MADEUNG AND SALE: ETHNOMEDICINE FOR MOTHERS' POSTNATAL CARE IN ACEH, INDONESIA

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Abstract— Aceh is a province in Indonesia where people still carry out traditional medicine (ethnomedicine) on postpartum mothers. The knowledge of traditional medicine is passed on from generation to generation. Madeung and sale treatment utilizes a variety of kinds of plant as medicine to accelerate the healing process of postnatal mothers. This study aims to determine the process of madeung and sale as one of the ethno medicine practiced by the Acehnese people as postpartum mothers care. This research is a qualitative study with phenomenological approach to examine these cultural phenomenons, Madeung and sale from the community point of views and experiences. The respondents in this study were postnatal mothers and midwives who were versed in gathering and preparing plants into traditional medicine consumed by mothers after childbirth. The data analysis was performed using data reduction, data conclusion drawing/ verification technique presented in narrative form. The results of the study established 40 species of plant used by Acehnese people as traditional medicine to care for postpartum mothers. Madeung and sale process were conducted for forty four days, starting on the second day after birth. The process of Madeung and sale as well as the utilization of varied medicine herbs which were consumed by post birt mothers are still carried out today and believed to speed up the healing process of postnatal mothers, restore stamina, aid weight loss, increase perspiration quantity to improve skin detoxification, and at the same time prevent ageing.

Keywords— Madeung; Sale; Ethnomedicine; Mothers postnatal care

1. INTRODUCTION

Indonesia has about 40,000 species of plants with around 25,000 species of seed plants or more than 10% of the world's flora. There are also around 35,000 species of moss and algae. No less than 40% of these species are endemic to Indonesia. Not only that Indonesia has more than 17,000 islands and 50 types of ecosystems or vegetation [1], but it is also inhabited by about 300-700 different ethnics. Indonesians' ethnic heterogeneity leads to diverse cultures, traditions and local knowledge across different ethnics.

One of the local wisdoms possessed by Indonesians is utilizing the surrounding natural resources. Every local community utilizes vegetable resources to meet the life needs, one of them is to maintain health by utilizing plants as a medicine [2, 3]. The knowledge of plants use as a medicine is generally passed on orally. Consequently, that knowledge is limited to certain groups of people and vulnerable to degradation due to acculturation or

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modernization. Mentions that more than 80% drugs circulating in the pharmaceutical industry and cures for various diseases including cancer are adapted from local knowledge [4]. Torri [5] As is the case of *jamu*, a traditional herbal medicine, introduced by the Javanese and has been used by other ethnic groups and even other countries. Nevertheless, there are still many knowledge of the use of plants as medicine that is used by other ethnic groups in Indonesia that have not been documented or disclosed just like *madeung* and *sale* by the Acehnese.

Madeung and *sale* are performed by employing a variety of fragrant and nutritive plants [6]. Postpartum treatment is believed to cure various diseases such as knee, spine, legs, joints and various other diseases that often appear in a woman after childbirth. Traditional postpartum care is practiced by mothers especially to improve the reproductive organs in order to recover it to its original state [7-9]. Researchers found different types of herbal medicines and traditional medicine practices to accelerate the healing process, but it is also believed by the public that ethnomedicines have relatively small side effects, so it is still trusted and popular until now [10-14].

Ethnomedicine is one of the areas of ethnobotany fields that reveals local knowledge of various ethnicities in maintaining their health. Empirically, traditional medicines utilize plants and animals, but plants are more widely used than animals. The word ethnomedicine is derived from the word *ethno* (ethnic) and *medicine* (drug). This suggests that ethnomedicine is at least related to two things: ethnicity and medicine. Scientifically, ethnomedicine is a perception and conception of local community health understanding or a study on traditional ethnic medical system [15, 16]. States that an ethnomedicine study is conducted to understand the health culture from the perspective of the society (emic), then scientifically proven (etic) [17]. At the initial stage of his research, ethnomedicine is part of health anthropology [15] that began to develop in the mid-1960s (McElroy 1996), but in the subsequent development it is considered as a discipline in Biology. Purwanto [18] states that the use of data on traditional medicinal plants obtained from an ethnomedicine research is an effective way to find new useful pharmaceutical materials in terms of time and cost. Listed are some medicines formulated from local knowledge: (1) quinine, adapted from the Incas who have long used *Chinchona* as a malarial drug; (2) reserpine, originating from *Rauwolfia serpentina* has long been used by the Indians to lower blood pressure.

