



# Use of traditional medication on the health of women and children of the Togutil tribe in North Moluccas Province

Zulkiflia Taib<sup>a</sup>, Robert Sibarani<sup>b,\*</sup>, Fikarwin Zuska<sup>c</sup>, Delvian<sup>d</sup>

<sup>a</sup> Postgraduate of Natural Resource Management and Environment of North Sumatera University, Indonesia

<sup>b</sup> Faculty of Cultural Science, Universitas Sumatera Utara, Indonesia

<sup>c</sup> Faculty of Social and Politics Science, Universitas Sumatera Utara, Indonesia

<sup>d</sup> Faculty of Forestry, Universitas Sumatera Utara, Indonesia

## ARTICLE INFO

### Article history:

Received 28 June 2021

Accepted 30 July 2021

### Keywords:

Traditional medicine

Women and children of Togutil tribe

Local wisdom

North Moluccas Province

## ABSTRACT

**Objectives:** The study aims to study 1) how to use traditional medicine in the health of women and children of the Togutil tribe, and describes 2) the local wisdom of forest conservation by the Togutil tribe.

**Methods:** The research used ethnography study with the design of multiple sites and a thick description approach (thick description and depth).

**Results:** Togutil women and children always rely on traditional medicine and they do this treatment since ancient times and have always been done from generation to generation. Traditional medicinal ingredients come from the leaves, stems, roots of trees, and fruit of the trees. If the medicine has been given and there is no change, the person who is sick will be taken to a doctor for consultation and recommend other traditional medicine to drink. The role of women and children of the Togutil tribe is more dominant in the home to maintaining the food security and the role of men of the Togutil tribe is outside the home to hunting and farming.

**Conclusion:** The health of Togutil women and children is very important to maintain their survival. The pattern of maintaining their health by consuming traditional medicines.

© 2021 SESPAS. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction

North Maluku Province, precisely in Halmahera forest, there is one of the endangered Inland tribes, the tribe is named Togutil tribe. As a tribe that lives in the forest nomadically (moving around), the Togutils have a great tradition of respect not only with each other but also with the nature of the forest. The Togutils believe that every plant has a human-like soul and feelings. Trees as an important element for the Togutil tribe are seen from the tradition of planting trees every birth. Utilization of trees or plants should be done properly and taken as needed. If they cut down a tree, they have to replace it by planting ten trees.<sup>1</sup>

Togutil people use plants as a medicinal material sometimes also stored for any time needed, among others is iron rope (*Agelaea trinervis* (Lanos) Merr.) which is also called togutil rope because it is often utilized. The iron rope is sometimes mixed with lawang wood. And they have also experienced diseases such as smallpox that attack many people called 'sarampak' and they use gorati (*Curcuma longa*). Common types of plants are used by other communities such as betel/bidoho (*Piper betel*) for deep pain, turmeric/gorati (*Curcuma longa*) for skin pain, ginger/gihoro (*Zingiber officinale*) for headache, body pain, and guava/gowaya (*Psidium guajava*) for diarrhea. They also utilize bori (*Derris* sp.) and pangaho (*Barringtonia confusa* L. & O.) for fish poison. In addition, the community also uti-

lizes plants for magic. People can overcome some symptoms of the disease no less than 30 kinds of symptoms of the disease, including wounds, abdominal pain, headaches, knee pain, shortness of breath, jaundice and postpartum. In everyday life, the types of plants that are used as folk remedies, the simple use of which is by means of the part of the plant that is utilized simply by boiling, kneaded or burned. The plant parts used are leaves, bark, stems, roots and fruit. The types used for 'aunu magare garehe' are called yellow sores such as gurama, gofosa, au-au, ligua, naira, kahoka, ngodoro each of which is used by the bark and then boiled afterwards in the drink. To increase their appetite make use of behelo (*Cinnamomum macrophyllum* Miq.) by means of roots or stems boiled and then taken.<sup>2</sup>

