

# Challenges and Opportunities of Plants and Animals Medicine as Primary Health Care among the Oromo, Ethiopia: The Case of Gidda Kumbi Village of Nedjo District in Western Ethiopia

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**Abstract:** *In this paper, the opportunities of medicinal plants as primary health care and challenges of medicinal plants and animals in the context of sustainability and safety in GiddaKumbi village of Nedjo district in western Oromia region of Ethiopia are discussed. Villager's reason out why they prefer medicinal plants and animals as primary health care instead of biomedicine and also some members of the village raise challenges related to medicinal plants and animals on its sustainability, and safety. The data were collected both from primary (FGD, case study and informal interview) and secondary sources. The research has revealed the opportunities of using medicinal plants and animals as primary health care and challenges related to sustainability of the knowledge, and safety of medicinal plants and animals.*

**Keywords:** Plants Medicine, Animals Medicine, Opportunities, Challenges

## 1. Introduction

According to WHO (2015), Ethno medicine can be defined as, *the knowledge, skills, and practices based on the theories, beliefs, and experiences that indigenous to different cultures used in the maintenance of health and in the prevention, diagnosis, improvement or treatment of physical, social, mental, and spiritual illness*". It covers wide varieties of therapies and practices which vary from country to country, culture to culture, and society to society.

Africans ethno medicine practice includes diverse health practices, remedies, approaches, knowledge and beliefs incorporating plants, animals, and mineral products, spiritual therapies and charms. Folk healers utilize various techniques, media, methods, techniques, and approaches to diagnose, treat and prevent disease (Ibid).

The knowledge of ethno medicine in Ethiopia is transferred orally from one generation to the next generation. It extends from home remedies practiced as primary health care to those who specialize on traditional healing for various diseases. This practice involves the use of plants, animals and animal products, minerals, and various ritual and spiritual practice for healing different diseases (Yadav, 2013).

Oromo population is one of various ethnic group inhabit in Ethiopia. They have their own ethno medicine practice which is different from other ethnic group the country (Balcha, 2014). According to (Medhin and Abebe (1998); cf Abraham), Oromo populations are well known by using traditional medicine prepared from plants and animals. Oromia region of Ethiopia is rich in variety of plants and animals (Abraham, 2012). Due to this reason most of ethno medicines are prepared from plants and animals. Oromo society uses these indigenous medicines both for animals

and human being. They use it to treat various diseases and illnesses which related to different etiology or causation.

Even though indigenous medicines are used widely by various societies of the Africa, there are so many problems related to indigenous medicine. So it is very important to identify the challenges and prospects of using this plant and animal medicine as primary health care.

I had selected my research site because it is relatively the place where plant and animal medicines are highly used by the villagers.

## 2. Research Methodology

I collected data from both primary and secondary data sources by using both qualitative method of data collection. It helped me to analyze the opportunities and challenges of using medicinal plants and animals in the present day. I mainly used FGD, case study, and informal interview to understand the issue.

### 2.1. Primary Data Sources

#### A. Focus Group Discussion

Four focus group discussions were arranged to collect information about opportunities and challenges of animals and plants medicines. The first focus group discussion was conducted with male elders and traditional healers, the second with female elders; the third was with educated young and adult male members, and the fourth with educated females. I separated females from males; because the females do not feel comfortable speak equally with males in the public meeting. Moreover, it is considered as rudeness on the part of females. Each focus group discussion included 8 members. The duration of focus group discussion was 30 minutes at the minimum whereas 60 minutes maximum. The maximum duration of time was experienced

for under taking discussion with healers. The focus group discussion was conducted in the most relaxed condition with minimum interference of moderator and in order to make the situation more comfortable, the researcher arranged coffee for the participants.

### B. Case study

I used this method with different individuals who have experience of using medicinal plants and animals. I asked them the opportunities and challenges they have seen on medicinal plants and animals by using it as primary health care. A total of 6 case studies were conducted to collect data from informants. This helped me to support the data gained through focus group discussion.