These days a lot of researches on ethnomedicine are aimed to find new chemical compounds which are useful to manufacture modern medicine for various diseases, such as cancer. Up to now, most cancer medicines are still extracted directly from the plants because its synthetic compounds are not yet feasible or the production cost is much more expensive than direct extraction from the plants. In addition to treat diseases, another goal of an ethnomedicine research is to look for new compounds that have less side effects, the emergence of the resistant effects of existing drugs, and also to anticipate the emergence of new diseases. This encourages the expansion of ethnomedicine research especially in a place with rich biodiversity such as Indonesia. In Indonesia, ethnobotany research that includes ethnomedicine began to develop since 1983 with the commencement of Ethnobotany Museum in Bogor [17], and continue to develop until today. It is undeniable that it is supported by the ethnic diversity and biodiversity of Indonesia. Each study has a different focus depending on the research location, ethnicity, time, and the methods used. Some researchers also frequently report the discovery of a new medicinal plant species use. Silalahi [19] reports that *Hoya* sp. and *Dischidia* sp., two types of plants used as medicines in Kabanjahe market in North Sumatra as having anti-cancer properties. At the time of the study, *Hoya* was better known as ornamental plants than medicinal plants. On the other hand, the local community in North Sumatra use it for its medicinal purposes. This shows that there is still a lot of local knowledge about the use of medicinal plants in Indonesia that has not been well-publicized.

Based on the existing data, medicinal plants used by local Indonesians began to be scientifically researched by Rumphius in the 19th century [1, 17]. Since then, the number of medicinal plant species continues to grow as the research activities increase. Heyne in 1927 recorded no less than 1,040 species of plants in Indonesia have medicinal purposes as documented in the book "Useful Plants of Indonesia Volume I-IV". This number continues to increase that the book "Medical Herb in Indonesia" recorded about 7,000 species of plants in Indonesia have medicinal purposes [17]. While there are already a lot of ethnomedicine research that has been carried out, it is still mainly concentrated in Java island most notably Kasepuhan and Baduy, and Bali [17]. Ethnomedicine researches of Bali are related with *lontar husodo* [13], and *loloh* [20] while the Javanese' are related with herbal medicine. Although Salick [21] states that the researches are concentrated in Kinabalu, but based on an online literature review, there are ethnomedicine researches found in Sumatra, that is in Minangkabau [22], Vietnam [23], Malay [24, 26], Serampas [27], Batak [19]. However, a research on the Acehnese ethnomedicine has not been found yet, especially in the postpartum mothers care. This article will reveal an ethnomedicine research on *madeung* and *sale* by the Acehnese and its impact on postpartum mothers' health.

Based on the above description, research made and sold as one of ethnomedicine in the effort of healing postpartum mother attractive for four reasons. First, the results of this study can reveal various aspects related to the way injections of postpartum mothers so that it can be used as a guide for the providers of traditional medicine and modern medicine to improve health systems, especially for postpartum mothers. Second, research can reveal the benefits felt by the mother after undergoing the process *madeung* and *sale*. Third, the results of this study can be developed for the preservation and development of traditional medicines from medicinal plants. Furthermore, the fourth reason, based on the results of this study can be formulated local wisdom of the people of Aceh to the growth of postpartum mothers so as to make mothers postpartum is not susceptible to disease and become more healthy and strong.

2. RESEARCH METHODS

The research process is carried out with a qualitative approach to examine the cultural phenomenon of the views and experiences of the community. The qualitative selection of phenomenologists for several reasons: first, this approach is holistic by using the naturally derived data [28]. Data obtained as is, inductive (see, and find), and also to understand the ongoing processes within society. The second reason, qualitative phenomenologists is flexible in the review process, looking at the events that take place and the researchers present and followed together, what processes exist and are solved in solving problems. Third, the description of the environment in a proper way to identify and locate directly from the source. Fourth, the observed and observed reality is interpretive, the researcher will interpret what is seen, heard and understood in a natural setting [29].

