

THE COMMUNITY KNOWLEDGE IN THE GREAT RIVER VILLAGE ON BANJARBARU ABOUT SUPER DAYAK ONION (*ELEUTHERINE PALMIFOLIA MERR.*) TO CURE DIABETES MELLITUS

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ABSTRACT

Dayak onion or ghost onion (Eleutherine palmifolia Merr) is a typical plant of Borneo. This plant has been handed down generations of Dayak community in particular and the community in Sungai Besar Village Banjarbaru as medicinal plants. This plant has a color of red tubers with green leaves in the form of ribbon and flowers are white. In Dayak bulbs is contain phytochemical compounds such as alkaloids, glycosides, flavonoids, phenolics, steroids, and tannins that can be used as raw materials of drugs. Empirically, Dayak onion is proven to cure colon cancer, breast cancer, hypertension, lower cholesterol, drug boil, stroke, abdominal pain after childbirth that it can cure Diabetes Mellitus disease. The purpose of this study is to determine the knowledge of community in Sungai Besar village, Banjarbaru about the efficacy Dayak Onions (Eleutherine Palmifolia Merr) to cure Diabetes Mellitus. This research is a quantitative descriptive research with cross sectional approach. The technique of taking the research subjects using the quota sampling of 30 samples. Data analysis was by descriptive analysis. The results of data analysis show that the villagers of Sungai Besar Banjarbaru have a good knowledge about the efficacy of Dayak onion (Eleutherine Palmifolia Merr) to cure diabetes mellitus. Eventually, the level of education can supports the knowledge of Sungai Besar village Banjarbaru community about the efficacy of Dayak onion (Eleutherine Palmifolia Merr) to cure diabetes mellitus.

Keywords: Community Knowledge, Dayak Onion, Diabetes Mellitus.

Introduction

In some areas, the Dayak onion is known by various names such as sabrang onion, tiwai onion, ghost onion / kambe (Dayak), vessel onion, shallot of babawangan beureum, siyem onion (Sunda); brambang sabrang, luluwan sapi, sabrang (Java) and onion (Malay) (Very dkk, 2000). This plant has been used for generations of Dayak onion about medicinal plants. This plant has a color of red tubers with green leaves in the form of ribbon and flowers are white. In the Dayak bulbs is contain phytochemical compounds such as alkaloids, glycosides, flavonoids, phenolics, steroids, and tannins that can be used as raw materials of drugs (Nur, 2011). Empirically, it is known that Dayak bulb is efficacious as a cure for cancer, tumor, anti-inflammatory, stop bleeding (hemostatik), and facilitate urine / diuretic, analgesic, dysentery, while the leaves are efficacious as a drug for puerperal women (Agromedia, 2012). The empirical evidence is also reinforced by the results of research conducted by Galingging, (2007) said that Dayak onions proven to cure bowel cancer, breast cancer, hypertension, lower cholesterol, ulcers, strokes, abdominal pain after childbirth including can cure Diabetes Mellitus.

Diabetes mellitus (DM) is the major one of health problems. Data from a global study show that the number of people with Diabetes Mellitus in 2011 has reached 366 million people. If no action is taken, this number was expected to increase to 552 million by 2030 (IDF, 2011). Diabetes Mellitus has been caused of 4.6 million deaths. In addition, health care expenses for Diabetes Mellitus has reached 465 billion USD (IDF, 2011). The International Diabetes Federation (IDF) estimates that as many as 183 million people are unaware that they have Diabetes Mellitus. So, in this case 80% people has a Diabetes Mellitus live in low- and middle-income countries (IDF, 2011). The largest number of Diabetes Mellitus patients is between 40-59 years old (IDF, 2011).

Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia and carbohydrate, fat and protein metabolism disorders caused by insulin secretion or insulin secretion (Harrison, 2000). According to the World Health Organization (2006), Indonesia is still in fourth position as a country with the largest population suffering from diabetes after the United States, China, and India. The basic health research (Riskesmas) is conducted in 2013 found that the national prevalence of Diabetes Mellitus is 6% of 15 aged and about 1,060,000 people from 176.689.336 people suffering from Diabetes Mellitus, with the highest prevalence available in West Java Province (7%). Meanwhile, the province of South Kalimantan is the province with a highest number of Diabetes Mellitus patients on the Borneo island (6%), East Kalimantan, and Central Kalimantan (4%) are prevalence of Diabetes Mellitus, West Kalimantan (2%) are prevalence of Diabetes Mellitus.

Diabetes Mellitus is commonly referred as the silent killer because it can affect all organs of the body and caused by various complaints. Diseases will be caused by eye vision, cataracts, heart disease, kidney disease, sexual impotence, difficult to heal and rot / gangrene wounds, infections of the lungs, vascular disorders, stroke and so forth. Not infrequently, patients who have severed by Diabetes Mellitus amputation of limbs due to decay (MOH, 2005).

