

Local Community Knowledge About Medicinal Plants in Ethnic Countries on Sumbawa Island

Nila Yuliana¹, Yasinta Aloysia Daro¹, Muhammad Fauzi¹, Laily Widya Astuti¹, Seftiani Utami¹, Ieke Wulan Ayu¹

¹ Universitas Samawa, Sumbawa, Indonesia

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Correspondence

E-mail : nilayuliana066@gmail.com

ABSTRACT

Background & Objective: Local cultural wisdom on Sumbawa Island related to health is still lacking, in this case it is necessary to get attention from health workers, especially the materials used by the community regarding the safety of the materials used. The objectives of the study were (1) to find out the types of medicinal plants used daily by the people of Sumbawa Island (Sumbawa Ethnic Group, Bima Ethnic Group, Dompu Ethnic Group), (2) to reveal how the people of Sumbawa Island (Sumbawa Ethnic Group, Bima Ethnic Group, Dompu Ethnic Group) obtain and utilize medicinal plants as traditional medicine. **Metode:** The research approach used in this study is a qualitative approach with an exploratory survey. **Result:** The results of the interview on medicinal plants originating from Sumbawa are: Babak Pohon Juwet, Babak pohon kemang kuning, Serat Kuku, Mentawer, Babak Tapulet, Kapas Niwang, Sepeda Api, Turi Ungu, Sukun. **Conclusion:** (1) The types of medicinal plants used daily by the people of Sumbawa Island are 81 types. (2) The way the people of Sumbawa Island obtain and utilize medicinal plants as traditional medicine is obtained from around the house/yard, fields/gardens, and from the forest. The way to process medicinal plants is by boiling the parts of the plant that are utilized, such as tree bark, roots, and leaves, and drinking the water, making a paste to be applied, and drying them to be made into potions.

INTRODUCTION

Local community knowledge about the use of medicinal plants is a concept obtained based on community experiences passed down from generation to generation in a particular area (Barat, S.J. 2014). This knowledge appears in the form of a culture of plant utilization (Nurrani, 2015). The use of plants is based on knowledge that has been adhered to as traditions and customary laws that have been passed down from generation to generation by the community. The community has knowledge about the benefits of plants which is basic knowledge and is very important in maintaining their survival (Pramita, N.H, S. Indriyani, 2013). Local knowledge in utilizing these plants as medicine is included in ethnobotanical studies (Nasution et al., 2020).

The contribution and role of ethnobotany in the present and future generations are very broad and diverse, especially in the discovery of new drugs (Hakim, 2014). One branch of science used to discover new chemical compounds in the manufacture of modern medicines is ethnomedicine (Silalahi, 2016). Ethnomedicine is a study of the perceptions and conceptions of local communities in understanding health by utilizing medicinal plants (Syarifuddin et al., 2022).

The native ethnic groups that inhabit Sumbawa Island are the Sumbawa Tribe, the majority of whom live in Sumbawa and West Sumbawa, the Bima Tribe, and the Dompu Tribe. Most of the people still maintain traditional medicine that has been passed down from generation to generation. According to Daulay, (2011), knowledge about medicine and treatment is the most important part of traditional knowledge held by local people, especially rural or traditional people. People still believe that

traditional medicine is very helpful in health. This happens because in the village it is still very easy to get medicinal plants that are around the residents' settlements.

Plants are obtained from yards and gardens and are processed by the community by boiling, concoctions, eating directly, and soaking. In addition, there is a study by Ani et al., (2018) which states that there are 45 plant species from 27 families used by the community around the Madapangga Bima Nature Tourism Park for medicinal ingredients for various diseases. The results of this study were conducted on Sumbawa Island, but research on medicinal plants in ethnic groups on Sumbawa Island has never been conducted, although Health Efforts through the use of traditional medicine from these plants have been known to the community from the past to the present.

Information related to local community knowledge about medicinal plants has been widely published, especially their content and benefits. However, local community knowledge about medicinal plants in ethnic groups on Sumbawa Island has never been conducted, especially observing the use of medicinal plants in infectious and non-infectious diseases, so this research is important to be carried out in order to support Sustainable Development Goals 3 on Sumbawa Island.

