layton, 1997). Basically, we can conclude that culture is a way of life, which consists of belief, values, norms, symbols that conduct people's behavior and the way of interaction between them. In this case, we will examine the people in Depok overcome their health problems.

This research uses quantitative approach. Data is collected through a survey questionnaire. The research is to identify the health information literacy of Depok residents. The literacy consists of the perception of the public on health, their ways of searching for information, and the obstacles they face to get information. Other questions will relate to a number of possible determinants of literacy including education, early childhood development, age, personal capacity, living and working conditions, gender and culture.

For academic purpose, this study is expected to be able to develop library and information science work, especially regarding health information literacy. For social purpose, this study hopefully could contribute to the Depok Government in planning and improving their health programme, especially in disseminating health information to the public.

2. Concepts of Health Information Literacy

As mentioned earlier, health is a holistic concept. Health is not merely physical condition, it is related as well to emotional and mental condition. There are most three common factors affecting people's health: genes, life-style and social factors, allopathic drugs, and environmental factors (Bhatia, 2007). Genes are inherited by parents to their children, physically and mentally, as well as health problems such as obesity, hypertension, peptic

ulcers, diabetes, and emotional instability. Examples of life-style and social factors are such as increased sedentary habits, long working hours, reduced rest hours, diet containing highly processed food, poor in fiber content and with loads of artificial colors and flavors, increased anxiety and tensions related to education, career, and job performance. These are some of the factors that are responsible for decreasing the health status of our society at large. Factors of allopathic drugs do not only have their side effects, but their excessive use is decreasing the immunity level of our society at large. The pill-popping culture is an open invitation to chronic ailments. People keep suppressing their ailments, and keep working until their body finally gives up. Environmental factors like increasing pollution of our air, water, and earth is popular in contributing to the increase level of many diseases. This causes a high level of asthma and other allergic complaints in urban areas. Depleting ozone layer is a known factor in increasing rate of skin cancers. Noise pollution is a recognized factor in increasing anxiety and stress levels in our society.

According to the American Librarian Association (ALA), information literacy is defined as a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effective needed information" (Information Literacy, 2006). The meaning of 'abilities' is complex and it depends on many factors, such as perception on the world, empirical experiences, education background and social context. The higher someone has the ability, the more precise, faster, and accurate he/she gains the information. In contrary, if someone has the lower ability, he/she gain little or even wrong information. Thus, health information literacy includes the ability to find, understand and communicate health information and to assess it. It is defined as the ability to gain access to, understand, and use information in ways which promote and maintain good health.

Standards for information literacy, issued by the Association of College and Research Libraries (ACRL, one of the divisions in American Library Association), indicates those abilities as the: ability to recognize information needed, ability to access information, ability to evaluate information, ability to use the information, and ability to understand issues social economical information (ACRL, 2006). Firstly, the ability to recognize information needed is indicated if an individual understands the problem he/she is facing. Individual will explore and evaluate the problem and process the information needed. Secondly, the ability to access information is showed if an individual can recognize the sources of information, including electronics sources such as database and the Internet, understand strategies for searching and select information. This ability includes ability to interact with others, communicate with various characters, and understand values, norms, beliefs, and culture. Thirdly, the ability to evaluate information is analyzing information that is obtaining by critical thinking. Individual can decide which information is important, less and not important, and then relate it to information obtained from other sources. Besides, individual can identify point of view, bias information, basic assumptions, and assess information whether it is accurate, reliable, and valid. Fourthly, the ability to use the information is related to the way of organizing, processing, using, and disseminating information (time and target), and understanding copyrights. Finally, the ability to understand issues on social and economical information is related to information privacy, intellectual property, plagiarism, royalties, and copyrights. By using ICT tools, people can access information efficiently and effectively.

SCONUL (1999) provides standard of ability measurement which contains the following categories of people: (a) *novice*, that individual does not have specific knowledge what is information needed, the way of searching, processing and disseminating information; (b) information needed, the way of searching, processing and disseminating information; (b) *advanced beginner*, that individual does not have those knowledge but he/she is able to do something right; (c) *competent*, that individual has those knowledge, but he/she does not always practices them; and (d) *proficient*; that individual has those knowledge and practice them; and *expert*, that he/she has those knowledge and totally practice them.

These abilities in health information literacy should be supported by humanities values. Value is concepts living in men cognition in the certain society, which are considered valuable and worthy, so they can make it as guidance for living. The values determine whether people behave right or wrong, good or bad. Development of the health information literacy is influenced most by an individual' characteristics, education level, financial level, ability of communication, and his/her relation to others (Case, 2002). Barriers could come from the environment, such as poor facilities of access, and poor political and economical conditions.