Researchers focusing on learning the culture of reproduction that becomes a view of life, experiences, meaning, and attitude by meeting with the community. The sampling technique is to use purposive and snowball which can be described as follows:

Fig. 1 Research Design

The samples in this study were (1) mothers who had undergone and undergoing the process of pregnancy, childbirth and breastfeeding, (2) community leaders selected by using snowball techniques, (3) shamans in the study sites. Furthermore, researchers describe the general meaning of a number of research subjects to their various life experiences related to reproductive culture. Descriptions consist of "what" they experience and "how" they experience it. Researchers do not include personal experience with reproductive culture-related phenomena. It is expected that researchers can focus on the experience of the participants. So that researchers find the essence as the top aspect of the qualitative phenomenological study. The research was conducted in two locations, namely Krueng Kluet, South Aceh Regency and Lambhuk Village, Banda Aceh City. Krueng Kluet village is a village located in North Kluet District, South Aceh Regency. Its astronomical location is between 302'25" North Latitude and between 9709'12" East Longitude. The total area of Kluet Utara is 3.65 percent of the total land area of South Aceh district. The distance between the city Regency with this village approximately 40 Km. The second location is the city of Banda Aceh, where from 91 Villages in Banda Aceh City, researchers took Lambhuk Village as the second research site. Where Lambhuk Village is a village located in District Ulee Kareng, Banda Aceh City. Its astronomical location is 05016'15 " -05036'16" North Latitude and 95016'15 " -95022'35" East Longitude with an average height of 0.80 meters above sea level, with an overall area of approximately 61.36 km². The data collection techniques in qualitative research, among others, by way of observation, interviews, documentation [29, 30]. The validity of the data is done with four test that is; credibility test, transferability test, dependability test and confirmability test [31]. Data processing is done by using data analysis technique and presented in narrative form. Data analysis is done by data reduction, display data, and conclusion drawing / verification [32].

3. RESEARCH FINDINGS AND DISCUSSION

Traditional postpartum treatment in Aceh is not only limited to the utilization of medicinal plants, but there is also traditional medicines called *madeung* and *sale* which are believed to help the healing process. Different medicinal plants used in the treatment of postpartum mothers and *madeung* and *sale* techniques will be explained below.

3.1. UTILIZATION OF TRADITIONAL MEDICINAL PLANTS TO CARE FOR POSTPARTUM MOTHERS

Acehnese mothers will carry out a traditional treatment that makes use various medicinal plants to speed up the healing process after childbirth. There are 40 plant

species used by the Acehnese namely; *Cinnamomum burmannii*, *Illicium verum*, *Parameriaberbata schumun*, *Massoia aromatica/ Oleum masoyi*, *Alyxia stellate*, *Cassia surattensis*, *Usnea Sp*, *Uncaria roxb*, *Andropogon nardus*, *Zingiber zerumbet*, *Saussurea lappa*, *Dioscorea hispida*, *Rhizoom zingiber cassumunar*, *Cyperus tuberosus*, *Ligusticum wallichii*, *Rhizoom alpiniagalanga*, *Glicyrhiza glabra*, *Kaempferia galangal*, *Lepidium sativum*, *Coriandrum sativum*, *Brassica rugosa*, *Parkia roxburghi*, *Papaver somniferum*, *Myristica fragrans*, *Trigonilla funum graecum*, *Nigella sativa*, *Cominum cyminum*, *Vermenis anthelminteca*, *Carum copticum*, *Helicteres isora*, *Terminalia catappa*, *Quercus lusitanica*, *Sindora sumatrana*, *Capsicum frumtesgens*, *Capsicum frumtesgens*, *Cardemen*, *Schima premma cordifolia*, and *Prema cordifolia*. There are several ways to prepare the plants as medicine; boiled and then the concoction can be directly consumed, one glass per day in the morning. However, some traditional medicines are shaped like small pills that can be taken like a regular pill. To make these pills, candied sugar will be added to boiled herbs and the mixture should be boiled until the moisture disappears. After that, the herbs could be rolled and made into small granules. Lastly, dry the granules and they are ready to be consumed.

