

INDIGENOUS ZOOTHERAPEUTIC HEALING PRACTICES: AMONG THE MACCA OROMO, SOUTHWESTERN ETHIOPIA

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ABSTRACT

ANIMALS HAVE BEEN USED AS REMEDIAL CAPITAL FOR HEALING A NUMEROUS OF ILLNESSES AND DISEASES IN NEARLY EVERY HUMAN CULTURE. FIELD WORKS WERE CONDUCTED FROM JANUARY TO JUNE 2016 INCLUDING A FIELD WORK AND VISITS TO FOLK HEALERS OR PRACTITIONERS AND KNOWLEDGEABLE RESPONDENTS. A TOTAL OF 21 KEY INFORMANTS WITHIN THE AGE GROUP OF 46 TO 82 WERE INTERVIEWED, OUT OF WHICH 4 FOLK HEALERS AND (2) TWO OF THEM ARE CERTIFIED PRACTITIONERS AT NATIONAL LEVEL WHILE THE OTHER FIFTEEN (15) INFORMANTS ARE LOCAL ELDERS LOCALLY CALLED AS 'JAARSA BIYYA' AND 'ABBOOTII GADAA', OUT OF WHICH 3 ARE FEMALES. INDEED, THIS FOLKLORIC STUDY DOCUMENTED RESOURCES OF MEDICINAL ANIMALS AND THEIR ROLE IN PRIMARY HEALTH CARE SYSTEM, HOW THEY ARE CONSERVED, AND THREATS AMONG THE MACCAA OROMO IN SOUTH-WESTERN ETHIOPIA. IN GENERAL, ABOUT NINETEEN (19) SPECIES OF FOLK MEDICINAL ANIMALS (15 WILD AND 4 DOMESTIC ANIMALS WHERE 11 ARE MAMMALS, 3 BIRDS AND 5 REPTILES) ARE DOCUMENTED ALONG WITH MODE OF PREPARATION AND PROCEDURES. THE FINDS OUT THAT FOLK MEDICINAL ANIMALS USED BY THE MACCAA OROMO ARE UNDER SERIOUS RISK DUE TO EXTERNAL AND INTERNAL INFLUENCES RELATED TO DEFORESTATION, RELIGIOUS VIEWS AND THE EXPANSION OF BIO-MEDICINES. THIS SHOWS THAT AN ATTENTION SHOULD BE GIVEN TO THE PRESERVATION OF THESE MEDICINAL ANIMALS AND FOLK HEALERS SHOULD GET LEGAL RECOGNITION BY THE GOVERNMENT.

KEYWORDS: BIO-MEDICINE, FOLKLORIC, FOLK-MEDICINAL ANIMALS, FOLK HEALERS, MACCAA OROMO.

INTRODUCTION

The concept traditional, or indigenous knowledge, covers wide ranging subject areas from art to agriculture, as well as medicinal uses of plants and traditional systems of medical diagnosis.

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Traditional knowledge can be found in a wide variety of contexts, including: agricultural knowledge; scientific knowledge; technical knowledge; ecological knowledge; medicinal knowledge, including related medicines and remedies; and biodiversity-related knowledge³. Human interaction with nature, especially with other animals is one of the oldest cultural assets in human history. Through this interaction, humans have been utilizing animals for healing practices incorporated with different belief systems and indigenous practices. Animals and their product are the main sources of folk medicine⁴. Animal-derived products have represented an important part of the dermatological therapeutic arsenal in different cultures through the ages. This is known as zoo therapy⁵ and even in the current world, it still plays an essential role in health care.

Mind you! Not all animals are useful for medicinal purpose. In most cases smaller animals are preferable for the same purpose⁶. Larger animals are mainly utilized for consumption^{7;8;9}. As the World Health Organization (2003), asserts folk medicines are incorporating special plants, fewer animals and certain mineral along with the belief system for healing purposes which includes treating and preventing illnesses. However, from a Eurocentric point of view, this knowledge has been labeled as traditional, cultural, irrational and unscientific. Despite this, health care demand of a large section of rural and urban population of developing countries is satisfied by indigenous healing practices¹⁰.

The history of folk medicine is as old as humanity. It has been there for millennia, and would be the same as long as humanity exists. Various literatures revealed that even in the old civilizations such as the Syrians, the Babylonians and Hebrews people used various homemade medicines to cure from illnesses and treat wounded warriors¹¹. Furthermore, today in the so called modernized 21st century where science is dominating the knowledge system of the world, about 75 – 90% of the population mainly in the middle and lower income countries relies on folk-medicine for treatment¹². For instance, Ethiopia's about 60% medicinal resources are from

³ Abbott R. (2014). *Documenting Traditional Medical Knowledge world intellectual property organization*.

⁴ Costa-Neto em and marques jgw. (2000). *Faunistic resources used as medicines by artisanal fishermen from Siribinha Beach, State of Bahia, Brazil*. J Ethnobiol 20: 93-109.

⁵ Alves J and Rosa IL (2005). *Why study the use of animal products in traditional medicine?* J Ethnobiol 1 (5)1-5

⁶ Kokwaro JO (1993). *Medicinal plants in East Africa. East Africa Literature Bureau, Nairobi, Kenya*

⁷ Narnag, S. & Mitra, M. (1998). *Indigenous knowledge and the treatment of disease in Abujmarh. In Contemporary studies in human ecology*. New Delhi, India: Kamla-Raj Enterprises.

⁸ PIERONI A, GIUSTI ME AND GRAZZINI A. (2002). Animal remedies in the folk medicinal practices of the Lucca and Pistoia Provinces, Central Italy. In: FLEURENTIN J ET AL. (Eds), *Des sources du savoir aux médicaments du future/from the sources of knowledge to the medicines of the future*, Paris

⁹ Adeola, M.O. (1992). *Importance of wild Animals and their parts in the culture, religious festivals, and traditional medicine of Nigeria*. Environ. Conserv. 19 (2): 125-134. Sci.culture, religious festivals, and traditional medicine, of Nigeria. Environ. Conserv. 19: 125-134.