Knowledge is the result of human sensing, or the result of knowing a person to the object through his or her senses (eyes, nose, ear and so on). Many peoples knowledge is acquired through the sense of hearing and the sense of sight (Notoatmodjo, 2010). Knowledge is influenced by the factor of formal education, but it is not mean people with low education have low knowledge.

The Indonesian nation has long known and used by medicinal plants as one of the efforts in tackling health problems. Knowledge of medicinal plants is based on experience and skills that have been passed down from one generation to the next. Based on the results of preliminary studies by previous researchers and based on the above background, the researchers are interested to examine "Banjarbaru Community Knowledge About Efficacy Dayak Onion (*Eleutherine Palmifolia* Merr) To Cure Diabetes Mellitus."

RESEARCH METHODS

This research type is quantitative descriptive using a cross sectional design and a single variable about the efficacy community knowledge of dayak onion (*eleutherine palmifolia merr*) to cure Diabetes Mellitus. The sample of this research is 30 peoples. The sampling technique uses a quota sampling. The research instrument is used with questionnaire.

Table 1 Questionnaire grid

Variable	Indicator
<i>Diabetes Mellitus</i>	a. Meaning b. Types and Factors c. Perception d. Cause e. Danger
Dayak Onion	a. Meaning b. Benefits c. Morphology d. Perception

Before the questionnaire was used in the study, the questionnaire had to be piloted in advance to determine a validity and reliability. Validity and reliability test carried out on at least 30 respondents who have the same characteristics with the respondents in the place of research carried out. Validity was analyzed by Pearson product moment correlation formula, whereas reliability was analyzed by Alpha Cronbach formula. Validity and reliability are performed using Stableistic Product and Service Solution (SPSS) version 16.0. Data processing is editing, processing, cleaning.

RESULT

From 30 respondents studied, got some respondents between 20-29 years as many as 11 people with percentage 36.67%, respondents between 30-39 years as many as 7 people with percentage 23.33%, respondents between 40-49 years as many as 8 people with percentage 26.67% and respondents between 50-60 years as many as 4 people with percentage of 13.33%.

**Table 2
Age Frequency Distribution**

Age	Frequency	Percentage (%)
10-19	0	0
20-29	11	36.67
30-39	7	23.33
40-49	8	26.67
59-60	4	13.33
Total	30	100

From 30 respondents who researched, there were respondents who sex men 12 people, with percentage of 40 percent and female sex respondents as many as 18 people with a percentage of 60%.

Table 3
Gender Frequency Distribution

Gender	Frequency	Percentage (%)
Man	12	40
Woman	18	60
Total	30	100

From 30 respondents studied, the education level of respondents from junior high school is 3 people with percentage 10.01%, education level of respondents from senior high school is 7 people with percentage 23.33% and education level of respondents from higher education is 20 people with percentage 66.66%.

Table 4
Education Frequency Distribution

Education	Frequency	Percentage (%)
Elementary School	0	0
Junior High School	3	10.01
Senior High School	7	23.33
Undergraduate	20	66.66
Total	30	100

From 30 respondents studied, community knowledge about the benefits of Dayak onion to cure Diabetes Mellitus as many as 27 people have knowledge with good category with percentage of 90% and have knowledge with enough category as much as 3 respondents with percentage of 10%.

Table 5
Public Knowledge Distribution

Category	Knowledge	Percentage (%)
Very Good	27	90
Good	3	10
Total	30	100

The results of community knowledge about the benefits of Dayak onion to cure diabetes Mellitus, who got more than 75 as many as 27 people and who got less than 75 as many as 3 people.

Table 6
Results of Community Knowledge Scores

Number	Respondent Identity	Respondent Score
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1	Respondent 1	82.14
2	Respondent 2	75.00
3	Respondent 3	82.14
4	Respondent 4	96.42
5	Respondent 5	92.85
6	Respondent 6	96.42
7	Respondent 7	100.0
8	Respondent 8	96.42
9	Respondent 9	96.42
10	Respondent 10	92.85
11	Respondent 11	92.85
12	Respondent 12	85.71
13	Respondent 13	82.14
14	Respondent 14	78.57
15	Respondent 15	75.00
16	Respondent 16	82.14
17	Respondent 17	89.28
18	Respondent 18	100.0
19	Respondent 19	82.14
20	Respondent 20	96.42
21	Respondent 21	82.14
22	Respondent 22	67.85
23	Respondent 23	89.28
24	Respondent 24	67.85
25	Respondent 25	96.42
26	Respondent 26	85.71
27	Respondent 27	100.0
28	Respondent 28	75.00
29	Respondent 29	64.28
30	Respondent 30	100.0

The frequency distribution of community, which got the highest percentage on the category value of statements about cure Diabetes Mellitus 92.85 and 100 as many as 12 respondents, while the highest on category value statement about Dayak onion as many as 9 respondents (30%).