Fig. 2 Medicinal plants are processed into pills

Table I. Plants used as Medicine for Postpartum Mothers and their Benefit

Scientific Name	Local Name /Regional Name	Parts used	How to use	Benefit
<i>Cinnamomum burmannii</i>	<i>Kulit Manis/ kulet maneh</i>	Stem bark	Boil then drink	Reduces cholesterol, controls blood sugar, contains appetite suppressants, anti-infections and reduces rheumatism symptoms.
<i>Illicium verum</i>	<i>Kulit lawing/ lawing kleung</i>	Stem bark and fruit	Boil then drink	Eases urine passes, joint pains, cough and nausea.
<i>Parameriaberbata schumun</i>	<i>Serapat</i>	Stem bark	Boil then drink	Heals uterine wounds, tightens vagina, muscles, smooths skin, removes toxins, boosts blood circulation.

Massoia aromatica/ Oleum masoyi	<i>Mesoyi/ masoi</i>	Fruit	Boil then drink	Treats postpartum uterus pain, cures wounds and yeast infection.
	<i>Salasari/ pulosari</i>	Stem bark	Boil then drink	Heals wounds.
Cassia surattensis	<i>Seunamaki</i>	Leaf	Boil then drink	Heals wounds.
Usnea Sp	<i>Jenggot jin/ kayu angin</i>	Leaf	Boil then drink	Antibiotics for gram-positive bacterial infections, dissolves fat, improves the digestive tract.
Uncaria roxb	<i>Gambir/gambe</i>	Fruit	Boil then drink	Contains antioxidants.
Andropogon nardus L.	<i>Sere/ bak rhee</i>	Stalks	Boil then drink	Contains antioxidants, postpartum treatments, warms up the body.
Zingiber zerumbet	<i>Lampunyang/ langkunyang</i>	Stalks	Boil then drink	Contains antibacterial properties, dissolves fat, improves the digestive tract.

<p><i>Saussurea lappa</i></p>	<i>Pucok</i>	Leaf	Boil then drink	Cures asthma and cholera.
<p><i>Dioscorea hispida</i></p>	<i>Gadung</i>	Tubers	Boil then drink	Heals wounds, reduces stomach cramps, removes pus from wounds.
<p><i>Rhizoom zingiber cassumunar</i></p>	<i>Kunyit</i>	Root	Boil then drink	Contains fat dissolving properties, aids weight loss, and improves stamina.
<p><i>Cyperus tuberosus</i></p>	<i>Geunoe/ rumput teki</i>	Root	Boil then drink	Promotes smooth menstruation and urination flow, relieves bowel movements, reduces pain, lowers blood pressure and acts as anti-diabetic medication.
<p><i>Ligusticum wallichii</i></p>	<i>Ganti</i>	Leaf	Boil then drink	Nourishes the heart, promotes blood circulation, strengthens heart performance, and acts as antifibrotic.
<p><i>Rhizoom alpinagalanga</i></p>	<i>Lengkuas</i>	Root	Boil then drink	Reduces pain, soothes the belly, reduces fever, and improves the respiratory system.
<p><i>Rhizoom zingiber</i></p>	<i>Halia</i>	Root	Boil then drink	Increases the absorption of food and nutrients, prevents fever and cold, soothes belly in distress, reduces pain and inflammation and improves the respiratory system.

<p><i>Glycyrrhiza glabra</i></p>	<i>Akar manis</i>	Root	Boil then drink	Treats high blood pressure, and improves gastrointestinal health.
<p><i>Kaempferia galanga</i></p>	<i>Cekur</i>	Fruit	Boil then drink	Improves postpartum uterus health, improves menstruation flow, reduces cough, tightens uterus muscles, reduces swelling and prevents nerves pain.
<p><i>Lepidium sativum</i> L.</p>	<i>Camcuruih</i>	Leaf	Boil then drink	Treats dysentery and infections, boosts menstrual blood flow.
<p><i>Coriandrum sativum</i> L.</p>	<i>Ketumbar</i>	Seeds	Boil then drink	Improves the digestive system, treats angina symptoms, increases lactation and appetite, prevents nausea and gastritis.
<p><i>Brassica rugosa</i></p>	<i>Sawi</i>	Seeds	Boil then drink	Strengthens the bones, prevents cancer, acts as anti-diabetic, nourishes skin and hair, sleeping aids.
<p><i>Parkia roxburghii</i></p>	<i>Kedawung</i>	Seeds	Boil then drink	Relieves puerperal fever, treats cold, relieves menstrual and postpartum pain, kills harmful microbes, and improves the digestive system.
<p><i>Papaver somniferum</i></p>	<i>Opium</i>	Flower petals	Boil then drink	Relieves muscle pain and treats poisoning.