¹⁰ WHO. (2003). *National Policy on Traditional Medicine and regulation of Herbal medicines*, Report of a WHO Global Survey, Geneva, Switzerland May 2005.

¹¹ Etana, T. (2007). *Use and Conservation of Traditional Medicinal Plants by Indigenous People in GimbiWoreda, Western Wellega*. M.Sc. Thesis. Addis Ababa, Ethiopia.

¹² Behailu, E. (2010). *Ethno botanical Study of Traditional Medicinal Plants of GomaWereda, Jima Zone of Oromia Region, Ethiopia*. M.Sc. Thesis Addis Ababa University.

plants¹³. And, 80% of Ethiopia's people rely on folk medicinal plants to prevent and cure various health problems¹⁴.

Folk healers are exclusive from one another in terms of their skills and areas of healing specialization. Thus, all folk healers don't provide similar services. For instance, some are expertise in healing broken bones called "wogessa," while traditional bonesetters birth attendants –'yelimdawalaj'; Herbalists, Prophets/faith healers- 'deberta', and 'tenquay' (witch doctors), and spiritual healers such as 'weqaby' and 'kalicha'¹⁵.

Similarly, the Oromo has been protecting their health, their cattle's using traditional medicines made from gifts of natural such as plants, an animal's body and minerals. Only few people are endowed with healing wisdoms, and these people are known as *warra cirreessa* or *ogeessa*¹⁶. There is cultural norm and values on how to manage these practices among the Oromo. For instance, it is forbidden to treat someone beyond the domain of the Oromo's culture, value, tradition and ideology. Hence, folk medicine is merely healing illnesses and protecting societal health. Rather, it is also a means by which societal norm, value, culture, philosophy and wisdom transfer through generations^{17,18}. However, the development of this indigenous knowledge is jeopardized due to the expansion of bio-medicine, deforestation and western religious view. Besides, social and economic problems of practitioners this practice and wisdom is on the way to extinction¹⁹.

A number of scholars have conducted various studies regarding indigenous health care system among the *Oromiya*. Indigenous people have developed their own folk medicines employing nature and its inhabitants such as from birds, animals, minerals and plant species. The workability of these medicines is tested, proved and experimented; and, supported by the philosophy, culture, wisdom, art, belief system, practice, indigenous knowledge of a given community²⁰. Similarly, the Oromo believes that these elements highly determine the curative power of folk medicine in general and folk-medicinal animals in particular.

In fact, very few studies have been undertaken to the Oromo folk healing practices using animals. For instance, asserts of the folk-medicine is deeply rooted with a faith system of a

¹³ Bannerman, R. H. (1983). The role of traditional medicine in primary health care. In *Traditional Medicine and Health Care Coverage*. R. H. Bannerman, J. Burton, and C. Wen-Chieh, eds. Pp. 318-327. Geneva: World Health Organization.

¹⁴ Dawit, A and Ahadu A. (1993). Medicinal plants and Enigmatic Health practices of Northern Ethiopia. B.S. P.E. August 1993.

¹⁵ Kebede Deribe, Alemayehu Amberbir, Binyam Getachew and Yunis Mussema, A historical overview of traditional medicine practices and policy in Ethiopia. *Ethio. J. Health Dev.* 20(2):127-134, 2006.

¹⁶ Holf W. Traditional Health Practitioners as Primary Health Care Workers. *Trop Doc.* 1997;1 (27supp):52-55.

¹⁷ Nigussie, A. (2010). *Anethnobotanical study of medicinal plants in Farta Wereda, South Gonder zone of Amhara region, Ethiopia*. Addis Ababa

¹⁸ Etana, T. (2007). *Use and Conservation of Traditional Medicinal Plants by Indigenous People in Gimbi Woreda, Western Wellega*. M.Sc. Thesis. Addis Ababa, Ethiopia.

¹⁹ Press, I. (1978). *Urban folk medicine: A functional overview*. *American Anthropologist*, 80, 71-84.

²⁰ Cotton, C. M. (1996). *Ethno botany: Principles and Applications*. John Wiley and Sons Ltd. Chichester, England, pp. 347.

particular community²¹. Besides, a study conducted by Gidey²², on traditional medicinal animals used by the people of Qafta-Humera District, Northern Ethiopia, and found out that people, especially from the urban areas and the educated people have a bad perception on the utilization of traditional medicines. Furthermore, Assegid²³ conducted an Ethno botanical Study of Wild Medicinal Trees and Shrubs in Benna Tsemay District, Southern Ethiopia with the aim of identifying wild medicinal trees and shrubs. However, these entire studies lack folkloric element, did not address the changes it has undergone and the factors that donated to its continuity among of Indigenous medicinal knowledge among the *Maccaa* the Oromo of with particular reference to *Aanaas Mattu* of *Iluu Abbaa Bora* Zone, southwestern Ethiopia.

MATERIALS AND METHODS

This descriptive study employed qualitative research approach to describe folk-medicinal animals, and their utilization among the *Maccaa* Oromo of *Iluu Abbaa Boor*, southwestern Ethiopia. To this end, in an in-depth with 9 key informants consists of knowledgeable local elders (3), cultural experts (2) and folk healers (4) was conducted. Besides, two FGDs with 12 participants: consisted six (4) folk healers, those who treat human beings and livestock's and the second group consisted of eight (8) local elders -male 5 and female 3, were conducted with local elders and folk practitioners. Furthermore, non-participant observation was made to some selected sites where folk healers reside in the study area to enable the researchers understand the issues not fully addressed through other tools of data collection. Secondary data were also used as part of the literature review of books, journal articles and internet sources for further analyses of the basic concepts and theories involved in the study.

The sampling technique chosen were purposive sampling because it was to capture the necessary and detail information and the views of the people in the study area. Of the Oromo communities, only one, i.e. *Maccaa* is purposely selected for the case analysis, as this site is among the most forestry area in Ethiopia. Accordingly, *Mattuu* district was selected for the sake of the widely functioning of indigenous Oromo folk medicinal animals. In view of that, a snowball (chain referral) sampling method was used to get participants or key informants of the study. The primary data collected through interview, non-participant field observation and FGDs were analyzed qualitatively.