It is recorded no fewer than 60 types of 54 clans and 35 tribes/family of plants that are utilized for the use of medicinal materials. Among the 11 plants used for traditional treatment of togutil women and children. The plants utilized are quite diverse and are widely utilized from the family Fabaceae, Verbenaceae and Zingiberaceae and generally still grow wild. The stature of plant species used for medicinal materials is quite diverse from trees, herbs and grasses including orchids (*Nervilia aragoana* Gaud.) and begonia (*Begonia holosericea* Teijsm. & Binn.). The way the plant is processed is still quite simple, boiled, kneaded, or burned. While the way of utilization of plants there are single or some that are sourced from several other plant species.<sup>2</sup>

In accordance with the Background described it can be seen that the Togutil people who live in the forest and still utilize plants for the use of traditional medicine as a treatment when there are sick family members, for their service of limited health access provided by the government, the breeding of plants in the forest as an alter-

Peer-review under responsibility of the scientific committee of the 3rd International Nursing, Health Science Students & Health Care Professionals Conference. Full-text and the content of it is under responsibility of authors of the article.

\* Corresponding author.

E-mail addresses: [rs.sibarani@usu.ac.id](mailto:rs.sibarani@usu.ac.id), [pmc@agri.unhas.ac.id](mailto:pmc@agri.unhas.ac.id) (R. Sibarani).

**Table 1**

Types of plants used as traditional medicinal materials by women and children of Togutil tribe in the following table North Moluccas Province.

No	Types of plants			Functions	Process	Material
	Local name	Scientific name	Family			
1	Kuroho	<i>Pentaspadon motleyi</i> Hk. f.	Anacardiaceae	Appetite Enhancer	Boil and drink	Bark
2	Kananga	<i>Cananga odorata</i> (Lam) Hook.f. & Thomson	Annonaceae	Children are less healthy	Boil for bathing	Bark
3	Kayu tutuhuru	<i>Tabernaemontana aurantiaca</i> Gaud	Apocynaceae	Abdominal pain (infant)	Eroded, kneaded plus hot water and then drank	Bark
4	Goro-goro	<i>Colocasia esculenta</i> L.	Araceae	Getting dirty blood out	The leaves are soaked in water, then drink	Leaves
5	Niara	<i>Canarium maluense</i> Lautrb	Burseraceae	Yellow sores, postpartum	Boiled and then drank	Bark
6	Tali besi	<i>Agelaea trinervis</i> (Lanos) Merr	Connaraceae	Body a pain, postpartum	Boiled and then drank	Stem
7	Kugeta	<i>Merremia peltata</i> (Roxb.) Merr	Convolvulaceae	after giving birth	Young leaves are kneaded, then drink boiled stems	Young Leaves and Stems
8	Linua duku	<i>Scleria scorbiculata</i> Nees	Cyperaceae	Sore throat cough postpartum	Pounded stems The roots are chewed and then the amps are melted on the surface of the throat, the fruit eaten Batang	Roots, fruit and stems
9	Pohon baru	<i>Hibiscus tiliaceus</i> L.	Malvaceae	Postpartum	boiled and then drank Young leaves kneaded plus warm water Bark (inside)	Young leaves and inner Bark
10	Ngodoro	<i>Microcos ceramicus</i> Burr	Tiliaceae	Postpartum yellow pain	Bark boiled and then drank	Bark
11	Digo	<i>Sida rhombifolia</i> L.	Malvaceae	Unhealthy both children and adults	Chewed and then disbursed on the Body	Root

native to the traditional medical resources of the togutil tribe on natural resources can give birth to knowledge of the utilization of natural resources passed down through generations and eventually accumulated into local wisdom. According to researchers, caring for and maintaining the health of togutil mothers and children is the same as taking care of the environment and maintaining the balance of Natural Resources to bequeath to future generations. From this explanation, the authors conducted a study with the title: The Use of Traditional Medicine for the Health of Women and Children of Togutil Tribe in North Moluccas Province.

## Method

The source of data in this study in the form of primary data and secondary data obtained from the results of the journal review, the authors conducted a qualitative descriptive research approach with data collection through national and international literature studies that have been published in articles, scientific research journals and book references related to this research. Literature searches are done using search engines in the form of google scholar, google book, doaj.org, mendeley.com, academia.edu, reserachgate.net, kompasiana.com, inarxiv.id. The results of this concept are expected to recommend the discovery of new drugs in a traditional way derived from certain plants based on the use by certain local tribal communities in search of alternative treatments.