<p><i>Myristica fragrans</i></p>	<i>Pala</i>	Fruit and seeds	Boil then drink	Cures stomach pain, treats headaches, treats angina symptoms, improves the digestive system and blood circulation, brightens dark spots as well as repairs and moisturizes the skin.
<p><i>Trigonilla funum graecum</i></p>	<i>Klabat</i>	Seeds	Boil then drink	Improves hormone production to aid lactation, reduces virus attacks, eliminates fever, aids in arthritis and hypertension.
<p><i>Nigella sativa</i></p>	<i>Jintan hitam</i>	Seeds	Boil then drink	Relieves pain, contains anti-bacterial, anti-inflammation, anti-ulcer, anti-hypertension, anti-oxidants and anti-virus.
<p><i>Cominum cuminum</i></p>	<i>Jintan putih</i>	Seeds	Boil then drink	Aids weight loss, boosts the blood circulation, treats abdominal pain, muscles relaxant, improves the digestive system, improves the skin condition and prevents aging.
<p><i>Vermenis anthelminteca</i></p>	<i>Jintan kusani</i>	Seeds	Boil then drink	Treats uterus wounds and nourishes the body.
<p><i>Carum copticum L.</i></p>	<i>Jeumuju</i>	Seeds	Boil then drink	Accelerates wound healing.

<i>Helicteres isora</i>	<i>Seputa/ kayu ules</i>	Fruit	Boil then drink	Acts as a postpartum tonic, contains hypnotics, appetite booster, anti-bacterial properties, relieves abdominal cramps, and reduces fever.
<i>Terminalia catappa L</i>	<i>Majakeling</i>	Fruit	Boil then drink	Contains protein, treats uterus infection.
<i>Quercus lusitanica</i>	<i>Majakani</i>	Fruit	Boil then drink	Contains natural contraceptives, a vaginal care that eliminates fungi and bacteria.
<i>Sindora sumatrana</i>	<i>Saparantu</i>	Fruit	Boil then drink	Treats bleeding in the uterus, miscarriage, and canker sores.
<i>Capsicum frutesgens</i>	<i>Merica hitam</i>	Seeds	Boil then drink	Prevents cancer, anti-oxidants, improves the digestive system, aids weight loss and flatulence.
<i>Capsicum frutesgens</i>	<i>Merica putih</i>	Seeds	Boil then drink	Aids weight loss, relieves headaches, cough, and stomach ulcers and keeps the heart healthy.

<i>Cardemen</i>	<i>Kapulaga</i>	Seeds	Boil then drink	Reduces cancer, controls blood pressure, controls cholesterol, and treats muscle spasms.
<i>Schima premma cordifolia</i>	<i>Kembang mangkok</i>	Fruit	Boil then drink	Heals wounds, cure mastitis, and improves urine passes.
<i>Prema cordifolia</i>	<i>Bunga baroeeh</i>	Flower petals	Boil then drink	Lowers blood sugar levels.
<i>Zingiberaceae</i>	<i>Temulawak</i>	Root	Boil then drink	Keeps the heart healthy, improves digestion, and reduces arthritis symptoms.
<i>Piper betle</i>	<i>Sirih</i>	Leaf	Boil then drink	Eliminates body odor, treats yeast infection.
<i>Ruta angustifolia</i>	<i>Ingg</i>	Leaf	Boil then drink	Relieves pain, reduces fever, neutralizes toxins, treats febrile seizures, boosts wound healing.