Table 7
Result of Community Knowledge About Curing Diabetes Mellitus

Category of Questions	Value	f	Percentage (%)
Curing Diabetes Mellitus	50.00	3	10.0
	57.14	3	10.0
	64.28	2	6.66
	71.42	3	10.0
	78.57	5	16.67
	85.71	2	6.66
	92.85	6	20.0
	100.0	6	20.0
Total		30	100

Table 8
Community Knowledge of Dayak Onions

Category of Questions	Value	f	Percentage (%)
Dayak Onion	64.28	1	3.33
	71.42	6	20.0
	78.57	5	16.67
	85.71	7	23.33
	92.85	9	30.0
	100.0	2	6.45
Total		30	100

DISCUSSION

Based on the results of community knowledge in the village of Sungai Besar Banjarbaru about the efficacy of Dayak onion (Eleutherine Palmifolia Merr) to cure Diabetes Mellitus discussion as follows:

The community knowledge of Banjarbaru river village about the efficacy of Dayak onion (Eleutherine Palmifolia Merr) to cure Diabetes Mellitus based on age shows that a majority 20-29 years old or over 20 years old (> 20 years). This shows that age affects the capability and mindset of a person. The more ages will develop the capture and mindset, so the knowledge gained will be better (Budiman and Riyanto, 2013). The knowledge of the people in Banjarbaru river village about the efficacy of Dayak onion (Eleutherine Palmifolia Merr) to cure Diabetes Mellitus based on age, mostly belonging to good category. The age groups are 20-29 years old or over 20 years old (> 20 years). This is due to the process of mental development matures, especially in adulthood. On the psychological or mental aspects of the level a person more mature. So, it can be concluded the age of a person influential in the acceptance of information resources. The higher age of a person, the better knowledge gained.

The results of this study that indicate the most dominant level of education is a society with a Bachelor / Higher Education means the community of Sungai Besar Banjarbaru village has a level of knowledge about the efficacy of Dayak onion (Eleutherine Palmifolia Merr) to cure Diabetes Mellitus and belongs to the category of knowledgeable. So, it can be said that people in the village of Sungai Besar Banjarbaru pertained to the development of a more mature mindset. Education is an attempt to develop personality and abilities in and out of school, lasting for life. Education affects about the learning process, the higher a person's education the easier the person is to receive information. Information obtained from both formal and non-formal education can have a short-term effect is resulting in a change or increased knowledge (Budiman and Riyanto, 2013).

In this case, education becomes one of the factors can affect to one's knowledge level. Education is an attempt to develop personality and abilities in and out of school and lasts a lifetime. Education affects by a learning process, the higher a person's education, the easier a person is to receive information. With higher education, someone will tend to get information either from other people or from other mass media (Budiman and Riyanto, 2013). There are several factors that influence one's knowledge such as education, mass media or information, socio-cultural, and economic, environment, experience, age, and occupation (Budiman and Riyanto, 2013). Knowledge is not something that already exists and available for while others just accept it. Knowledge is as an ongoing formation by someone who at any moment reorganizes because of new insights (Notoatmodjo, 2010).

The results of this study that indicate about the level of community knowledge in the village of Sungai Besar Banjarbaru about the efficacy of Dayak onion (Eleutherine Palmifolia Merr) to cure Diabetes Mellitus. It showed that the level of knowledge with good category with the number of respondents as many as 27 people from 30 people, knowledge with enough category as many as 3 respondents (10%). It can be concluded by the level of knowledge in Sungai Besar villagers Banjarbaru about the efficacy of Dayak onion (Eleutherine Palmifolia Merr) to cure Diabetes Mellitus has been categorized as good. This is because the majority of community is active in seeking information, especially about the efficacy of Dayak onion to cure Diabetes Mellitus. In addition, people also often get information from people who come from personal experience both personal experience of the respondents themselves. According to Notoatmodjo (2012), personal experience can be used as an effort to gain knowledge. The developed experience can provide professional knowledge and skills that can develop decision-making abilities, manifestations of scientific reasoning, and ethical alignment that depart from real problems related to existing conditions. Therefore, the level of

community education is expected to people in the Sungai Besar village Banjarbaru be able to understand about Diabetes Mellitus including the prevention and handling, including the use of medicinal plants Dayak onion in treating Diabetes Mellitus.

CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this research is the knowledge of Sungai Besar village Banjarbaru community about the benefits of Dayak Elephant (*Eleutherine Palmifolia Merr*) to cure Diabetes Mellitus are including in the level of good knowledge. The level of education can supports the knowledge of sungai besar village Banjarbaru community about the efficacy of Dayak onion (*Eleutherine Palmifolia Merr*) to cure Diabetes Mellitus.

Suggestions for people in sungai besar village Banjarbaru which is still in enough category in knowledge about the efficacy of Dayak onion (*Eleutherine Palmifolia Merr*) to cure diabetes mellitus. It is suggested to learn more and dig the references and information about the efficacy of Dayak onion (*Eleutherine Palmifolia Merr*) to cure Diabetes Mellitus and for other researchers. It is advisable to examine more deeply about Dayak onion both the efficacy, content, other benefits and side effects of Dayak onion to enrich knowledge, information, and empirical findings are good and useful especially about the efficacy of Dayak onion to cure various diseases .

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