Obstacles in information seeking behavior stated by Case (2002) come from individual's mind, such as characteristic, level of education, social status, and economical level. Those aspects influence the relationship between individuals, as good communication is able to provide information access. Indonesia people is known for its closed community; if individuals do not know others well, they do not trust each other, then they will find difficulties to get or share information.

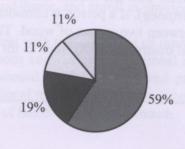
3. Findings

The questionnaires were sent to 50 respondents. They were from the households in Beji Municipal. Most of the respondents were female (62%) and the rest were male (38%). A description of the respondents reveals that Depok residents are dominated by young families leading a modest life. Women of young age with married status and children shows the typical small household of Indonesian family. Most of them are between 29 to 39 years old (40%), followed by people between 18-28 and 40-50 (26% and 24%). The rest are between 51 and 61 (10%). Most of them are housewives (30%) and office workers (30%), and people who work for anything (20%). With the educational background of high school level and below, and salary of less than two millions rupiahs, most of the respondents live modestly, bearing the high cost of living in Depok. A total of 38% graduated from senior high school, 24% graduated junior high school and 20% passed primary school. Only 16% got a higher education certification or degree. The lower education level results in lower income among the respondents.

(a) Health Information Literacy

The data is divided into five indicators based on the analyzed questionnaires. Each indicator is interpreted in the social and cultural context. In this research, the findings for the following indicators are described, which are the ability to identify the needed information, the ability to access information, and the ability to evaluate information. In cultural theory, we have to identify the three levels of Schein's cultural organization (Schein, 1992), namely assumptions, values, and behavior and artifacts. The deepest level of culture is assumption, which influences beliefs, norms, and values. In the second level, values as heritage of ancestors will conduct people's behavior in interacting with each other. The findings are:

(i) The ability to identify the needed information: To be able to determine the nature and extent of the health information needed, individual should realize the concept of health. Figure 2 shows that more than half (59%) of the respondents state that health relates to good feeling and happiness (mental health). A total of 19% say that being healthy is a condition of physical health. The rest indicates that health concerns both mental and physical health (11%) and health concerns physically normal without disability (11%). This findings show that the respondents are more concerned in mental and emotional health than physical health.



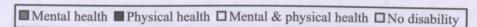


Figure 2: Concept of Health

Figure 3 shows that the respondents frequently need the information on diseases of illnesses that they experience (45%); they need information about traditional and modern medicine (45%); and they need information on preventive medicine (37%). They are also concern about information on first aid (30%) and exercises (38%). A total of 20% indicates that they need information on good nutrition and healthy eating pattern. This findings show that the respondents need various aspects on health information.

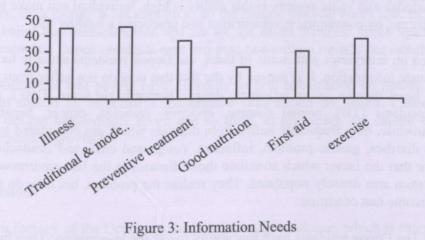


Figure 3: Information Needs

According to the respondents, the most important thing in life is keeping their faith of religion (48%), followed by keeping physical and mental health (44%), improving knowledge (38%), and working (26%). This data is matched to the Indonesian culture as the biggest Islamic country in the world. People use religion as a way of life and a guidance for their behavior in all activities. When they suffer from illness, they will pray and read the Koran. Besides that, most of the respondents prefer watching television, get deep sleep, go for a vacation, and chat with friends. This shows that they know what information they need and what to do in dealing with health problems and illnesses.

(ii) The ability to access information: The ability to access information among Depok residents is low. Almost half of them (42%) do not find out about health information. Usually, the first information on illnesses comes from their friends/family, radio/television, and spiritual practitioner, shaman (19% respectively) (Figure 4). They will go to a medical doctor as a last choice. In the middle class family, this condition is reversed. They will see other alternatives if they have given up medical healing.

Another finding is that they do not find out information about mental illnesses (23%). According to them, a person who has mental illnesses behaves like crazy people. In the rural areas or villages (*kampong*), if a person is considered crazy, the villagers would have his or her legs locked between two pieces of wood. The respondents too do not find out information about medical treatment (20%), such as for acute diseases.