The purpose of the study is to: Find out the types of medicinal plants used daily by the people of Sumbawa Island (Sumbawa Ethnicity, Bima Ethnicity, Dompu Ethnicity) ; Reveal how the Sumbawa Island Community (Sumbawa Ethnicity, Bima Ethnicity, Dompu Ethnicity) obtain and utilize medicinal plants as traditional medicine.

METHOD

The research approach method used in this study is a qualitative approach with an exploratory survey. An exploratory survey is a research method conducted to explore initial ideas and insights related to a topic. This method is often used to understand new issues, identify problems, or find important variables. The survey in this study was conducted to determine the types of medicinal plants and how to obtain and utilize medicinal plants as traditional medicine in the community (Sumbawa Ethnicity, Bima Ethnicity, Dompu Ethnicity).

The types of data in this study are divided into 2 (two) types, namely secondary data and primary data, namely:

1. Primary Data

Primary data is obtained through direct interviews with respondents, herbalists, and the government using a questionnaire as a research instrument that has been prepared in advance and by conducting direct observations in the field. Interviews are conducted to obtain demographic data, utilization data related to medicinal plants.

2. Secondary Data

Secondary data is needed to support existing primary data so that we can better understand the problems to be studied. The secondary data needed includes reports from partner farmers, statistical data from the sub-district or village where the respondents or where the medicinal plants are located, the Health Office, the Sumbawa Regency Agriculture Office. The method used to obtain secondary data is documentation. Documentation is a method by investigating written objects such as books, magazines, documents, regulations, photos, diaries, internet sites. The documentation in this study is financing data, Village Regulations, and related data from Sumbawa Regency Agriculture.

Sample selection was conducted for community respondents in three ethnicities using accidental sampling and purposive

sampling. The research respondents were people representing ethnicities with a total of 30 respondents. Determination of informants using purposive sampling. Informants are people who are used to provide information about the situation and background conditions (location or place of research), and are people who are known to be able to provide complete information related to the ethnobotany of medicinal plants and people who are known to have used medicinal plants for generations.

The data analysis methods used in the study were: 1) To find out the types of medicinal plants used daily by the Sumbawa Island Community (Sumbawa Ethnicity, Bima Ethnicity, Dompu Ethnicity) using descriptive analysis; 2) To reveal the methods of the Sumbawa Island Community (Sumbawa Ethnicity, Bima Ethnicity, Dompu Ethnicity) in obtaining and utilizing medicinal plants as traditional medicine using Miles and Huberman analysis.

RESULTS AND DISCUSSION

Respondent Characteristics

Characteristics are obtained from the background data of respondents who are willing to fill out the questionnaire so that respondents are expected to provide information. These characteristics include gender, age, education and length of stay which are described as follows:

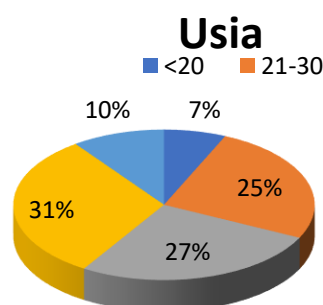


FIGURE 1. Respondent Characteristics Based on Age

Figure 1. shows the youngest respondents aged <20 years and the oldest at >50 years. The largest number of respondents was aged 41-50 years, which was 28 people (31.1%).

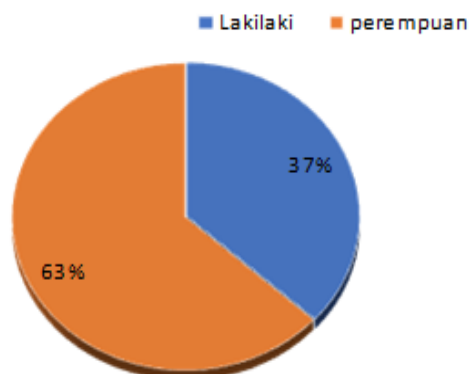


FIGURE 2. Respondent Characteristics Based on Gender

Based on Figure 2. shows that out of 90 respondents, most of them are female, namely 57 people (63.3%) and as many as 33 people (36.7%) are male. The results of the analysis show that the number of female respondents is more knowledgeable about medicinal plants.