DISCRIPTION OF THE STUDY AREA

According to the Land and Environmental protection sectors, the absolute (astronomical) location of the district is 35°20'31'' East Longitude and 8°23' 5'' North Latitude (Mattuu Finance & Economic Office, 2014). According to data obtained from the Mattuu district finance and Economic, Mattuu is one of the 24 rural districts of the Ilu Abba Bora Zone, Southwestern

²¹ Workineh, K. (2006). *Traditional Oromo attitudes towards the environment: An Argument for environmentally sound development*. Addis Ababa.

²² Gidey Y. and Samuel .Z. Ethno botanical Study of Traditional Medicinal plants in Gindeberet district, Western Ethiopia. Proceedings of the 1st International Technology, Education and Environment Conference.61-67. African Society for Scientific Research (ASSR), 2011.

²³ Assegid Assefa and Tesfaye Abebe, *Ethno botanical Study of Wild Medicinal Trees and Shrubs in BennaTsemay District, Southern Ethiopia*.J. Sci. Dev. 2(1).17-33, 2014.

Ethiopia. The district has twenty nine (29) *Gandaa* (smallest administrative unit in Ethiopia) out of which (3) are town's *gandaa*. *Mattuu* is neighbored by *anaa Bachoo* from east, *anaa Bureen* from the west, *anaa Aallee* from south and *Biloo Nophaan* from North. The district is found at a distance of six hundred kilometers (600 KM) away south-west of the capital city of Ethiopia, Addis Ababa (*Finfinnee*).

The name *Mattuu* was originally derived from the name of Oromo clan called *Mattu*. According to oral history of the local community *Mattu* clan has lived in *Hurumu* before they occupied the land around *laga Soor* River which known as *Damoosoo*. Most of the time they call themselves as *Mattu Maccaa*. During that time *Mattu* clan was expanded to the current land called *Mattuu* district. Even the name of this leg was coming from the person's name from *Mattu* clan who called *Soorii Dinnichee*. The district was recognized as a district in 1962 E.C in the time in power of the king Haile Sillasie I. During that time, the *Mattuu* district was very wide includes *Bilo Nopha* and *Bacho* districts. But, currently these two districts are broken down from the district at present time and established independently.

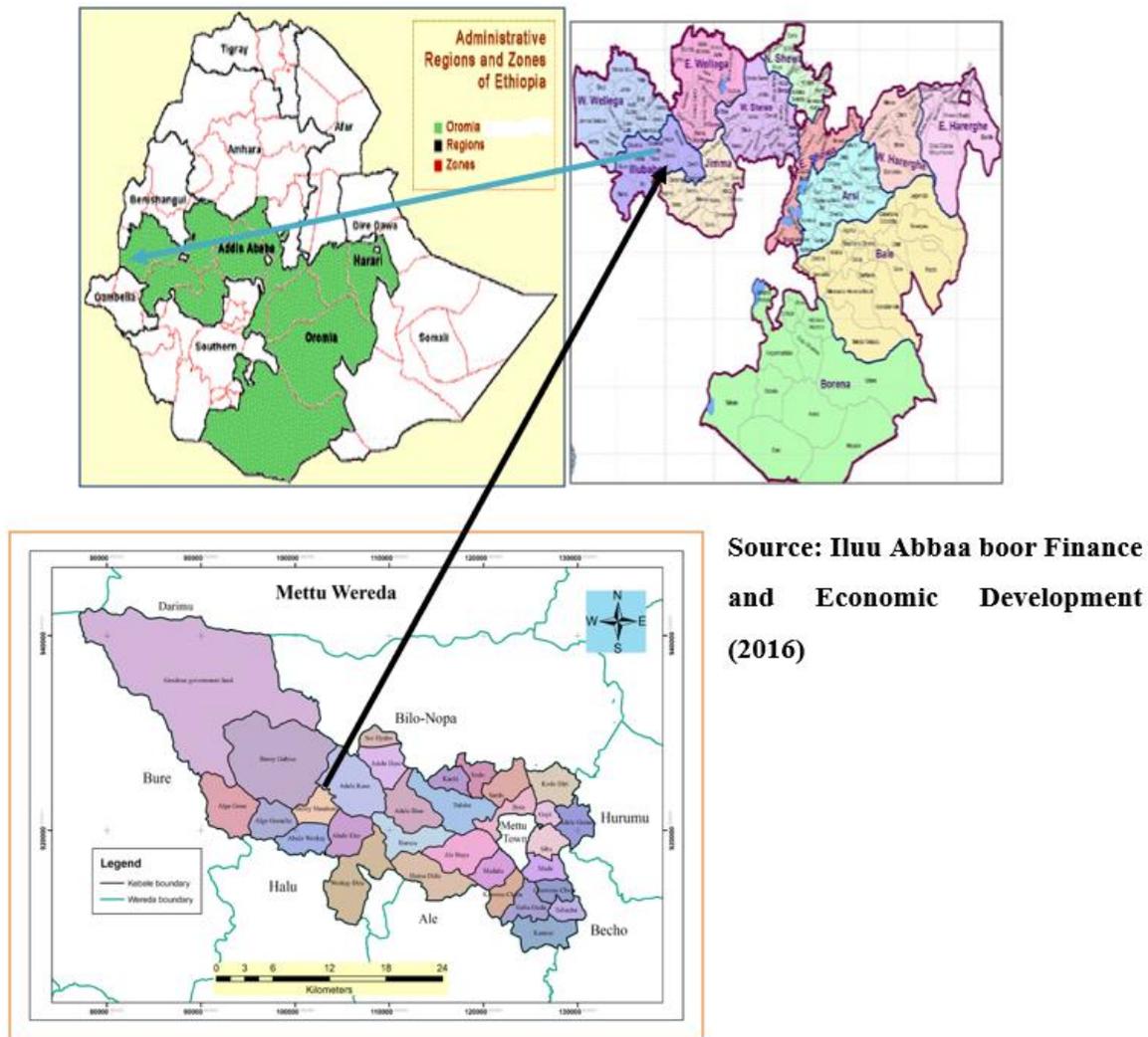
Based on the census of (2007) the total population of the *Mattu* district was estimated at 75,679 (out of 37,846 male and 37,833 female (CSA, 2007). Besides, the total land area of *Mattu* District was about sixty eight thousand seven hundred twenty three hectares (68,723) hectares.