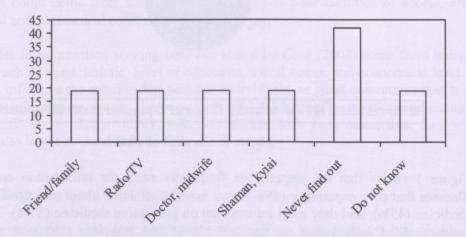


Figure 4: Access to Information

(iii) The third ability is to evaluate information: This ability enables an individual to understand information and its sources critically and select information into his/her knowledge and value system. If this ability is high, individual can make preventive action of disease, by consuming good nutrition and practicing a healthy life.

Based on interviews with some of them, the Depok residents actually have this ability to evaluate information. It is proved by the fact that they do not suffer from serious diseases, like heart disease, avian influenza, dengue hemorrhagic fever (DHF), micro bacterium tuberculosis (TB), mental disease, epilepsy, diabetes, cancer, hepatitis, and ISPA. Meanwhile, they frequently suffer from diseases which are considered to be less serious; like diarrhea, gastric problem, influenza, cough and cold, and headache. Most of them think that the factor which stimulate those diseases is the bad environment. They live in the slum area densely populated. They realize the problem, but they do not know how to overcome that condition.

(iii) The Depok residents have low ability to use the information. They have difficulties to understand the information from doctors or other medical practitioners. That is why they are not able to use the information. A simple case of disease can happen many times, if a doctor gives them some medicine, the instructions on how to consume them, and advices on the food that is good for their health, they do not listen. Due to poverty, they incline to consume the medicine, even as little as possible. Their decision has led to the increase and seriousness of their illness.

There is a belief that there are cases of malpractice. As a lower society, they are not able to claim because it cost money, time, and effort. Alternately, they believe in traditional medicine which are cheaper than the modern medicine. They use traditional healing, for example traditional massage, aroma therapy, healing process by spiritualist or kyiai.

To be healthy, the respondents know that they can refer to many preventive treatments, such as consuming good nutrition, leading a good life, and doing exercises. The majority of the housewives (80%) do exercises by doing household chores, such as sweeping,

washing clothes, walking to market, or looking after the children. They do not spend their money to learn self-defence and dance, and enroll in physical exercise classess.

The respondents too do not deal with any copyright of intellectual works, and they do not realize that they have indigenous knowledge in traditional medicine and healing. They do not realize that knowledge should be documented and preserved. Depok residents are happy if their receipt or traditional medicine from their ancestors are used by other people. They disseminate knowledge of health by words of mouth

(b) Obstacles to get health information literacy

Depok residents realize that the main obstacle to develop health information literacy is their awareness of the importance of health. As mentioned earlier, they search for health information if they feel sick. They try to heal themselves by traditional and generic medicines. If a disease becomes acute, they will see a doctor. There is nothing they else that they can do, because this awareness is a social construction. In their every day life, they interact with each other, individual interpret other's behavior, and react to it. This event will result in new belief, norms and values that will be learned by their children. We can conclude that their awareness of health is influenced by their background, education, and context. In addition, most of them have low education background.

Another obstacle is economic reason. Most of the respondents are housewives, and they have children to raise. Having an income less than two million rupiahs is not enough to buy good nutrition. Even though they can go to the doctor in case of illnesses with the small salary, their money is not enough to do the routine medical check ups. In Indonesia, there is a belief that medical check ups are for the haves. Medical check ups cost much money, meanwhile Depok residents earn less than two million rupiahs per month.

The last obstacle is that people have difficulty to find information on health. The local government should be responsible disseminate information on health. Cases of avian influenza, dengue hemorrhagic fever, and so forth, in principles, are caused by lack of health information provision.

4. Conclusion

Information literacy of the Depok residents is basically moderate, which is categorized as *competent*, that an individual has this knowledge, but he/she does not always practise it. Although one of the reasons is lack of money, Depok people's belief and religious values guide them how to perform a healthy life. They have awareness on health information, but in their life, health information is not a priority, comparing to the other needs of living. They believe that good feeling and happiness will bring physical health. To reach that condition, they prefer to perform religious activities. Those values are clearly implemented in Islamic practices, such as praying five times a day, fasting in the month of Ramadhan, and other religious obligations. Before praying, they have to do ritual ablution before performing their prayer. Other religious values that refer to their healthy life are to be grateful of God's blessings and give helping hands to others. They consider body movement in praying ritual as physical exercises.

Their health information literacy is supported by indigenous knowledge that is inherited from their forefathers. They believe in traditional medicine, kyiai healing, and other spiritual healing. Unfortunately, they just use it, but they do not realize that this knowledge should be preserved in written form. However, there is a need to better

understanding and respect of the relationship between health information literacy and culture in Depok residents.

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