<i>Tamarindus indica</i>	<i>Asam jawa</i>	Leaf	Milled and polished	Reduces body heat, nourishes the body.
<i>Oryza glutinosa</i>	<i>Ketan</i>	Seeds	Milled then rub on the skin	Regulates thyroid hormones activity, prevents cardiovascular diseases, nourishes the skin and prevents early aging.
<i>Cananga odorata</i>	<i>Seulanga</i>	flower	Milled then rub on the skin	Treats cough, keeps the body healthy.
<i>Citrus aurantifolia</i>	<i>Jeruk nipis</i>	Fruit juice	Squeezed then rub on the skin	Contains high vitamin C.
<i>Kapur</i>	<i>Kapur sirih</i>	Lime betel	Milled then rub on the skin	For skin and beauty care.
<i>Ricinus communis</i>	<i>Jarak pagar</i>	Leaf	Milled then rub on the skin	Reduces abdominal pain, accelerates wound healing, improves digestion.

3.2. MADEUNG AND SALE TREATMENTS

Postpartum mothers in Aceh religiously carry out *madeung* and *sale* process. After the delivery process is completed, maternal care is started to be prepared. The husband will

provide wood stumps that will be used during the forty-four days. These timbers are also known as "*tungoe*" will be used in the *madeung* process. A divan made from bamboo or palm trunk that has been split lengthwise approximately 5 cm wide then arranged lengthwise with around 2 cm space between the slats (so that smoke and heat can enter through the cracks) will also be prepared. The cots are usually made based on the person's height, so that this *madeung* woman can sleep comfortably and freely. The cots width is at least 75 cm or depending on taste and needs with approximately 1 meter in length.

Fig. 3 Divan models for *Madeung*

The space between each slats should allow hot steams to enter. Aside from that, three coconut-sized and slightly flattened stones should also be available to support the woman's stomach when she is sleeping on her side. The stones will be heated first (*Toet bate*), after that it will be wrapped with cloth to keep the heat in so that it can still be felt but not harmful for the mother. The stone is then placed on the mother's abdomen, if the stone lost the heat, it will be replaced with the second stone and so on. This is aimed to encourage puerperal blood discharge that is considered dirty and causes various diseases that may endanger the mother's health. In addition, this technique is also believed to shrink the mother's stomach size after childbirth.

Fig. 4 *Madeung* stone shape and location

Under the divan, a large vessel is prepared where a hot wood stove would be placed in. The vessel must be resistant to heat and thick. The wood stove will be placed in the vessel and the vessel will then be placed under the divan. If the vessel is already filled with ash, her family will throw it out and replace the woods so that this *madeung* mother can enjoy the process. The fire under the cots must be kept alive in a controlled way. Hence, the *madeung* woman will sleep on the divan while enjoying the warmth. The *Madeung*

process lasts for 44 days, it begins on the second day after childbirth. Even so, it is also permissible if a mother wanted *madeung* for twenty days only.

The order of *madeung* and *sale* is initiated by heating the stones. After the stones are really hot, then the stones are removed from the heat and wrapped with a cloth or jatropha leaves. The stone is then put under the woman's abdomen. The fire under the divan should be kept alive and not too big. This *madeung* woman then will sleep comfortably on the divan while enjoying the warmth. *Madeung* process lasts for forty-four days, starting on the second day after childbirth. During *madeung* and *sale*, mothers will perspire a lot and lose the weight they gained during pregnancy. *Madeung* and *sale* have the same principle with a sauna that will cause the body to sweat a lot that serves thorough cleansing effect on the skin and sweat glands. This excessive sweating will increase the capacity of skin detoxification with open pores and remove impurities from the body. Dirt and fat stored in the body would melt under the high temperatures, and in the end these impurities will be discharged through sweat and digestive tract. *Madeung* and *sale* will also aid weight loss because it positively affects the body's metabolism speed and intensity that eventually results in weight loss.

Mothers who carry out *madeung* and *sale* treatment will relieve the pain in her muscles and increase her stamina, that it is not uncommon in Aceh, that post *madeung* and *sale* mothers are stronger and able to perform any physical activities such as going to the rice field, gardening and taking care of the livestock. Mentions that having regular sauna has therapeutic values and it can lower blood pressure in hypertensive patients and increase left ventricular ejection fraction in patients with chronic heart failure. *Madeung* and *sale* also improves lung function in patients with chronic lung disease. It improves the lung function and provides relieve to asthma and chronic bronchitis sufferers. *Madeung* and *sale* can also reduce pain and improve joint mobility in patients with rheumatic diseases. *Madeung* and *sale* does not cause drying of the skin even beneficial for the patient.