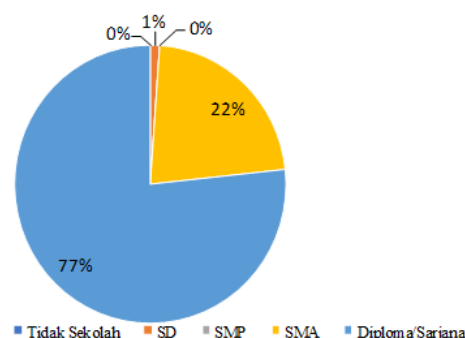


FIGURE 3. Respondent Characteristics Based on Education

Figure 3 shows that the respondents' education level is a percentage of elementary school education level of 1 person (1.1%), high school education of 20 people (22.2%) and the majority of Diploma/Bachelor's education of 69 people (76.7%).

Knowledge of Local Medicinal Plants
Based on the results of analysis and interviews with respondents, several additional medicinal plants used by local communities were obtained as listed in the following table.

TABLE 1. Local Medicinal Plants

No	Medicinal plants	Scientific Name	Parts used	Benefits		Processing Method
1	Babak Pohon Juwet	<i>Syzygium cumini</i>	Old tree bark	Internal Kerapa', mouth ulcers, internal heat		boiled
2	Babak pohon kemang kuning	-	Old tree bark	Tonsils, pain when swallowing		boiled
3	Serat Kuku	-	From roots to leaves	Hemorrhoid		boiled
4	Mentawer	-	Leaves that are still green	Reduces swelling	breast	Fresh leaves finely ground
5	Babak Tapulet	-	Old tree bark	Internal mouth, internal heat	Kerapa', ulcers,	Finely ground and the sediment water is drunk
6	Kapas Niwang	-	Leaf	Internal mouth, internal heat	Kerapa', ulcers,	Finely ground and the sediment is drunk, and the remaining sediment is rubbed all over the body.

No	Medicinal plants	Scientific Name	Parts used	Benefits	Processing Method
7	Sepeda Api		Leaf	Kerapa' rain, which usually occurs in children who have a fever in the rainy season with symptoms of rashes/lumps of pus all over the body.	Roasted then ground and rubbed all over the body
8	Turi Ungu		Leaf	Dislocation, smoothing the skin	Finely ground, mixed with kencur and rice, then applied to the dislocated area; purple turi leaves mixed with rice are applied all over the body to soften the skin.
9	Sukun		Leaf	Kidney infection, kidney failure	boiled

Figure 1. shows the youngest respondents aged <20 years and the oldest aged >50 years. The largest number of respondents was aged 41-50 years, which was 28 people (31.1%). This is in line with the study of Notoatmodjo, (2003) that the Indonesian people still have a strong bond to the cultural tradition of using herbal medicine, so that the use of traditional medicine is quite evenly distributed in all age groups. This result could be due to the increasingly developing technological advances so that more and more information is obtained, so that young people can also find out information about traditional medicine.

Based on Figure 2. shows that out of 90 respondents, most of them are female, namely 57 people (63.3%) and as many as 33 people (36.7%) are male. The results of the analysis show that the number of female respondents is more knowledgeable about medicinal plants. According to Afriliana, (2019), women tend to understand traditional medicine better than men, this is because women are

more interested in understanding a treatment in depth compared to men.

Figure 3 shows that the level of education of respondents is the percentage of elementary school education level of 1 person (1.1%), high school of 20 people (22.2%) and the majority of Diploma/Bachelor's education of 69 people (76.7%). According to Oktarlina et al, (2018) that someone with higher education will find it easier to accept or remember knowledge more easily. In addition, knowledge about a treatment that can cure is obtained from generation to generation, then from this it can be deepened through information received either self-education or from other external factors such as the environment (Setiawan et al, 2018; Widiyanto et al, 2018).

The weakness in this study is that researchers have difficulty in obtaining information from informants regarding the types of medicinal plants used as treatment. This is because this knowledge is obtained from generation to generation and cannot be shared with other people.

CONCLUSIONS AND RECOMMENDATIONS

The types of medicinal plants used daily by the people of Sumbawa Island are 81 types, including the babak pohon juwet, babak pohon kemang kuning, serat kuku, mentawer, babak tapulet, kapas niwang, sepeda api, turi ungu, and sukun.

The way the people of Sumbawa Island obtain and utilize medicinal plants as traditional medicine is obtained from around the house/yard, fields/gardens, and obtained from the forest. The way to process medicinal plants is that the parts of the plant that are utilized such as tree bark, roots, and leaves are boiled and the water is drunk, made into a paste to be applied, and dried to be made into a potion.

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