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### THE USE OF *SALEKARANG* AS A TRADITIONAL MEDICINE TO TREAT HEALTH COMPLAINTS EXPERIENCED BY THE PEOPLE IN PAMEKASAN - MADURA

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**Keywords: Pamekasan, herbal medicine, *salekarang***

#### ABSTRACT:

Indonesia has around 400 ethnic groups, each of which has a variety of knowledge that has been passed down from generation to generation, including traditional medical knowledge or herbal medicine. Pamekasan is one of the districts on the island of Madura, which is rich in various herbal concoctions. The wealth of herbal medicine in Pameksan is inseparable from the habits of the local people who prioritize taking herbal medicine rather than coming to the doctor when experiencing illness, especially people who live in rural areas. One of the distinctive herbal medicines in Pamekasan is "*Salekarang* herbal medicine". *Salekarang* has become one of the leading products in Pamekasan. This study aims to determine the composition of *salerakang* herbal medicine and to determine its use to cure the health problems of the community. This study used a descriptive design with a qualitative approach. The informants chosen were the people who made traditional medicines in Pamekasan, which had been hereditary for generations. Data collection was done by interviewing 11 herb makers as respondents.

The results show that *Salekarang* herbal compositions are: black curcuma, curcuma, *lembuyang*, fingerroot, ginger, and pepper for the first recipe, and neem leaf, star anise, cubeb pepper, massoia bark, black cumin, cinnamon, curcuma, and turmeric for the second recipe. The novelty of the research reveals that Based on the experience from the makers, *salekarang* herbal medicine can be used to cure, as follows: heat, flu after coughing, infection, itchy throat, cold, unwell body (*nyongaronyo*), and increasing appetite.

## INTRODUCTION

History proves that the ability of humans to survive greatly depends on their ability to use natural resources from the environment around them for their daily needs, including health care needs, disease prevention, and treatment of the diseases they suffer. The use of plants around their neighborhood as traditional medicine, or often called herbal medicine, has developed along with the development of the history of human life, since before the development of modern medicine and health facilities. Raw materials for traditional medicine that are commonly used come from several parts of the plant, namely: plant root, stem, bark, flower, and fruit (Yunus & Dida, 2017). Traditional medicine was originally known as herbal medicine, until now herbal medicine is still believed to be a panacea to treat various diseases and even has been developed in modern industries. Community knowledge about medicinal plants has different characteristics in each region, because that knowledge is usually a hereditary inheritance from the ancestors in each region. For this reason, only a small portion of the community knows the types of medicinal plants.

The use of traditional medicine as an alternative treatment is growing due to several factors, including: the use of traditional medicine is considered successful when the world of medicine or modern medicine is not successful, the use of herbal medicine or traditional medicine is part of a hereditary medical tradition and becomes part of life in various cultures, and also the use of traditional medicine is considered free from adverse side effects of patients (Satria D, 2013). The side effects of traditional medicine are relatively small if used appropriately, that is, if the content of the active substance present in the plant is according to indications, the dosage is appropriate, the correct time of use, the accuracy of using, and not being misused (Oktora, Kumala, 2006).

Indonesia is a country that has a very large tropical forest, has a variety of plant species that can be used as raw materials for traditional medicine or herbal medicine that can be used to treat various diseases (Yunus & Dida, 2017). In Indonesia, traditional medicine is more commonly known as herbal medicine. Indonesia has the advantage in terms of developing herbal medicine with 9,600 types of medicinal plants that can be used as raw materials for herbal medicine. In addition, the government has also classified medicinal plants which are the raw materials for making herbs into ten potential commodities to be developed. From the economic side, the herbal medicine industry has contributed greatly to national income, increased community welfare and provided employment. Almost 99% of the raw materials used are domestic products which are considered capable of carrying multiplier effect on health. Indonesia is indeed rich in medicinal plants that have been used by its people and have been passed on from generation to generation as sources of medicinal plants (Keller, 2011).

The use of traditional medicine or herb in various regions is aimed at various purposes including the maintenance of women's health, especially those related to the female reproductive organs (Natadjaja et al, 2014.) (El & Rofil, 2015). Traditional medicine has been used in health services, especially in the first-level health services in Indonesia. The use of traditional medicine in Indonesia

is part of the nation's culture and has been used by the community since centuries ago. The use of traditional medicine in Indonesia is inseparable from the heritage of Indonesia's ancestors. However, in general, its effectiveness and safety have not been fully supported by adequate research results. Bearing this in mind and realizing that Indonesia is a mega-center of medicinal plant in the world, it is necessary to have a national policy that can become a reference for all parties involved in it.