### C. Informal Interview

I conducted some informal interviews to cross check the information gained through focus group discussion. 8 persons (5 males and 3 females) were interviewed at their work place, around the church, and prayer houses of the village.

## 2.2 Secondary data sources

I have examined documentary sources such as books, articles, unpublished materials from some of my friends, and periodical reports to collect information about the study area, and nature of studies previously conducted on this topic. This helped me to understand the general picture of the study area and to relate existing literature with the outcome of my study, save resources and guided me to undertake my research.

## 3. Objective of the Study

### 3.1 General objective

The general objective of this research was to understand the challenges and opportunities of plants and animals medicines as primary health care

### 3.2 Specific objectives

The specific objectives of this research were;

- To explore opportunities of plants and animals medicine as primary health care
- To identify the challenges of plants and animals medicine in context of sustainability and safety.

### 3.3 Research Questions

The research questions of this study were;

- What are the opportunities of plants and animals medicine as primary health care?
- What are the challenges plants and animals medicine in the context of safety, and sustainability?

## 4. Results and Discussion

### 4.1 Opportunities of Plants and Animals Medicine as Primary Health Care

Kirksey (2007) and Birhan, et al (2011) have discussed various reasons why people prefer ethno medicine as their primary health care. These are easily accessibility of ethno medicines, cost effectiveness, and cultural acceptability. Other researchers like Thorne has opined that, the People use it because of its effectiveness in medicating some illnesses and diseases (Cf. Abdullah, 2011).

The data collected from FGD participants reveal that, some villagers have strong faith in medicinal plants and animals and are even do not feel comfortable to use western medicine. Some of the participants use both modern and traditional medicine. In line with the above literature; my study assessed several reasons for people's preference of plants and animal medicines as primary health care. The reasons are classified as follows; cost effectiveness, effectiveness of plants and animals in treating and preventing some diseases, accessibility of these medicines, painless treatment, and proudness of people's to their culture.

### 4.2 Cost effectiveness

Participants of focus group discussion highlighted the cost effectiveness of herbal & animal medicine and also low consultation fees for healers. Most of these medicines are shared knowledge of the people. They know the process of preparation and method of use. At least one of the members of their kin has knowledge about plants and animal medicine. So they can treat themselves without any fees.

Also if they go to traditional healers for consultation, they pay a little amount. While making non participant observation, I observed that some traditional healers accept the payment in cash while others accept in kind. The local drinking called *qublame* is the most common gift given to traditional healers. Those traditional healers who receive money for consultation charge very small amount, usually 5-10 birr which includes the cost of medicine. The consultation fee is paid only once during the course of treatment. Charging higher amount of fee is not ethically acceptable. The healers refuse to accept more amounts even if the patients are willing to pay.

### Case study 1

Mr. Tula 60 years old male told me that:

*I use most of the time plants and animals medicine to treat myself when I am sick. Even though government encourages us to use modern medicine, I prefer traditional medicine because of its cost effectiveness. To get modern medicine, it is very expensive, but I can get traditional medicines cheaply or even for free. For example if I have headache and go to modern health center, I will pay minimum of 70 ETB. But I can treat myself here by using coffee, cultivated in my field without any payment. My son, please see! They find reasons to make me to pay more. They say laboratory test fee (blood test fee, urine test, etc...) and card fee. My aim is to recover from illness, why should I pay more?*

**Case study 2**

Similarly another informant Mr.'s Naga'e 37 years old woman

*I was sick and went to a traditional healer who resides in our village. Before I went to the healer, I had consulted the doctor in the town for a treatment of skin disease (tineacorporus). The doctor asked me to pay 150 birr to get the medicine. But at that time I didn't have even 50 birr to pay him. I came back and went to see the traditional healer in my village. I asked him how much I pay him. Then he asked me to pay 5 birr. I couldn't believe my ear about what I have listened and asked him again. He told me the same amount again. Then I told him how difficult my disease is and how much money the modern doctor asked me for treatment. Then I added 20 ETB on what he said and gave him 25ETB. But he refused to accept and literally threw extra 20 birr towards me. Since from that time, I did not go to hospital or modern health center, because I can be treated well by traditional healers by little money.*