The climate of the *Mattuu* district is subtropical and has almost all year round rainfall with average annual rainfall of 1,219.95 mm, and also the Annual Average Temperature of 19.45°C. The climatic condition of the district (83%) is tropical and (17%) desert. In the district, different types of crops grow, and the major ones include cereals like teff, wheat, barley, sorghum, maize and millet, Pulses (faba beans, chickpeas, haricot beans, peas) and oil seeds (Niger seeds, rape seeds, and safflower ground). Beside these, coffee is cultivated as a principal cash crop. In addition, *Mattu* district is also known by animal rearing where the most widely reared animals include cattle, sheep, goats, mules, horses, donkey and poultry. Also, the major export items supplied to the central market is coffee, skin of sheep and goat and hides²⁴. *Mattu* district is also rich with various man-made and natural ecotourism sites. For instance *Tulluu Gurraachoo* (Gurracho Mountain), *Qabar Genee*, *Qarsaa Googillaa Dirree Qabsoo farra Gita Bittaa Nafxanyaa* and *Kaabii Fatansaa Iluu* are a well-known site.

Maccaa Oromo of *Mattu* district have a culture in which they reflect their identity, way of managing conflicts. For instance, *Jarsa biyyaa* and *gumaa* blood payment are the most common traditional mechanisms of conflict resolution in the study area. In addition, *Macca* Oromo's have been practicing the following marriage customs like *kadhimmannaa*, *hawwii*, *Aseennaa* and *butii*.

²⁴ *Mattuu* Finance & Economic Office, 2016.

Map1. Geographical location of the study area



RESULTS AND DISCUSSION

The *Maccaa* Oromo's world view of "Health" and "Folk-medicine"

This point needs concern to understand the *Maccaa* Oromo's perception of health and its folk-medicine. In *Maccaa* Oromo world view the concept health is very primary for human life and it forms the basis for the development of the nation. The concept health has a special position in their lives. They also believe that there is no wealth than health. For this reason they call the term health all times in their communication. Indeed, the contents of their *mammaaksaa* proverbs, *nagaha walgaafachuu* greeting, *jechamoota* saying, *faaruu* songs, *hiibboowwan* riddles, *baacoowwan* jocks, *sirboota* music's and *eebba* blessing are immersed with the concept of health. The equivalent term of health in afaan Oromo is *fayyaa*. Accordingly, they highly interconnect the concept health with many live elements. '*Fayyaan qabeenya*' Health is wealth. There is nothing in life that is more valuable than good health. Without health there is no *gammachuu* happiness,

no *nageenyaa* peace and no *milkaa'inaa* success. A person with bad health cannot enjoy the pleasure of being wealthy. According to our key informants health is more valuable than money and knowledge. Money cannot purchase health and happiness in human life. While the healthy person remains in a state of bliss and happiness in his/her life. Moreover, a healthy person sings the glory of his /her life and works hard to realize his/her *abjuu* dreams. He never complains. He is always happy and cheerful²⁵.

Since, the concept health and medicine never had been standing alone; the *Maccaa* Oromo has their indigenous conception for the medicine. In their local language the term medicine is called *dawwaa* or *qorichaa* with great respect ion. *Dawwaa aadaa* Folk medicine and folk belief can provide resources and be helpful Mechanism on how to treat for the health problems. In the absence of diseases or health problem talking about the folk-medicine is unexpected. In Oromo in general and *Maccaa* Oromo in particular the solution searched for the problems at the time people experienced it. Everything in Oromo is the results of long experience. So that, for the outbreak of the disease Oromo institution of health starts searching *qorichaa* medicine to treat or overcome the health problem. The experiment and searching solution can take long time because the activities are great and a play with a surrounding environment²⁶. In general, the *Macca* Oromo's conception of *Fayyaa* 'health and *Qoricha aadaa* folk medicine is in-depth and highly connected to their day to day life.

Folk Medicinal Animals and Types of Diseases to be treated in the Study Areas

In Oromo culture every disease has their own medicine and there are experts for these illnesses. Those *ogeessa/ beekaa qorichaa* experts prepare medication from animals, plants and medicinal mineral products. Thus folk medicinal animals have been cover large scale in healing human and livestock disease. In nature the land in *aanaa Mattuu* of *Maccaa* Oromo is covered by forest and different biodiversity. In natural forest of *Maccaa* Oromo there are large number of wild animals (mammals, birds, reptiles and the like). For examples, Bat, Hyena, Porcupine, Rabbit, Columbus monkey, Squirrel, Boar , Hippopotamus, Bison, Dikdik, Bushbuck, Monkey, Eagle, Francolin Crow and the like. According to our informants, many of these wild animals are used as the source of folk medicine. Their parts used to cure different illness and sickness. The *Maccaa* Oromo used different animals and their parts for curing different livestock and his families 'diseases. Those folk-medicinal animals may include insects up to huge animals from both domestic and wild.

The folk knowledge and practice of certain medicinal animals that have remedial and painkilling effects was transmitted from one generation to another and it is the outcome of bold experimentation through trial and error method over hundreds of years. Zootherapy (animal based medicine) is the cure of human ailments with remedies made from animals and their products. To this end, in this study, about 32 folk medicinal animal species was classified across different types, based on the part of the animals used in medical function, have been documented with their local and scientific names. In addition, among these folk-medicinal animals some are used to treat livestock in study area²⁷.