## Results

### Utilization of plants as traditional medicine of Togutil tribe

Togutil people use plants as a medicinal material sometimes also stored for any time needed, among others is iron rope (*Agelaea trinervis* (Lanos) Merr.) which is also called togutil rope because it is often utilized. The iron rope is sometimes mixed with lawang wood. And they have also experienced diseases such as smallpox that attack many people called 'sarampak' and they use gorati (*Curcuma longa*). Common types of plants are used by other communities

such as betel/bidoho (*Piper betel*) for deep pain, turmeric/gorati (*Curcuma longa*) for skin pain, ginger/gihoro (*Zingiber officinale*) for headache, body pain, and guava/gowaya (*Psidium guajava*) for diarrhea. They also utilize bori (*Derris* sp.) and pangaho (*Barringtonia confusa* L. & O.) for fish poison. In addition, the community also utilizes plants for magic. People can overcome some symptoms of the disease no less than 30 kinds of symptoms of the disease, including wounds, abdominal pain, headaches, knee pain, shortness of breath, jaundice and postpartum. In everyday life, the types of plants that are used as folk remedies, the simple use of which is by means of the part of the plant that is utilized simply by boiling, kneaded or burned. The plant parts used are leaves, bark, stems, roots and fruit. The types used for 'aunu magare garehe' are called yellow sores such as gurama, gofosa, au-au, ligua, naira, kahoka, ngodoro each of which is used by the bark and then boiled afterwards in the drink. To increase their appetite they make use of behelo (*Cinnamomum macrophyllum* Miq.) by means of roots or stems boiled and then drink (Table 1).

From the results of the study, it was noted that there are 11 types of plants that are utilized for the use of traditional treatment of women and children of Togutil tribe as medicinal ingredients. Plants that are utilized are quite diverse and that are widely utilized and generally still grow wild. The stature of plant species used for medicinal materials is quite diverse also from trees, herbs and grasses. The way the plant is processed is still quite simple, boiled, kneaded, or pounded. While the way of utilization of plants there are single or some that are diramu from several other types of plants.

Traditional knowledge about the use of plants as medicinal materials carried out by the Togutil people shows still the close relationship between humans and nature (forest). Knowledge of the utilization of plants such as the use of plants to be used as cough medicine in children, mothers giving birth, for endurance and others all obtained from plants.<sup>3</sup>

Use for pre and postnatal care is a type of plant use that utilizes more diverse types of medicinal plants. pre and postnatal care, consisting of seven types of plants used as a single remedy.

**Table 2**  
Local wisdom of Togutil forest management in North Moluccas Province 2020.

No	Types of plants	Uses
1	Hamangau	Arrowhead poison material when going hunting
2	Birth Tree	Every baby is born planted by a tree by their parents
3	Pohon Kematian	Each Togutil tribe that dies trees are used for ritual purposes and by planting new trees instead
4	Prohibition on damaging sago trees	Foodstuffs for the survival of the Togutil tribe in the forest
5	Buko-Nonaku	There's a sign of forest ownership.
6	Mangadodo gomu pahiyara (maintenance restrictions)	Restrictions on forest ownership area of each Togutil tribe
7	Gosimo sacred forest	Forests used for meetings hold traditional ceremonies or rituals of the Togutil tribe
8	Matakau	Prohibition on damaging forests

Another important medicinal plant species for the Togutil tribe is species 1 (hamangau/new tree), is a medicine needed in every postnatal treatment and whitish disease in women.<sup>4</sup> Local wisdom of the Togutil Tribe against plant forests in addition to being used as a medicinal plant is also used as a sacred tree (ritual) that can only be taken by traditional shamans and utilized according to daily needs without damaging it is used not only as their food peyedia but the forest is considered a relic of treasure by their ancestors that must be guarded. It consists of two types of core local wisdom, namely local wisdom for the welfare or prosperity of the community and local wisdom for peace or human kindness. Local wisdom that can be used to improve well-being includes hard work, discipline, education, health, cooperation, management, gender, creativity, and cultural preservation, and environmental care. Local wisdom aimed at creating peace consists of decency, honesty, or integrity, social fidelity, harmony, commitment, positive thinking and praise (Table 2).<sup>5</sup>

