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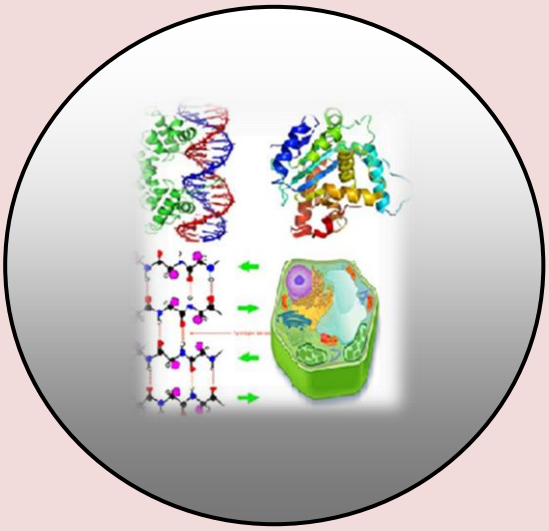

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Availability and Utilization of Traditional Medicinal Plants Used By Local Communities of Haro Limu Woreda, Eest Wollega Zone

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ABSTRACT

Traditional medicines are still the most affordable and the most accessible sources of treatment in the primary health care system. Recently, a dramatically increasing prevalence brought illness to the focus of public health interests. Thus, this study was conducted to assess availability and Unitization of traditional medicinal plants being used to treat different human illness at Gidda Ayena Woreda, East Wollega Zone of Oromia regional state Ethiopia. In an ethnobotanical survey in defined rural and urban areas randomly identified sites were selected to identify the most well experienced practitioners that are known by using traditional medicinal plants to treat human illness using question, observation and interviewed in a structured manner about their administration were used to collect apprtaorite data from the informants. There were different medicinal plants belonging to different families that have been used to treat different allies at the study area. Traditional medicinal plants are commonly used in the study area to treat disease. The available data regarding the medicinal activity of the plants is not sufficient to adequately evaluate or recommend their use. Clinical intervention studies are required to provide evidence for a safe and effective use of the identified plants in the treatment of different illness.

Keywords: Ethnobotanical Survey, Traditional Medicinal Plants and Illness.

INTRODUCTION

An estimated 6000 species of higher plants, 10% of which are endemic, make up the Ethiopian flora. The nation is renowned for its substantial geographic diversity, which encourages the emergence of various habitats and vegetation zones.

The enormous diversity of traditional knowledge and practices of the people in using medicinal plants is partly a result of Ethiopia's diverse languages, civilizations, and religious convictions. Because the whole list of medicinal plants that indigenous people have historically used is not yet available, our understanding of how they are used is still insufficient (Mesfin Tadesse et al., 2005). The main threats to Ethiopia's medicinal plants are environmental degradation, deforestation, agricultural development, overexploitation, and population growth (Kebu Balemie et al., 2004). The spread of contemporary education exacerbates knowledge loss by causing the younger generation to undervalue its old values. In order to record, analyze, and share information about the connection between medicinal plants and human society, ethno botanical research are helpful.

The studies conducted on the traditional medicinal plants in Ethiopia are very limited when compared with the multiethnic cultural diversity and the diverse flora of Ethiopia (Giday *et al*., 2009). Even though traditional knowledge of medicinal plants is very crucial to treat different diseases, there is no study conducted in present study area, hence, thus this study is conducted to assess the availability and utilization of traditional medicinal plant in Haro Limu Woreda, East Wollega Zone.

MATERIALS AND METHODS

Description of the study area

The present study was conducted in three selected Haro Limu Woreda(Tano Gatira Dambi and Suge Lalisa Kebele), East Wollega Zone, Oromia National and regional state, Western Ethiopia. These Kebele are one of the district of East Wollega zone, in Haro Limu. This district is contiguous with Limmu in the east, Benshangul Gumuz Regional state in west and Anger River in the south and Ebantu district in the north of the district. This district was located at distance 165 km & 488 km from zonal town called Nekemte and Addis Ababa respectively. Today this district is sub divided into 15 farmers associations 1 urban kebele with a capital town of Haro for all it administrative purposes.

Sampling of Methods

Random sampling method was used to select 34 informants at random from the local populace. To choose study participants who had more experience and solid understanding of conventional medicinal plants, a random sample procedure was used. In order to acquire pertinent data, questionnaires in Afan Oromo were designed and given to respondents before being translated into English.