²⁵ Interview with Sh/Nasir Muhammed,2016,Mattuu district

²⁶Interview with Hailu Legese,2016,Mattuu district

²⁷Interview with Sh/Nasir Muhammed,2016,Mattuu district

Even though folk medicinal plants formulate up the bulk of the components used in most folk medicines and indigenous medical scheme worldwide, total animals, animal parts, and animal-derived products (e.g., coat, blood, waste products, urine, hair, horn, bone, fat, etc.) are used as elements of the folk medicine. The use of organs or parts of folk medicinal animals as folk remedies is the foundation of several indigenous healing practices in *Maccaa* Oromo. According to data generated from both interview and focus group discussions many animal species are identified as folk medicine among the *Maccaa* Oromo. These can be classified into mammals, reptiles, birds and the like. To make it clearer, let us see the concepts of animal parts and products, disease under treatments, causes of disease, mode of preparation and treatment and *mechanism* of dose control one by one with justification as follows.

A) *Simbira Halkanii* (Bat): -In *Maccaa* Oromo of study area the *simbira halkanii* is used as folk medicine. Thus, it used for the treatment of *dhukkuba shimbiraa* (folk illness). This disease is very serious and caused by *simbira halkanii* or bat, which fly during night time and urinate on human being according to their view. Some informants have been told that this night bird has also evil shadow (*gadidduu hamtuu*) which can cause this illness and affects the health. Furthermore bat is classified under the mammals scientifically.

Cause: - carried by bats

Symptoms- the indicator of this illness is eating the patient's body, especially face; and the blacken color of his/her skin, refusal to eat or drink and sometimes blood in feces or urine.

Parts and products of animals: -The whole parts.

Mode of preparation and treatment: the mode of preparation of this folk medicine is begun by hunting the bat and kill. After killing this medicinal animals and slighting they putting in the sun in order to dry. Then after crush and change it into a powder and mixing with clean water. Finally, sleeping on the back and take one drop in both nose for three or five every morning. In addition to that, ointment is applied to affected areas such as rashes or sprains.

Treatment materials: - Water and powder of the bat body.

Mechanism of Dose control: - Over and under dose will affect the patient who catches by this illness. The most commonly used implements for measuring quantities of this folk medicine are spoons, bottles, kettles, pans, clay pots, hand palms and finger pinches. For that reason the *Macca* Oromo folk healers have developed the best mechanism to control the dosage. First, they mix the powder into the clean water in measuring by sugar spoon. In addition the patient has to take a single drop by using feather of the hen or any other birds.

B) *Saree* (Dog): - The disease which caused by the bitten by the dog is among the serious illness in the study area. This disease will affect both livestock and human being. According to practitioners of *Macca* Oromo if the penitent couldn't get the treatment in forty (40) days it will kill the patient automatically.

Cause: - bitten by abnormal dog /injuries

Symptoms: - the Symptoms of rabies (*dhukkuba saree marattee*) are series headache, maximizing body temperature, minimizing petit and the like. If it is livestock Lack of normal cud chewing (rumination), rough coat, any abnormal swellings or lumps on the body, the animal may be over-excited, skin or udder, eyes red, dull in appearance or running, rapid drop in milk yield, dry muzzle and nostrils, loud, rapid breathing or coughing, lameness, stiffness and reluctance to move.

Parts and products of animals: - Folk healing practices make use of parts and products of animals as elements: egg for rabies, they use liver of the *saree* and sometimes burn the whole body parts.

Mode of preparation and treatment: - After the dog bites someone else it recommended killing and giving it fresh liver for the person who affected by rabies. If it affects the livestock they burn the whole bodies and aching for them. Since rituals are important in the interaction between *Macca* Oromo livestock keepers and their animals. They also use spiritual forces which may be invoked with prayers during treatment.

Treatment materials: - liver

Mechanism of Dose control: - According to our informant(s), to control the dose of this folk-medicine, it has to be measured with small coffee cup and given three times a day for three to five days and it usually started during early morning.

C) *Waraabessa (hyena):*-As focus group discussion reveals a folk medicine, which we got from *Waraabessaa* Hyena is used to heal spiritual illness. According to their world view, there is no solution for such complex disease except spiritual healing practices. As folk healers told us this illness comes from freak or frustration from this evil eye is well known in their community. This is known as *ija budaa* (evil eye). The disease will affect both human being and livestock. In addition to that the bone of this animal is preparations to invoke witches.

Cause: - Evil spirit

Symptoms: - the symptoms of this illness are complex and changeable. Thus; it can cause physical symptoms that are not related to a disease, such as weakness, eye infections, upset stomach, and fever and vomiting. This clearly indicates that there are certain signs that can be seen, according to which the affliction of an evil eye is detected. Knowledgeable folk healers dealt with this matter and clarified it.

Parts and products of animals: - According to the society believes, sometimes they calls the jinni (evil). In addition the eyelash of *waraabessa* is drug for someone who sleeps a lot .Its use is after shading it then putting in to neck when his teach worn on horse and mule and also donkey, wild animals prohibit to it the patient.

Mode of preparation and treatment: - first folk healers have hunted the *Waraabessa* for its coat and eyelash which used as a folk medicine to cure evil spirit. Then burn in fire and aching to the patient.

Treatment materials: - Coat, fair & eyelash

Mechanism of Dose control: - According to our informant(s), the dose of this medicine measured with minimizing the amount of eyelash and its coat simple.

D) *Hantuuta (Rat):* - The waste product of this folk medicinal animal is used to treat *moluu* or hair losing in Oromo of the study area. A rodent that resembles a large *hantutaa* typically has a pointed snout and a long tail. Some kinds have become cosmopolitan and are sometimes responsible for transmitting diseases and serve as folk medicine in *Macca* Oromo. With this kind of hair loss, you may end up with bald spots if you are a man. If you are a woman, you may find that the hair on the top of your head is slowly thinning.

Cause: - Family history. In most cases, hair loss is inherited, which means it's passed down from one or both of your parents. This is called male-pattern or female-pattern hair loss. According to

their indigenous knowledge system you grow less hair as you get older. Hair also gets thinner and tends to break more easily as you age. Poor diet, especially not getting enough protein or iron.