**4.3 Efficacy**

Herbal and animal medicines are more effective in curing some illnesses and diseases than western medicines. This is another reason for the people to use plant and animal medicine as primary health care. These illnesses are mostly caused by personalistic disease causation; humans, spirits, and supernatural agents. The villagers believe that there is no treatment available in western medicine for the treatment of such illnesses. So people go for traditional medicine without any alternatives.

**Case study 3**

Mr. chala, 32 years old man, narrated this incident which happened to one of his best friends when they were in grade 10.

*We were three friends and used to move together always. We used to enjoy to walking in evening hours. We usually sit near a house and play there. That house was inhabited by a woman and she gave us banana and orange from her garden always. Most of the time, she used to give one banana to me and my other friend but three or four to third friend. But we didn't put any emphasis on this behavior. That woman had evil eye. She attacked my third friend and he became ill. He suffered abdominal pain, vomiting, headache, sleeplessness, senselessness, and nearly to die. Then we took him to Nedjo Hospital along with his family members. Then he slept there for four days and showed no sign to recover. Even it became worse and we were worried for his life. Then one of his relatives told us to bring to traditional healer, but we refused. Because we thought how local healer can heal, when doctor could not cure. Instead, we started to look for another specialized medical doctor. Then the board of Nedjo hospital wrote reference letter to Ayira Hospital, where many white doctors are in work. We took him there and he slept there for one week. Again no change was marked. Then they advised us to take him home as there is no hope for improvement. We felt sad and thought of losing him. We took him back to home. Then that person, who previously suggested us to take him to indigenous healer, told the same thing again. Then with no hope, we took him to one of the traditional healers of our village. When traditional healer saw him, he suggested organizing a healing ritual in the*

*home. On the appointed day, the healer performed the ritual and put some plants in the fire that emanated smoke. Gradually then my friend started to recover. We were so much amazed by this traditional healer's ability. Since then some persons, like me, who did not believe in traditional medicine, became believers. Thanks to Traditional medicine, now my friend is living in America (went there by dv lottery) and he sends me money sometimes.*

The above narrations in form of extended case history reveal the sequential development of a type of illness and process of treatment to infer the effectiveness of traditional medical system. At the same time it depicts how even the educated people change their outlook from western health care system to traditional one.

Similarly, some illnesses/accidents are prevented only through the use of plants. I saw tobacco plant in front many houses which is used to prevent snake bite. The smell of tobacco plant keeps the snake away from the house and hence the members are protected particularly during night time. I have seen another plant named, *mukamomo*, which is planted to prevent entry of evil eyed persons to the house. The villagers also put the leaves of *ciladdami* plant in their ears to protect themselves from fibril illness *bitati* which is caused by evil spirit.

**Painless treatment**

During FGD, the participants opined about the preference for plants and animals medicine for some diseases because of its painlessness when used as compared to modern medicine.

**Case study 4**

Chaltu a 52 years old, mother, narrated her experience as follows.

*I prefer traditional medicine to western medicine for treatment of some diseases/illnesses as they are less painful. Six months ago I was bitten by a mad dog. I went to modern health center for treatment. They told me as I will recover after taking 18 injections on abdomen. On hearing this, I was afraid and discussed with one of my neighbors who had experienced it before and recovered from it following treatment in modern medicine. She told me that injection is not only painful but also very difficult. She also guided me to one of the traditional healers who can treat it simply without any pain. Then I went for traditional medicine treatment. The healer gave me medicine, and recovered from it without any pain.*

**Accessibility**

Plants and animals medicines are easily accessible within the village. Villagers may not go long distance in order to get plants or animals medicine. People can get it from their field, relatives, elders or neighbor unlike western medicine. Especially people who cannot move from place to place due to various reasons such as old age, disability and pregnancy prefer ethno medicine because they can get it around their home. Even if they cannot be found around their home or neighborhood, the traditional healers come and treat them at their home.