Data Collection Methods

The male and female traditional plant healers that participated in the study ranged in age from 25 to 95. Questionnaires, interviews, and observation were the primary techniques of data gathering. Each traditional healer was questioned about their understanding of medicinal plant applications and availability in the chosen study area. The interview was made easier by the people's use of their native tongue (Afan Oromo). Voucher samples of each traditional medicinal plant species were also taken during the field visit it and allowed collecting number. Verbal in formed content was obtained from each individual traditional medicinal plant particular healer who was participating during the field period.

Method of data Analysis

Descriptive statistical methods were employed to determine frequencies, relative frequencies, densities and relative densities.

RESULT AND DISCUSSION

Socio Demographic Characteristic of Respondents

About 34 practitioners were participated in this study on average. In general, the majority of respondents lacked literacy, and their farms frequently depended on traditional forging activities. Additionally, they were all men, completely ignorant of how to preserve this medical plant, and only a select few people were told about it by the secretary.

Table 1. Socio demographic characteristic of informants.

Socio demographic		Frequency	Percent
Age			
a)	**25-29**	**3**	**10**
b)	**30-34**	**12**	**40**
c)	**35-40**	**10**	**33.33**
d)	**41-45**	**5**	**16.66**
Marital status			
a)	**Divorced**	**13**	**43.33**
b)	**Married**	**15**	**50**
c)	**Void owed**	**2**	**6.66**
Educational back ground			
a)	**diploma**	**14**	**46.66**
b)	**Certificate**	**3**	**10**
c)	**illiterate**	**4**	**13.33**

Commonly Available and Utilized Medicinal Plants

The preponderance of the plant species utilized in these study areas are given in table (2). Only a small number of plants were farmed; most were taken from native peoples' habitats. The study found that roughly 18 families of plants were typically available and utilized to treat various human ailments. Table 2 lists the general scientific name of the plants, their preparation method, and the types of diseases that they were used to treat.

Medicinal plants Used to Treat Only Human Diseases

The number of plant species utilized as traditional medicines for treating human illnesses was counted, and these plants are from 30 genera and 19 families. The Asteraceae family was the most prevalent among these plants. 30 plant species were listed by Fisseha Mesfin (2007) and 25 plant species are cited in Endalew Amenu (2007). The work of Endalew Amenu (2007), Seyoum Getaneh (2009), and others reported on the supremacy of the family Asteraceae for the treatment of human ailments.

Table 2. List of commonly available and utilized traditional medicinal plants in Haro Limu Woreda, 2018.

No	Local name	Family Name	Scientific name	Part used	Method of preparation Utilize	Disease treated
1)	Makanisa	Euohorbiaceae	*Croton macrostachyus Del*	bud	Applying terminal bud over skin infection	Fungal diseases
2)	Shankora	Poceacace	*Saccharum officinarum L.*	Stem	Heating part of steamed eating	Common cold
3)	Talba	Linaceae	*linumusltatsinum*	seeds	dissolved in water and drink	Gastric infection
4)	Asangira	Solanaceae	*Datura stramonium*	Leaves	Crushing leaves and applying over the head	Wound of head
5)	Dhummuga	Loranthaceae	*Oliverellahilde, branth*	leaves	Heating the leaves and applying over the infected body part	Cold
6)	Caatii	Celtraceae	*Catheduls*	Leaves	Tonsin	
7)	Xenadama	Ruraceae	*Rutaprave olensi*	Leaves &root	Drinking the leaves bud with tea (coffee)pounding the root & drink	Common cold and Abdominal pain
8)	Yeroo	lamiaceae	*Pynostah abyyssinica*	leaves	Heating the leaves and applying over the infected body	Eye infection
9)	Qabarichoo	Asteraceae	*Echonophis pidus*	roots	Infusion (steaming the root to plant	Evil Sprite
10)	Buna	Rubiaceae	*Coffe arebiaca*	Seed	Powdering and drinking Applying powder over the wound	Headache wound

11)	**Yaatuu**	**Asteraceae**	***Acmellac ausirhizal***	**flower**	**Chewing the yellow flower**	**Tonsil**
12)	Harkisa	Boranginaceae	*Cynoloss umlaceolantum*	Jelly of the stem	Jelly of the slom apply over the fire wounds	Fire wounds
13)	Arangama	Agocynaceae	Carrissa spananum	Root	Heating the roots and applying over illest teeth	Tooth de livery
14)	Qortobbii	plantaginaceae	Plant golacealed	Seed	Powdering the seed and applying the bodies	Blooding bodies
15)	Loomii	Cuccurbiza cea	Cifrusauranti olia	Fruits	Applying over skin	Skin infection
16)	Pappayyaa	Ciricaceae	Caicpayya	Fruit	Applying fire wound	Fire wound
17)	Qulubbii diimaa	Alliaceae	Alliumati cepal	Leaves	Eating the leaves	Common cold
18)	Eebich	Asteraceae	Vornonia amy of dalina	leaves	Brushingena me of teath	Removing bacteria from the teeth

Table 3. Number of taxa and plant families used in the treatment of human diseases.