Symptoms: - The symptoms will depend on what kind of hair loss you have. If your hair is thinning, it happens slowly over time, so you may not notice the hairs falling out. If your hair is shedding, then clumps of hair fall out. You may lose hair all over your scalp, which is called general hair loss. Or you may lose hair only in one area, which is called focal hair loss. With inherited hair loss, men usually get bald spots around the forehead or on the top of the head, while women have some thinning all over the scalp, but mostly on the top of the head. Since your hair has a lot to do with your appearance, losing it may cause you to have lower self-esteem if you don't like how you look. This is especially true in women and teens.

Parts and products of animals: - Waste product of rat.

Mode of preparation and treatment: - First the folk healer has to collect the waste product of this folk medicinal animal. Then grinding it and mixing with butter. Finally, painting a person who affected by this illness continuously for about one week in the form of a cream.

Treatment materials: - waste product & butter

E) Dhaddee: - As our respondent told us, the meat (fat) of this folk medicinal animal is remedied for the illness of Spinal cord. This disease will cause when someone peak up heavy materials. In addition, the fat flesh of *Dhaddee* is medicine for series wound.

Cause: - The cause of this disease is caring heavy load and sometimes cold

Symptoms: - the basic sign of this disease is serious pain of spinal cord, difficult breathing, sweating and weakness etc.

Parts and products of animals: - flesh of *Dhaddee*

Mode of preparation and treatment: - To keep human healthy, this traditional healing practices have been applied for centuries and have been passed down orally from generation to generation. Thus after, hunting and slighting this wild animal they cook its flesh for an hour to make soup. A distillation is made in the same way as soup. Before any step boiling water is poured into a clean container in which fat flesh or chop of this animal part have been put. Then the container is covered for 10-20 minutes approximately until the medicinal components have been extracted. The water is filtered and given to the patient, cooled or warm.

Treatment materials: - water, flesh, bush and container/clay pot

Mechanism of Dose control: - According to folk healer(s), the dose of this medicine measured with traditional cup or *bushii* based upon the patient's age and status.

F) Illettii (Rabbit): - The hair of the rabbit is a common folk medicinal animal in the study area. *Illetti* Rabbit is the small and simple body mass wild animal with long ear. According to our informant(s) the *rifeensaa* hair of *Illettii* Rabbit is effective folk medicine to cure series wound which caused by fire risk.

Cause: - fire accident

Symptoms: - Any of the following signs may be the result of fair wound: wound pain, excitement, depression and etc.

Parts and products of animals: -The hair of *Illetti*

Mode of preparation and treatment: - first of all hunting the *Illettii* and take its hair. Then washing the wounded bodies and put the hair on it. By doing this it must keep it on until the wound

become dry and cured. According to data collected from FGD the curative power of this folk medicine is high. In addition the *Macca* Oromo used the ear of *illettii* as medicine and tie on the neck of horse to speed up like a Rabbit²⁸.

G) *Culullee* (Eagle): -this folk medicinal animal is a well-known in indigenous healing practices. The common name for many larger animals of prey of the family; *Culullee* belongs to several groups of species that are not necessarily closely related to each other. According to *Macca* Oromo *Culullee* Eagle taken as the sign of *ariifannaa* fastness, *cimina* strength, *jajabina* courage, *ogummaa* wisdom, eager sight, *hafuurummaa* explanation of Spirit, *yaala* healing, *uume* creation, *beekumsa* knowledge of magic, *dandeettii dhoksa dhugaa adduunyaa hafuurawwaa arguu* ability to see hidden spiritual truths, rising above the material to see the spiritual, ability to see the overall pattern/big picture, connection to spirit guides and teachers and higher truths, great power and balance, dignity with grace, intuitive and creative spirit, respect for the boundaries of the regions, grace achieved through knowledge and hard work²⁹.

Cause: - From Fragrant or offensive odor/ inborn

Symptoms: - Lungs are also known as the source of life, for rejecting the breath steams and improvement of animal spirit. The basic Symptoms of this illness are occurring in one of the above mentioned organs which results in asthma *Ukaa*; or the infection occurs in the swelled organ and the produced pus spreads over respiratory system, it demonstrates as asthma; the excitement of causative agent leads to the excitement of the disease, when the tissue is full of causative agent.

Parts and products of animals: - An egg

Mode of preparation and treatment: - In traditional healing practice or system, remedies are prepared in several rather standardized ways which usually vary based upon the animals utilized, and sometimes, what condition is being treated. Accordingly, the preparation of this folk medicine is done by mixing the inner part of the *Culullee* egg with pure water and given to the patient by *bushii* or traditional cup³⁰.

H) *Guchii*: - *Guchii* Ostrich is the largest bird which cannot fly like other bird species. Though they cannot fly, *Guchii* are fleeting, strong runners. An egg of this folk medicinal animal is used to heal or cure the series *qakkeeAsma*. Asthma is a chronic (long-term) lung disease that inflames and narrows the airways. Asthma affects people of all ages, but it most often starts during childhood when it caused by inborn. And it is an incurable illness. However, with good treatment and management there is no reason why a person with asthma cannot live a normal and active life).

Cause: - The caused by inhaling From Fragrant or offensive odor, dust or other potentially harmful substances while on the job.

Symptoms: - The common signs of *Asma* are Coughing, especially at night, during work/exercise or when laughing, difficulty breathing, chest tightness, shortness of breath, wheezing (a whistling or squeaky sound in your chest when breathing, especially when exhaling).

Parts and products of animals: -an egg

²⁸ Interview with Aadde Momina Jemal ,2016, Mattuu District

²⁹ Interview with ObboGetaecho Gelata,2016,Mattuu district

³⁰ Interview with Aadde Minalech Asefa 2016,Mattuu district

Mode of preparation and treatment: - In modern medical science still there is no cure for asthma, but once it is properly diagnosed and a treatment plan is in place the patient will be able to manage his/her condition, and his/her quality of life will improve. But the folk healers have a solution for this disease; that is the egg of *Guchii*. The mode of the preparation and treatment is mixing the internal part of the egg with butter and it's given to the patient.