Indonesia has around 400 ethnic groups (ethnics and sub-ethnics). Each ethnic and sub-ethnic group has a variety of knowledge that has been passed down from generation to generation, including traditional knowledge in medicine. Evidence of the use of traditional medicine since centuries ago in Indonesia, among others, can be seen from the reliefs contained in Prambanan and Borobudur temples, written in palm leaves, as well as relics and culture in the palaces to this day. For the people of Java and Madura, traditional medicine is better known as herbal medicine, both in the form of sliced or powdered form and ready to be brewed.

Pamekasan is one of the districts on Madura island, which is rich in various herbal concoctions. The wealth of herbal medicine in Pameksan is inseparable from the habits of the local people who prioritize taking herbal medicine rather than coming to the doctor when experiencing illness, especially people who live in rural areas. In addition, to maintain the cultural heritage of the ancestors about concocting herbal medicine among the Pamekasan community is still high. The herbal concoction by the Pamekasan community is different from the herbal medicine from other regencies on Madura island. One of the distinctive herbal medicines in Pamekasan district is "*Salekarang* herbal medicine". *Salekarang* has become one of the leading products in Pamekasan. *Salekarang* herb becomes one of the people's choices to maintain their health and to treat themselves when they experience pain.

Unlike the people in Sumenep district, *Salekarang* is the name of a disease that has symptoms such as: heat, not feeling well especially during the change of seasons, flu with cough, itchy throat, and others. *Salekarang* herbal medicine is made by almost all herbal medicine makers in Pamekasan. Although *Salekarang* herbal medicine is very well known in Pamekasan, but until now not many people know the composition of the herbal medicine, and moreover *Salekarang* herbal medicine made by different makers can have different compositions.

This study aims to determine the composition of *salekarang* herbal medicine and to determine its used to cure the health problems of the community.

## **RESEARCH METHODOLOGY**

This study used a descriptive design with a qualitative approach. The informants chosen were the people who made traditional medicine in Pamekasan district, which had been hereditary for generations. To find out the composition and utilization of *salekarang* herbal medicine by the community, interviews were

conducted with 11 herb makers as respondents. The data of this study were collected through observation and in-depth interviews with the herbalists related to the composition of *salekarang* herbal medicine and its monitoring. The instrument used was a recorder.

## RESULT & DISCUSSION

From the interview process with 11 (eleven) respondents, there are several types of traditional medicine groups that are very popular in the Pamekasan community and are in demand, namely *salekarang* herbal medicine. *Salekarang* herbal medicine is usually functioned to relieve pain due to toothache, when the body is unwell due to the flu, and sore throat or itching. The name of the traditional medicine in other regions, such as in Sumenep district is often used as the name of a disease that often appears in the community due to seasonal change. For example, when people get flu, heat, and a bad throat like pharyngitis, in Sumenep it is called *Salekarang*.

In Pamekasan, *Salekarang* is often called a panacea, because of its very wide use in which it enhances the immune response as well so the body is not easily attacked by diseases. The body feels more healthy due to drinking the *salekerang* herbal medicine.

### *Salekarang* Herbal Medicine Recipe

Based on the results of interview process with the respondents, from various recipes of *salekarang* herbal medicine, recipes made by the herbalist in Pamekasan can be grouped into 2 (two) groups, with their respective compositions as presented in table 1.

Table 1. The composition of *salekarang* herbal medicine

No	Composition of ingredients (Recipe 1)	No	Composition of ingredients (Recipe 2)
1	Black curcuma	1	Neem leave
2	Curcuma	2	Star anise
3	<i>Lembuyang</i>	3	Cubeb pepper
4	Fingerroot	4	Massoia bark
5	Ginger	5	Black Cumin
6	Black pepper	6	Cinnamon
		7	Curcuma
		8	Turmeric

If noticed, both the recipes as written on table 1, the composition of the materials/plants used is different either in the amount of type, but by local people they both are called *salekarang* herbal medicine and used with the same purpose. The difference in the recipe occurs because it comes from different initial sources (from different parents). As explained above that *salekarang* herbal medicine is made from generation to generation from the ancestors, and herbal

recipes are also arranged according to their empirical experience, it can be understood that the composition of this herbal medicine can vary according to the experience of the predecessors, as the following interview excerpts:

"...*Dari ka'dimmah panjenegan kenging racekan jamu salekarang?*". (Where did you get the concoction of *salekarang* herbal medicine?)