4. CONCLUSION

There are 40 species of plants used by the people of Aceh as traditional medicine in the treatment of postpartum mothers. The medicinal plants traditionally taken by postpartum mothers are: *Cinnamomum burmannii*, *Illicium verum*, *Parameriaberbata schumun*, *Massoia aromatica/ Oleum masoyi*, *Alyxia stellate*, *Cassia surattensis*, *Usnea Sp*, *Uncaria roxb*, *Andropogon nardus*, *Zingiber zerumbet*, *Saussurea lappa*, *Dioscorea hispida*, *Rhizoom zingiber cassumunar*, *Cyperus tuberosus*, *Ligusticum wallichii*, *Rhizoom alpiniagalanga*, *Glicyrhiza glabra*, *Kaempferia galangal*, *Lepidium sativum*, *Coriandrum sativum*, *Brassica rugossa*, *Parkia roxburghi*, *Papaver somniferum*, *Myristica fragrans*, *Trigonilla funum graecum*, *Nigella sativa*, *Cominum cyminum*, *Vermenis anthelminteca*, *Carum copticum*, *Helicteres isora*, *Terminalia catappa*, *Quercus lusitanica*, *Sindora sumatrana*, *Capsicum frumtesgens*, *Capsicum frumtesgens*, *Cardemen*, *Schima premma cordifolia*, and *Prema cordifolia*. *Madeung* lasts for forty-four days, starting on the second day after birth. *Madeung* and *sale* is initiated by heating the stones, then the stone is removed and wrapped with a cloth or Jatropha leaves. The stone then is placed under the postpartum woman's abdomen who was sleeping on the provided divan. Mothers who make treatment and *sale* is believed to relieve pain in muscles, the body is more powerful, so that post *madeung* and *sale* mothers like stronger carry out various physical activities such as paddy fields, gardening and care of livestock. *Madeung* and *sale* process is believed to accelerate the healing process of postpartum mothers, can lose weight, sweat in large quantities thereby increasing the capacity of skin detoxification by removing impurities from the body, and make the mother ageless.