I) *Re'ee* (Goat): - The *Re'ee* is a powerful animal totem and closely related to the sheep, in particular the, but his symbolism is different. Unlike their sheep and ram siblings, *Re'ee* isn't particularly communal, often grazing alone and spreading themselves far apart. This is not to say *Re'ee* are anti-social, symbolically speaking - but it does evoke a sense of independence. When the *Re'ee* ambles onto your path, it might be a signal to contemplate your power as an individual. The milk of *Re'ee* remedies for eye illness and inner parasites.

Cause: - according to *Macca* Oromo folk healer's unclean drinking water is one of the most common ways to get parasites. If you live in a hot country, or are visiting one, always be particularly careful about the source of water you drink. The only way parasites or worms can infect you is if they get into your body somehow. So you need to think about how this is possible. Indeed, many in the ruler area have any number of parasitic infections, some of which are so highly contagious that extremely casual contact with something that has been handled by an infected person can infect another healthy person.

Symptoms: - The basic signs of this disease are Food allergies, Skin conditions can arise and Persistent abdominal swelling is a frequent sign of hidden invaders.

Parts and products of animals: - Milk

Mode of preparation and treatment: - Since there are many types of parasites, each with its own particular life cycle and pattern, a few generalizations may simplify the rationale behind the different treatment strategies. First, one needs to understand that the parasite is a creature that depends on a host for survival, ergo its name. It leeches nutrients that the host needs in order to be healthy. Second, the parasite invades a bodily structure and inflicts damage to that structure so healing requires both the elimination of the parasite and the regeneration or rejuvenation of the affected organs. To cure the inner parasites milk the *Re'ee* and boiling for 5-6 minutes approximately. After that they give it to the patient. But, for eye illness again, they are milking the goat milk and drop it in minimal amount.

J) *Weennii* (Columbus monkey): - is a wild animal which its hair is used as a drug to cure the illness so called *furreessaa* (smother); that is usually affect back animals like: horse, mule and donkey. *Furreessaa* is a contagious respiratory disease is caused by a bad smell infection. Signs include a fever, thick, yellow, nasal discharge and swollen, abscessed lymph nodes under the jaws. The infection is spread by infected material from nasal discharge or abscesses contaminating stalls, feed troughs, pastures, etc., especially, Young mules, donkeys and horses are the most susceptible to this disease. In addition to that the skull of this medicinal animal is used to cure bone fracture.

Cause: - the cause of this disease transmitted is either by contact of susceptible animals with a diseased horse, mule or donkey. Contact includes contact with a horse, mule or donkey that is incubating strangles or has just recovered from the infection, or with an apparent clinically unaffected long-term carrier.

Symptoms: - Animals show typical signs of a generalized infectious process (depression, in appetite, and fever). More typical of strangles, horses develop a nasal discharge (initially mucous and rapidly thickening), a soft cough and slight but painful swelling between the mandibles, with swelling of the submandibular lymph node. Horses, donkeys and Mules are often seen positioning their heads low and extended, so as to relieve the throat and lymph node pain.

Parts and products of animals: - Hair/skull or head

Mode of preparation and treatment: - the preparation of this folk medicine is as follows: first of the entire healer must hunt and catch the *weennii*; then after searching it for the treatment of *Kotte-duudaa* (horse, monkey and mule) shading its hair and if he needs to treat bone fracture just killing and cut her skull.

Treatment materials: - *Weennii*'s hair, skull, fire and fire container.

K) Harree (Donkey): - The scientific name of the *Harree* donkey is *Equusasinusasinus* based on the principle of priority used for scientific names of animals. The Donkey is one other folk medicinal animal among *Macca* Oromo of *Iluu Abbaa Boor*. *Harree* is domestic animal which lives in the house and her milk used as drug for the illness of *Asma ukaa*. According to its procedure the patient must to drink the milked after boiling. Asthma is a disease affecting the airways that carry air to and from your lungs. People who suffer from this chronic condition (long-lasting or recurrent) are said to be asthmatic³¹.

Cause: - the cause of this illness are allergic reactions to environmental allergens such as pollens, molds, dust mite or animal dander, colds and viral respiratory infections, exercise, changes in weather, exposure to cold air or sudden temperature change and irritants such as tobacco smoke, air pollution, paints and cleaning agents as well as strong odors and/or perfumes.

Symptoms: - Common signs and symptoms of an acute asthma episode include: Coughing, out of breath — may be absent, Breathlessness — while walking or while at rest, Respiratory rate increased, Chest tension, Chest or abdominal pain, low energy, feeling out of breath, disturbance, increased pulse rate and incapability to participate in sports.

Parts and products of animals: - Milk

Mode of preparation and treatment: - The *Macca* Oromo prescribed *Aannan Harree* for numerous purposes, such as liver difficulty, infectious diseases, nose bleeds, poisonings, and wounds. The mode of preparation of this folk medicine is started by milking the *Harree* and boil. Then give to the patient by *bushii* or any other material cultures.

L) Naacha (Crocodile): - a large predatory semi aquatic reptile with long jaws, long tail, short legs, and a horny textured skin. The Crocodile is a reptile which lives in water, it has big teeth, and it is used as a drug for the illness of back ache, poor memory.

Cause: - Excessive alcohol use has long been recognized as a cause of memory loss. Sleep deprivation. Both quantity and quality of sleep are important to memory. Getting too little sleep or waking frequently in the night can lead to fatigue, which interferes with the ability to consolidate and retrieve information and nutritional deficiency. Good nutrition -- including high-quality proteins and fats -- is important for proper brain function. In addition, Lower back strain is caused by damage to the muscles and ligaments of the back. This will occurs from over loaded /caring heavy load.

³¹Interview with Kedir Beyena, 2016, Mattu district

Symptoms: - There are several symptoms that are fairly consistent for people with lower back pain or neck pain from degenerative backache, including: Pain that is usually related to activity and will flare up at times, but then return to a low-grade pain level, or the pain will go away entirely and activities that involve bending, lifting, and twisting will usually make the patient's pain worse.

Parts and products of animals: - The teeth of *Naachaa*

Mode of preparation and treatment: - Thus the mode of preparing this folk medicine will begin from hunting *Naacha* and collecting its teeth. Then heat on the fire and hold on the back of the patient repetitively. But to treat the problem of memory losing the healer collect the teeth and broken it into small size and tie on neck or arm of the patient.