"..... enggi dari oreng seppo, kaula agabay jamu ampon generasi kaempa'. *Dimin jujuk ajar ka oreng Songenp cem-macemma jamu se eka'dinto*". (From my parents, I, as a herbalist, have already been the fourth generation. My great-grandfather learned from someone from Sumenep).

### **Source of Ingredients**

Sources of raw ingredients (plants) were variously obtained from crop yield in the yard and garden. Moreover, other ingredients were obtained from various regions, especially from Anom market in Sumenep and Karang Pinang market in Sampang based on their answer when being asked the origin of the sources of ingredients, especially the herbalists who had the recipe composition 1.

"... *eka'emmah sampeyan by going to jamunah?*" (where did you get the ingredients of this herbal medicine?).

".. *anekah bannyak ebudina rome ...*" (there were a lot of them behind the house).

The ingredients could be in the form of fresh ingredients and also in the form of simplicia. From the observation in the ingredient storage, for the owner of recipe 1, all the ingredients were in the form of simplicia.

### **Methods for making *salekarang***

There were 2 kinds of methods for making *salekarang*, namely wet (fresh) and dry methods. For the wet method, all raw ingredients were taken fresh, then chopped, boiled for a certain time, cooled, and the water could be drunk. If it did not run out in one drink, every time it wanted to be drunk, it must be warmed first. For the manufacture of the herbal medicine using dry method could be described as follows: first, all ingredients must be in the form of simplicia that had been in the form of small pieces, then mixed according to existing compositions, with the amount of each ingredient as estimated based on their experience, then pollinated. This dried herbal medicine was then packed in the form of powder. If it was wanted to be used, it could just be brewed with drifting water.

### **Method and Duration of Use**

The use of this herbal medicine could be taken as needed. If it was used to treat diseases, then it could be consumed twice a day for 3 to 5 days. If it was used for disease prevention or health maintenance, it could be consumed once a week. *Salekarang* herbal medicine should not be taken by someone who was taking medication. According to the information from the respondents, if the herbal medicine was consumed along with drug, then drug poisoning could occur. It was according to the following interview excerpt:

"..... bada pantangan bu bakto minum jamu? Ponapa se ta' kenging eda'ar bakto minum jamu?" (Did you experience any restrictions when you drank the herbal medicine? What should not be eaten when drinking the herbal medicine?)

"..... mon nginum pil ta' olle nginum jamu, pas mabuk, "engko e pangitek" mon oreng se nginum jamu pas mabuk eadaan" (If you drank the drug, then you could not drink the herbal medicine since you could get poisoned. I once was terrified because there was someone who drank the drug and herbal medicine at the same time, after that he/she got poisoned in front of me)

### **The Benefit of Salekarang Herbal Medicine**

The use of herbal medicine salekarang by the people in Pamekasan community is usually for maintaining health (enhance immunity) and to treat various diseases. By local people, *salekarang* herbal medicine is also called *sapujagat* or herbal medicine that can cure all kinds of diseases. Therefore, *Salekarang* herbal medicine is well-known and many are in demand by the people, especially by people in rural areas. Some of the symptoms of the diseases that can be cured with *salekarang* herbal medicine based on the experience of the herbalists are as follows: heat, flu with cough, infection, itchy throat, cold, unwell body (*nyongaronyo*), and increasing appetite.

### **The Benefit of Each Ingredients According to the Literature**

As presented in table 1, *salekarang* herbal medicine consists of various kinds of plants, so as a consequence, this herbal medicine has many benefits, because each ingredient has the properties that are very important for maintaining health and healing a disease. The function of each raw ingredient according to literature study is presented in table 2. From the results of confirmation of the literature, obtained several uses of each active ingredient ranging from mild disease such as pain relief to severe disease such as cancer.