**Case study 5**

Mr. Dula, 82 years old farmer and father of 7 said;

*My son! You have power to do what you want, to go where you want, you are energetic, and you are young. I was also like you at my time. But now, I do not have good energy and even unable to move comfortably from place to place. Do you think that today's children (western doctors) come and treat me here at my home? Never! Leave this! When I was young, I visited some medical doctors but what I have marked, they are arrogant and egoistic. Thanks to Abba Qalbii (one of villagers traditional healers) who runs to me immediately when he hears my illness. Recently I had experienced diarrhea and slept here in my house. Then this woman (The health post worker), came and told me to go to hospital. I asked her who will take me there. But she replied that my children should take me there. My son! think it, it takes 1 hour and 30 minutes on road for healthy person to travel to hospital. Then I called chali (youngest son), and told him to call Abba Kalbi. Abba Kalbi came within 30 minutes and gave me medicine. Then I recovered from my illness. My son, think over it, if Abba Kalbi would not have come.*

#### **Proudfness of villagers to their medical Tradition**

The villagers are proud of their culture, especially elderly persons of the village. They do not want to give up their culture. The use of medicinal animals and plants to treat and prevent disease/illnesses give them feeling of proudness and ownership. One of my informal informants whose age is around 80 had to say; *"I use plants and animals medicine because it is my culture. We inherited this culture from our fathers, and we have to transfer it to our children. We are handsome with our culture"*.

#### **4.3.1 Challenges of Medicinal Plants and Animals**

According to WHO (2005-2008) report on ethno medicines, there are so many challenges which are raised with the use of ethno medicines in different countries. Although these challenges are different from one country to another, most of them seem similar. The challenges listed by WHO were challenges of safety, quality, and effectiveness, challenges of knowledge, and sustainability, challenges of government regulation and policy, and challenges of fake healers, and accountability of healers. Data collected on challenges of medicinal plants and animals during FGD discussion, case study, and informal interview are categorized under two themes; Challenges of sustainability, and Challenges of safety.

#### **4.3.2 Challenges of Sustainability**

The villagers express some challenges about the sustainability of this knowledge for future generation. These problems which will affect the existence and transmission of this rich knowledge to the future generation are gradual extinction of some animals and plants in the area both by natural and manmade interventions, the spread of modern education, which push and encourage younger generation to use modern medicine, and reject their own indigenous medicine, and at the same time, the lack of government support for the knowledge in the village, which demoralize the specialists and push youngsters from the knowledge.

##### **a) Extinction of some animals and plants**

Some medicinal plants and animals which were found in recent past in the area are not found in the area today, while

others decreased into numbers. For the extinction of these medicinal plants and animals, there are various reasons according to my FGD participants. These reasons are over exploitation without re plantation, hunting and killing of animals without limitation, and expansion of agricultural land.

Most of medicinal plants found in this area are not used solely for medicinal purpose, but also used for other purpose such as house construction, and fire wood. The people use it in their day to day activities. In addition, the specialists and villagers use medicinal plants daily to prevent and treat illnesses/diseases. This causes over exploitation of these medicinal plants which threatens the sustainability of the plants in the future. Neither specialists nor villagers do not plant new seedlings when cut part of the plant or use entire plant for medicinal purpose or other purposes. Some medicinal plants were found abundantly and everywhere before, but currently they are very rare and found after long time of search. For example *Birbirs*, *Lolchisa*, *Xamanayi*, and *Renci* plants were found largely in the area previously, but currently only a few of them found in and around the village. In addition, the plant called *homi* disappeared from their village, as it was used for various purposes, now there is no single *homiplant* in the village. Since most of the medicinal plants are wild and found in the forest, the people do not take care for plantation of these plants in the forest areas. Similarly, the number of some medicinal animals have also decreased, while a few are totally disappeared due to hunting and killing of animals for various purposes in addition to their medicinal value. The animals such as Tigers, Antelopes, and Pigs have been decreasing into small number.