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REFERENCES

- [1] Kartawinata, "Dua abad mengungkap kekayaan flora dan ekosistem Indonesia", Memorial Lecture X, LIPI, Jakarta, (2010) October 15.
- [2] Kipkore, W, "A study of the medicinal plant used by the marakwet community in Kenya", Journal of ethnobiology and ethnomedicine. Vol. 9, no. 32, (2013): 337-347.
- [3] Nigh, R, "Maya medicine in the biological gaze: Bioprospecting research as herbal fetishism", Journal Current Anthropology, Vol. 43, no. 3, (2002): 451-477.
- [4] Fabricant, "The value of plant vised medicine for drug discovery", Journal environmental health perspective, Vol. 109, no.1, (2001): 69-75.
- [5] Torri, M. T, "The jamu system Indonesia: lingking small-scale enterprises, tradisional knowledge and social empowerment among women in Indonesia", Journal Of Internasional Women's Studies., Vol. 13, no. 1, (2012): 32-43.
- [6] Tuti, M. F, "Etnobotani dan identifikasi tumbuhan obat bagi ibu pasca melahirkan di Desa Krueng kluat Kecamatan Kluat Utara Aceh Selatan", Prosiding Seminar Nasional, UIN Ar Raniry, Aceh, (2017).
- [7] Walsh, L. V, "Beliefs and rituals in tradisional birth attendant practice in Guatemala", Journal of Transcultural Nursing., Vol. 17, no. 2, (2006): 148-154.
- [8] Purwaningsih, "Jamu, obat tradisional asli Indonesia pasang surut pemanfaatannya di Indonesia", Jurnal Departemen Farmasi., Vol. 1, no. 2, (2013): 85-89.
- [9] Mothup, M. C, "Use of herbal medicine during pregnancy among women with access to public healthcare in Nairobi", Mothupi BMC Complementary and Alternative Medicine, Vol 14, (2014): 432-151.
- [10] Mena, "Development the etnobotani river plant to increase the community economic income and biodiversity conservation in Surabaya river in Gresik and Sidoarjo regency", London, (2014).
- [11] Kleinman, A, "Patient and healers in the context of culture: An exploration of the borderland between anthropology, medicine, and psychiatry", Berkeley, University of California (2000).
- [12] Faturrahman, "Etnobotani studi of "Kaili Inde" tribe in central Sulawesi Indonesia" Emirates journal of food and agriculture., Vol. 28, no.5, (2016): 337-347.
- [13] Suryadarma, "Konservasi keanekaragaman hayati dan pengetahuan lokal herbal", Makalah Seminar Nasional., Yogyakarta, Persatuan Biologi Indonesia, (2010).
- [14] Damatubun, A. E, "Culture, Papuanes helth in perspektif Antropologi medicine", Juornal Antropologi Papua, Vol. 1, no. 1, (2002).
- [15] Bhasin, "Medical antropology", Journal ethno medicine, Vol. 1, no. 1, (2007): 1-20.
- [16] Daval, "Conservation and cultivation of ethno medicinal plants in Jharkhand in trivedi P. C. Medical plants utilization and conervation", Aaviskar publishers distributor Jaipur India., Vol. 1, no. 2, (2009): 130-136
- [17] Walujo, "Etnobotani : memfasilitasi penghayatan pemutakhiran pengetahuan dan kearifan lokal dengan menggunakan prinsip-prinsip dasar ilmu pengetahuan", Prosiding seminar nasional etnobotani IV., Cibinong Science Center LIPI. 12-20, (2009).
- [18] Purwanto, "Study: etnomedisinal dan fitofarmakope tradisional Indonesia", prosiding seminar nasional II tumbuhan obat dan aromatic, LIPI Bogor, (2002).
- [19] Silalahi, "The local knowledge of medicinal plants trader and diversity of medicinal plants in the kabanjahe tradisional market, North Sumatra Indonesia", Journal ethnopharmacology., Vol. 175, (2015): 432-443.
- [20] Sujarwo, "Ethnobotanical study of loloh: tradisional herbal drinks from Bali (Indonesia)", Journal ethnopharmacology, Vol. 169, (2015): 34-48.
- [21] Salick, J, "Whence useful plants? A direct relationship between biodiversity and useful plants among the Dusun of Mt. Kinabalu", Journal Biodiversity and Conservation, Vol. 8, no. 6, (1999): 797-818.
- [22] Ardan "The use medical plants by the villagers kubang Nan Rao, in West Sumatra", The nasional seminar ethnobotany, Denpasar Bali, (2000).
- [23] Hoang, "Tradisional medicine plantin Ben En national park Vietnam", Blumea., Vol. 53, (2007): 569-601.
- [24] Mahyar, "Medicinal plants of eberida (Riau Province, Sumatra, Indonesia)", Journal of ethnopharmacology, Vol. 31, no. 2, (1991): 217-237.
- [25] Rahayu, "The use of plants as traditional medicine by the local communities in Bukit Tiga Puluhan national park, Riau", The national conference of Indonesia medicinal plants Surabaya., Indonesia, (2000).
- [26] Susiarti, "Medicinal plant diversity in the tesso nilo national park, Riau Sumatra Indonesia", Reinwardtia, Vol. 12, no. 5, (2008): 383-390.

- [27] Hariyadi, B, "The entwined tree: tradisonal natural resource management of Serampas, Jambi Indonesia", disertations, University of Hawai'I at Manoa publishing, (2008).
- [28] Guba, E. G., & Lincoln, Y. S, "Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approach". San Fransisco: Jossey-Eass Publishers, (1991).
- [29] Creswell, J, "Research design: pendekatan kualitatif, kuantitatif, dan mixed", Yogyakarta, Pustaka Pelajar, (2015).
- [30] Tashakkori, A., & Teddlie, C, "Mixed methodology", Yogyakarta, Pustaka Pelajar, (2010).
- [31] Creswell, J. W, "Research design: Qualitative and quantitative approaches", California: Sage Publications, (1994).
- [32] Miles, M. B., dan Huberman, A. M, "Qualitative Data Analysis", California, Sage Publications, (1994).