Table 2. Plant parts used

PLANT NAME	SYNONYM	SCIENTIFIC NAME	BENEFICIAL FOR	PLANT PART
Black Curcuma		<i>Curcuma aeruginosa</i>	Antioxidant, antibacterial(Thea nphong, Mingvanish, & Kirdmanee, 2015)(Sugita et al, 2018)	Rhizome

Curcuma		<i>Curcuma zanthorrhiza</i>	Anti cancer, infectious disease (bacteria, candida, fungi), metabolic syndrome (hyperglycemia and hypertension) and platelet disorder. antioxidant, estrogenic and anti- estrogenic, nephroprotective and hepatoprotective.( Oon et al, 2015)	Rhizome
Lembuyang		<i>Zingiber zerumbet</i>	anti-inflammatory, anti-microbial, and anti-analgesic (Silalahi, 2018)	Rhizome
Fingerroot	Fingerroot	<i>Boesenbergia rotunda</i>	increase the activity of enzymes that play a role in lipid catabolism.(Silalahi, 2018)	Rhizome
Ginger		<i>Zingiber officinale</i>	anti-inflammatory agents [3, 4], osteoarthritis, rheumatoid arthritis, common scribed medications for pain(Lakhan, Ford, & Tepper, 2015)	Rhizome
Black Pepper	White pepper	<i>Piper albi</i>	Anti-microbial(Kapoo, Kaur, & Kaur, 2015)	Seed
Neem Leaf	Neem leaf, Intaran	<i>Azadirachta indica Juss</i>	antifeedant, repellent, antibacterial, and antifungal (Mustamu, Evacuasiyany, & Liana, 2016)	Leaf

Star Anise	cassia	Illicium Verum	Indigestion, diuretic	Fruit
Cubeb		<i>Piper Cubeba</i>	Antiasma, anti-inflammatory and antioxidant (Muthana et al, 2017)	Fruit
Massoia Bark	<i>Mesogi, masogi, mangsoi</i>	<i>Cryptocarya messoy (Oken) Kosterm.</i>	Warming the body	Bark
	<i>Masoyi</i>	<i>Massoia aromaticum Becc.</i>		
Black Cumin		<i>Nigella sativa</i>	antidiabetic, anticancer, immunomodulator, analgesic, antimicrobial, anti-inflammatory, spasmolytic, bronchodilator, antihypertensive, liver tonics, diuretics, digestive, anti-diarrheal (Khan et al, 2016)	Seed
Cinnamon		<i>Cinnamomum verum/c. zeylanicum</i>	antimicrobial activities. The antioxidant and antibacterial (Mazimba et al, 2015)	Bark
Turmeric	<i>Kunir, Turmeric</i>	<i>Curcuma Longa Linn/ Curcuma domestica Val</i>	Anti-fungal, Antioxidant, Anti-inflammatory, Anti-coagulant, Anti-viral, Anti-mutagenic, Anti-diabetic, Anti-protozoan, Antispasmodic (Bhat, Amin, & Nazir, 2015)	Rhizome

### Consumer Loyalty

Consumer can function this herbal medicine due to several factors such as their empirical experience. The community believes in traditional medicine because of the view and based on the experience of parents or ancestors of those who managed to heal others. This belief can disregard the scientific aspect of the herbal medicine content. This means that the public does not see what the herbal content is, but what is seen is the origin of the heir of the herb. And this is also believed by the herbal medicine makers, so it is difficult to develop and add new ingredients or reduce the composition of the herbal medicine, because it is considered a patent. Therefore, whatever the composition and the effect are, if the herbal medicine is a legacy from someone who is trusted, then this herbal medicine will be chosen by the community. Another factor is caused by supernatural factor, such as spirits or other people's treatment through certain media. People only trust traditional healers to treat this type of disease, because basically modern medical treatment is not considered capable of treating personalistic type of diseases. Thus, the heir of the herbal medicine is considered more important by the pamekasan community than the content of the herbal medicine itself.

### CONCLUSION

The concoction of *salekarang* herbal medicine used by Pamekasan people consists of 2 types with different composition of ingredients, which are black curcuma, curcuma, *lembuyang*, fingerroot, ginger, and pepper for the first recipe, and neem leaf, star anise, cubeb pepper, massoia bark, black cumin, cinnamon, curcuma, and turmeric for the second recipe. Based on the experience of the of the makers, *salekarang* herbal medicine can be used to cure, as follows: heat, flue after coughing, infection, itchy throat, cold, unwell body (*nyongaronyo*), and increasing appetite.

### Conflict of Interest

The authors state that there is no conflict of interest in this study and article

### Authors' Declaration

The authors hereby state that the data and all contents presented in this article are original research results from the authors. Any liability for claims relating to the content of this article will be borne by the authors.

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