Naturally also the climate of this area is changing from time to time as opined by participants of FGD. The rainfall is decreasing, and the area is changing to desert. In line with this change, some animals and plants are decreasing and disappearing.

##### **b) The spread of modern education**

Modern education is currently expanding by government at country level. Mistakenly or intentionally modern education propagates western medical system as better and indigenous medical system as void. The educated youth of the village are more attracted towards the modern medical treatment as first preference but comes back to traditional treatment if they fail in former type or enforced by their family to use it.

A few members of younger generations have demonstrated interest in learning herbal medicine from their parents or kin members. But learning in traditional medicinal plants and animals requires time and experience. Since these youth learn along with the school/college education, they do not have adequate time and interest to recognize the herbal plants and medicinal animals from the elders. Although children of some elders and healers are learning it from their parents but their number is very small. The people feel that it would be difficult to save this traditional knowledge of medicinal plants and animals after the death of elderly healers in the village.

I conducted seven informal interviews with youngsters who are in the age group of 20-25 to ascertain the level of shared knowledge on herbal medicine. But to my surprise, most of them did not tell me even single medicinal plant or animal. This attests to the fact that the sustainability of the rich knowledge is in danger of extinction in the future.

### c) Lack of Government patronage

The villagers ventilated their grievance regarding the absence of patronage from the government from Participants of FGD and during the course of informal discussion with villagers which is crucial for sustainability of the knowledge. The researcher came to know that the government does not pay adequate attention toward indigenous medicine rather government discourages the people to use indigenous medicine through its health post workers. Even, one person told me informally, that the kebele administrators threatened to stop the supply of cooking oil and sugar for those who do not go modern health center. These government servants consider the villagers who do not go to health centers as protesters of government policy.

Traditional healers do not have license to practice that their knowledge are recognized only by the villagers. Healers do not have license because they did not ask government to give them license as they lose their hope on the action of government in supporting biomedicine and discouraging indigenous medicine.

### 4.3.3 Challenges of Safety

There are some challenges related to safety which were raised with the use of plant medicine and animals during FGD. These problems include lack of hygiene, approximate diagnosis and treatment, and side effects.

#### a) Lack of hygiene

The educated participants in FGD are of opinion that as some plants and animals are used directly, without processing them, while others used after some processes. During the process of preparation of medicine, like grinding, powdering, mixing, dissolving, etc, the healers or elders who prepare it do not take adequate hygienic care to protect the drug from contamination. The articles used for preparation and storage of medicine are not properly cleaned. The healers sometimes use old cloth, used paper to store medicine for the patients. The ingredients such as honey, water used for compound medicines are not properly stored. The healers do not wash his/her hands properly before and after preparation of medicine. Hence, sometimes instead of healing the patient, the healer can spread infection. Although we can't say all healers and elders, do not maintain hygiene for the preparation of medicine, but it remains a cause of concern among the young educated villagers.

#### b) Problem of diagnosis and treatment

Some FGD participants, specifically the educated ones, are of the opinion that the healers' diagnosis is based on assumption so also doses of medicine. They are of opinion that at times the healers or elders are likely to commit mistakes in identifying the disease and prescribing treatment. Since diagnosis of disease, preparation of

medicine and the required dose for the illness are not supported by laboratory evidences it is quite plausible to believe the healers can commit mistakes. These healers just use finger tips, number of leaves before preparation of medicine etc without any scientific support for the actual dose. These measurements are also only for medicines which are orally taken such as drinking, while other medicines which are applied on skin, optical, dental, and nasal have no such measurement. In addition, the relationship between strength of illness/disease and amount of medicine given to the patient is by estimation rather scientifically tested. In that case, sometimes the medicine may be ineffective due to under dose given to the patient, while in other time it may be over dosage. Although some of the educated youth raise such concern, their arguments are influenced by modern education even by some literature in this field, it requires further research as the local health tradition is established on a strong platform of observation and experience.