The cultural elements of the togutil tribe are the belief centered on the ancestral spirits that occupy the entire environment so that if damaging natural resources is an insult to the ancestors as owners, there is the highest power and power that is Jou Ma Dutu, the owner of the universe or usually called O Giki-Moi namely the soul or life, the pattern of life in which the man hunts and hunts and his women have food at home. The kinship of the Togutil tribe is the joint feeding ceremony called Makkudotake, their livelihood dependence with nature makes them have a nomadic lifestyle, for them the forest is a food source so that in the use of the forest togutil tribe is their home so that keeping the forest is considered the same as keeping their own home. The term prohibition in environmental preservation is bohono, buko, nonako and to maintain and strengthen the values of local wisdom done by oral speech, customary sangsi-sangsi, direct application in the field (practice) and ngofa-ngofaka.<sup>4</sup>

## Discussion

Based on the experience of the Togutil tribe, the treatment of known types of diseases is done by utilizing traditional medicinal

plant ingredients as postnatal medicine, fever, health in children, appetite growth in children of Togutil tribe for the fulfillment of balanced nutrition for the sustainability of their lives. Oral medicine is a drug in the form of potions taken to treat diseases such as kidney stones, flu, ulcers, constipation, menstrual disorders, blood cough (tuberculosis), malaria, hypertension, tumors, venereal diseases (vaginal discharge, pus), blood clots, diabetes, and cancer. The health of Togutil women and children is so important to maintain the survival of the Togutil tribe. There are facilities provided by the government that are far from the access of Togutil tribal communities so that vulnerable with access to health services.

It is recorded no fewer than 60 types of 54 clans and 35 tribes/family of plants that are utilized for the use of medicinal materials. Among the 11 plants used for traditional treatment of togutil women and children. The plants utilized are quite diverse and are widely utilized from the family Fabaceae, Verbenaceae and Zingiberaceae and generally still grow wild. The stature of plant species used for medicinal materials is quite diverse from trees, herbs and grasses including orchids (*Nervilia aragoana* Gaud.) and begonia (*Begonia holosericea* Teijsm. & Binn.). The way the plant is processed is still quite simple, boiled, kneaded, or burned. While the way of utilization of plants there are single and some that are sourced from several other types of plants.

## Conclusion

There are 11 types of plants used as folk remedies for the health of women and children of the togutil tribe in medicine and 7 local wisdom of body utilization by the Togutil tribe.

The Togutil have the belief that every plant that grows around humans has a soul. Therefore, every use of medicinal plants should be done well and sometimes performed special rituals by traditional shamans.

The Togutil tribe's reliance on natural resources gave birth to knowledge of the utilization of natural resources passed down through generations and eventually accumulated into local wisdom.

## Conflicts of interest

The authors declare no conflict of interest.

## References

- Purwaningsih DA. An adaption of the endangered Togutil tribe's local wisdom into an animation character design. *Ultim J Komun Vis.* 2018;11.
- Susiarti S, Rahayu M, Royyani MF. Pengetahuan dan Pemanfaatan Tumbuhan Obat Masyarakat Tobelo Dalam di Maluku Utara. *Media Penelit dan Pengemb Kesehat.* 2015;25:211–8.
- Nadra W, Hariyono H, Ramli M. Kebiasaan Belajar Anak Dalam Keluarga Suku Togutil Halmahera Timur. *J Pendidik – Teor Penelitian, dan Pengemb.* 2016;1:1753–63.
- Apal FU, Ariyanti NSRI, Walujo EKOB. Medicinal plant utilization by the Togutil tribe in the buffer zone of Aketajawe Lolobata National Park. *J Sumberd Hayati.* 2018;4:21–7.
- Sibarani R. The local wisdom on Aren (*Arenga pinnata*) palm tree in Toba Batak tradition of North Sumatera at Lake Toba Area. In: *Journal of Physics: Conference Series.* IOP Publishing; 2018. p. b152060.