No.	Family	Genera	Species
1)	Agocynaceae	1	1
2)	Alliaceae	2	2
3)	Amarathaceace	1	1
4)	Asteraceae	3	3
5)	Baceaer assic	1	1
6)	Boranginaceae	1	1
7)	Braciceae	1	1
8)	Celtraceae	1	1
9)	Ciricaceae	1	1
10)	Cucrbitaceae	2	2
11)	Ephobia ceae	1	1
12)	Euohorbiaceae	1	1
13)	Fabaceae	1	1
14)	lamiaceae	1	1
15)	Linaceae	1	1
16)	Loranthaceae	1	1
17)	Myrtaceae	1	1
18)	Plantaginaceae	1	1
19)	Poceacace	1	1

Mode of Preparation

The details of several plant preparation techniques, including the fresh fruit plants' composition and environmental conditions, are provided. Seed and dried stem preparation techniques, such as crushing, powered, and pressing, are also given in the table. The type of preparation that was most widely used was crush, which accounts for a higher percentage of next powered Making and sequencing.

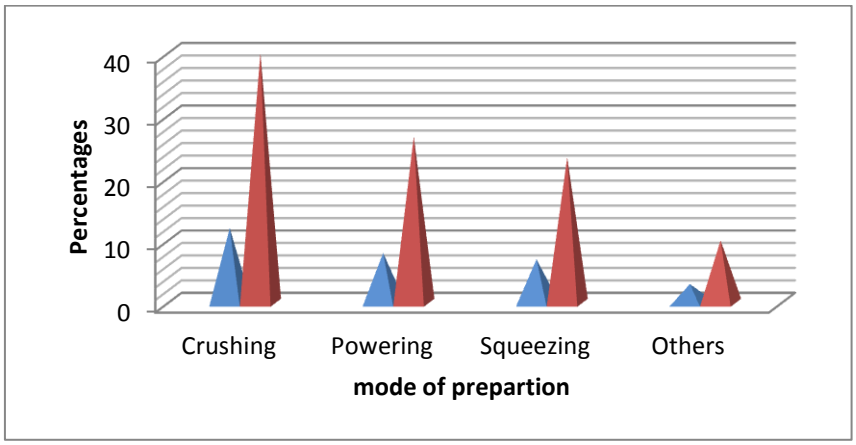

Figure 1. Mode of preparation of traditional medicinal plants.

Parts of plants used for medicinal treat of different human illness

According to table 3, several plant components were used to treat human illnesses. They were communally prioritized, especially with reference to particular plant families. Therefore, among traditional healers, leaves were most frequently employed as a form of medicine (33.33), followed by dried seeds (26.7%), dried steam (6.66), dried roots (6.61), and respecting while the last one was gross (leaves and roots, terminal), which accounts for 3-5, respectively.

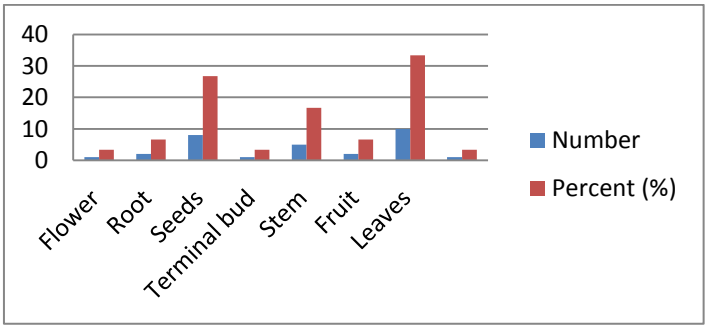

Figure 2. Plant part utilize for medicinal plant remedying percent.

The ease of preparation and the chemical components of leaves for the treatment of ailments may be the reasons why people prefer them to other plant parts. In contrast to leaves, remedy preparations that involve the roots, rhizomes, bulbs, barks, stems, or entire plants have effects that constitute a long-term threat to the survival of a single plant. As leaves were the most commonly collected plant part in the research area and have little impact on the mother plant's survival,

there is no concern about the high threat of medicinal plants owing to the usage of plant parts for medicine. This finding is in line with the results of other ethnomedicinal studies Endalew Amenu (2007); Etana Tolasa (2007); Haile Yineger and Delenasaw Yewhalaw (2007) who reported that leaves were the most cited plant parts used in remedy preparations.