#### c) Side effects

Some villagers also believe in the side effects of herbal and animal medicines. Sometimes the medicine taken to cure a specific illness/disease gives rise to another disease/illness.

#### Case study 6

Mr Amanuel, 29 years old man

*I have used medicinal plants and animals most of the times for treatment. Two years ago, I had experienced Liver disease "sabbata" and went to traditional healer for treatment. He then gave me medicine to drink and I recovered from the illness. But I got another disease from that treatment. That medicine made my stomach sick. I started to experience stomach ulcer Again I took stomach ulcer medicine and recovered. However, although I have recovered at that time, but I experience pain when I eat "qocco", "albanbe", corn, and bread. See! although I recovered from my first disease, I got another big disease.*

## 5. Summary

Villagers opined some opportunities in using plants and animals medicine as primary health care. These opportunities raised from villagers are cost effectiveness, accessibility, effectiveness in treatment and prevention of some diseases/illnesses, painless treatment of medicinal plants and animals, and proudness of villagers to their medical tradition. In addition, there are some challenges which are raised by villagers on sustainability of knowledge; extinction of some plants and animals, lack of government patronage, and the expansion of modern education, and on safety of using medicinal plants and animals; lack of hygiene, problem in diagnosis and treatment, and side effects.

## 6. Recommendation

- Government should give more attention and support for these indigenous healers. The indigenous healers be encouraged and made aware to apply for license to practice so that these indigenous healers can give better service to the society.

- The government should encourage pharmaceutical companies to produce medicine in tablet and syrup form by using herbal plants and animals, so that the apprehension of hygiene, contamination and improper dose of medicine can be minimized. The villagers can be encouraged to cultivate the plants and sell them to pharmaceutical companies which can be used as raw material for preparation of medicine. This will enhance economic condition of the villagers.
- Government should organize training camps for practitioners of herbal medicine to equip them with some technicalities of biomedicine so that they can work as primary health care giver at grass root level. They can work as support staff to complement the existing health service.
- The educated youth should be made aware about the benefits of traditional medicine. The students of schools and higher educational institutions should refrain from developing biasness to herbal medicines. School curriculum can be revised to incorporate the benefits of traditional medicine. They should learn that the western medicine and traditional medicines are not competitors but complementary to each other.
- The government should try to promote medical pluralism in the hospitals and clinics. So that the patients can have a choice to select the type of treatment as they want. Medical systems are culturally constructed and the patient or practitioner may have different perception about diseases etiology, and methods of treatment. As argued by Cultural Interpretive Medical approach, this creates miss communication between practitioners and patients. In order to avoid this, medical pluralism should be promoted.

## References

- [1] Abraham Waktola, 2012, *Traditional Medical Practices among Western Wollega Society In Particular references to NoleKaba district*. Samara University, Samara, Ethiopia (Unpublished Thesis).
- [2] BalchaAbera,,2014, “Medicinal plants used in traditional medicine by Oromo people, Ghimbi District, Southwest Ethiopia”; *Journal of Ethno biology and Ethno medicine*. Department of Biology, College of Natural Sciences, Jimma University, Jimma, Ethiopia
- [3] R. HiranmaiYaadav, 2013, “Medicinal Plants in Folk Medicine system of Ethiopia”; *Journal of Poisonous and Medicinal Plants*; Haramaya University, Ethiopia
- [4] WHO, 2015, *African Traditional Medicine*, Geneva