Mode of Administration

The local community prepares items made from traditional medicinal herbs in a variety of ways for administration. The oral, dermal, nasal, and ocular modes of administration are the main ones in the studied region. Oral administration, followed by dermal application, is the most common method of administration in the research area. Similar findings showed that oral administration predominated over alternative modes of administration, according to Ermias Lulekal (2005) and others.

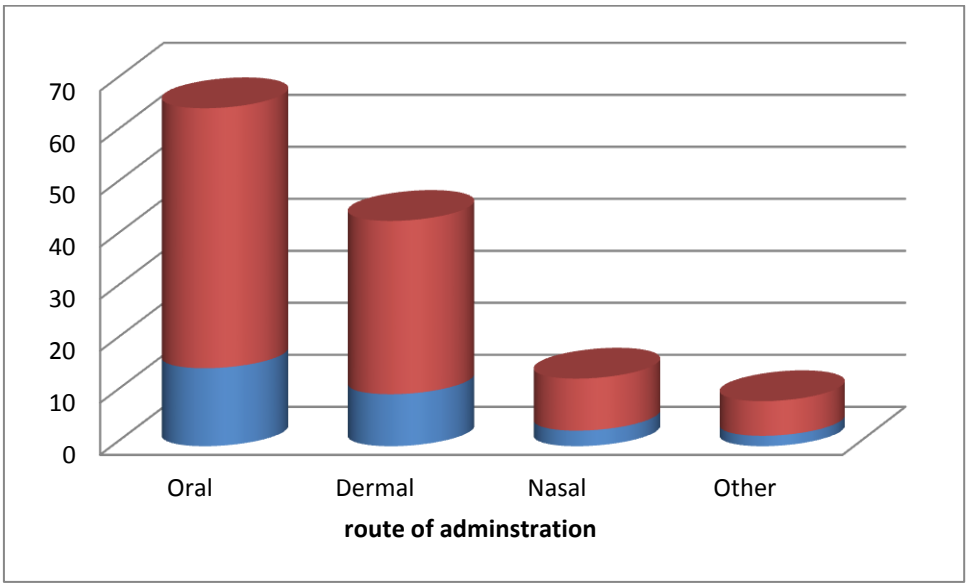

Figure 3. Route of administration of medicinal plants that used for human ailments.

Since the method of utilization is not fixed, traditional therapeutic plants have certain negative effects, with the exception of vomiting and floating. Consequently, it requires traditional healers to receive instruction in providing basic healthcare (Giday 2009). As most medicinal plants are wild and cultivated for their roots to prepare remedies, traditional healers should be encouraged to share their knowledge with interested people in their communities. The healer in insulations with governmental offices should take care not to irradiate the medicinal plants to ensure sustainability by establishing, nurse is for commonly available traditional plants so as to avoid carb devastation as it is associated (Giddy, 2009).

Correlation measurements like area, cloche, where by being situated for farming, growing trees, and falling will aid in reducing environmental degradation and the effort to create a global community (Endalew, 2007). About 30 therapeutic plants were found in the current investigation. Compared to gardens, most individuals pick more therapeutic plants from the wild. There is an urgent need to conserve such resources in order to maximize their usage in the primary healthcare system. The main traditional medicinal plants were all reported to treat more than 10 human illnesses. According to certain surveys, the majority of Ethiopia's traditional medicinal herbs are gathered from the wild.

Some significant information regarding knowledge of indigenous plants was also reported in the survey conducted by Alcoun (1991), and this is slower with the current study. Only verbal transmissions of this knowledge were made from one generation to the next, and indigenous knowledge evolves with both time and species. Ethinobotanical knowledge of plants involves customary methods for gathering raw materials and preparing indigenous knowledge of plant remedies in various countries, such as Ethiopia. These methods are passed down from one generation to the next in a variety of ways with the help of seriate and verbatitrans females, who are able to tolerate the indigenous knowledge to ethnic medicinal knowledge at each point of transfer (Amare, 1976).

As a result, thorough documentation of such use and full knowledge of the dawn days through ethnobotanical research is required. Traditional healers have been proven to play a crucial part in the primary healthcare system by helping the local populace who lack access to contemporary medical care yet are unafraid of its high cost. According to Walter (1987), between 65 and 85 percent of the population in every developing nation relies on traditional medicinal plants because there aren't enough hospitals and health care facilities there. Additionally, since traditional medicinal plants are more effective for rural populations than modern medicines, they require special consideration and support (Abbiw, 1996). Therefore, this is partially attributable to the fact that the majority of locals cannot afford or rely on modern medical services because of their skyrocketing costs and lack of transportation to and from medical facilities.

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