M) Jawwee (Nepos): - It is a type of reptile with large, heavy-bodied non-venomous snake. It used to treat backache and spinal cord disorders. Its procedure was carried out by cutting the fat *moora* of python and then they stay it in the sun and when it melted they paint to the body.

Cause: - Some spinal cord disorders and backache may originate outside the cord or, less commonly. The Causes of spinal cord disorders include injuries.

Symptoms: - Because of the way the spinal cord functions and is organized, damage to the cord often produces specific patterns of symptoms based on where the damage occurred. The following may occur in various patterns: weakness, loss of sensation (such as the ability to feel a light touch, pain, temperature, or vibration or to sense where the arms and legs are), paralysis and back pain.

Parts and products of animals: - Fat (*moora*)

Mode of preparation and treatment: - The basic mode of this folk medicinal preparation is begun in hunting and killing this reptile. After the hunter/folk healer has to cut its fat/*moora* and used in food.

N) Osolee (Squirrel): -an agile tree-dwelling rodent with a bushy tail, typically feeding on nuts and seeds. The meat of *Osolee* is a drug for the Gonorrhoea illness. It's used after they estimate the passion to cut and cut it. The one who have affected by' Gonorrhoea disease has to drink this medicine as soup. In addition the meat of Squirrel cures the obesity of children, which is sometimes called *qallisa* in local term or *sunsune*.

Cause: - Gonorrhoea is caused by the *Neisseria gonorrhoea* bacteria. The infection is transmitted from one person to another through vaginal, oral, or anal sexual relations. Sometimes the *Maccaa* Oromo elders were seen as the symbol of honor; since it's so called *dhibee dhiiraa*.

Symptoms: - Burning when urinating, spotting after intercourse and Swollen glands in the throat

Parts and products of animals: - Meat

Mode of preparation and treatment: - First is hunting and killing this medicinal animal; then slight and cut out its meat in fresh. Then after cooking this meat and make it a soup, it has to be measured by *bushii* or *hadhaa*. Finally, give the soup for the patient of this sexual transmitted disease (STD) by measuring with a cup or *bushii*.

O) Qocaa (Tortoise): - a slow-moving typically herbivorous land reptile of warm climates, enclosed in a scalar or the leathery domed shell into which it can retract its head and thick legs. *QocaaTortoise* is a type of reptile used as a source for folk medicinal animals in the area. The scaly of this reptile is used to treat a urine infection and chest pain. Though similar to angina chest pain, a heart attack is usually a more severe,

crushing pain, usually in the center or left side of the chest and is not relieved by rest. Sweating, nausea, shortness of breath, or severe weakness may accompany the pain³².

Cause: - *The cause of this illness is evil shadow*

Symptoms: - A burning sensation when urinating

Parts and products of animals: - flaking/scaly

P) Karkaroo (Boar): - *The Boar is an uncast rated male domestic animal which eats roots, fruit, rodents and small reptiles and dirty thing and it is a scavenger. The tooth of Karkaroo is a drug for the breast illness. This illness most of the time occurred after giving birth.*

Cause: - *most of the time the cause of this disease is related to michii*

Symptoms: -Redness on the breasts, nipple indentations or flattening, and certain types of discharge may be signs of *Dhukkuba harmaa* breast cancer. In addition the sign of this illness includes swelling, softness, pain, a thickening of tissue and inflammation in one or both breasts.

Parts and products of animals: - Teeth

Mode of preparation and treatment: - the preparation of this folk medicine is begun by hunting and killing the *karkaroo*. Then after taking its teeth and hooting by fire. Finally, put into the affected breast repetitively.

Q) Arraagessa (Crow): - crow is an others folk medicinal bird in the study area. The flesh of this folk medicinal bird is a used to the folk illness like *mortuu*. This illness is spiritual one which can affect the lives of human being and livestock.

Cause: - the *cause* of this illness is spiritual power.

Symptoms: - Accidents, Carry the joy of life, weakness and belief in violence.

Parts and products of animals: - Flesh

Mode of preparation and treatment: - first killing the *Arraagessa* crow by arrow by hunting and slighting. Then after drying its flesh and mix up with clean water. Finally, boil for a moment and give for the patient in the form of soup every morning until he/she recover from this illness.

R) Bofa (Snake): -In study area the other name of *bofaa* is *biifaa* and it used as folk medicine to treat disease like chest pain. Thus, the coat or shed of this medicinal animal is used to cure *dhukkuba laphee* chest aches and used as fatten for cattle. Before all things the folk healer has to search this coat and grinding to make powder and mixing with water. Finally boil the coat of this medicinal animal until it becomes soup and in drinking the livestock.

Cause: - the causes of this illness are peaking up heavy things and failing accidentally

Symptoms: - the sign of chest pain are weak, fast heartbeat, and *waraansa onnee* heart aches.

Parts and products of animals: - coat or shed

Mode of preparation and treatment: - the ways of preparing this folk medicine have been begun with searching the coat or shed this folk medicinal animal. Then grinding to make powder and mixing with water. Finally boil until it becomes soup and in giving to the patient.

Mechanism of Dose control: - Local people or healers use a different *mechanism* to control the dosage of remedies. From these *mechanism* measuring by the *bushii* coffee cup based on the strength of the patient.

³²Interview with obbo Mohammed Waggarii,2016,Mattu district

S) **Kuruphee**: -Goat like animal which lived in the forest and source of food. The meat and *hadhooftu* of this animal can cure different diseases like *addeessituu*, and *laamshessaa* (paralyzed body) and the blood by itself can help in strengthening the body.

Cause: - traditionally paralysis is most often caused by accidents while working. For instance, the damage of nervous system *Miidhama jismii*, especially the pain of spinal cord *dhukkuba dugdaa* or broken or severed spinal cord and head injury.

Symptoms: - difficulty to talk normally, inability to express emotion and difficulty eating or drinking.

Parts and products of animals: - *hadhooftu* and flesh

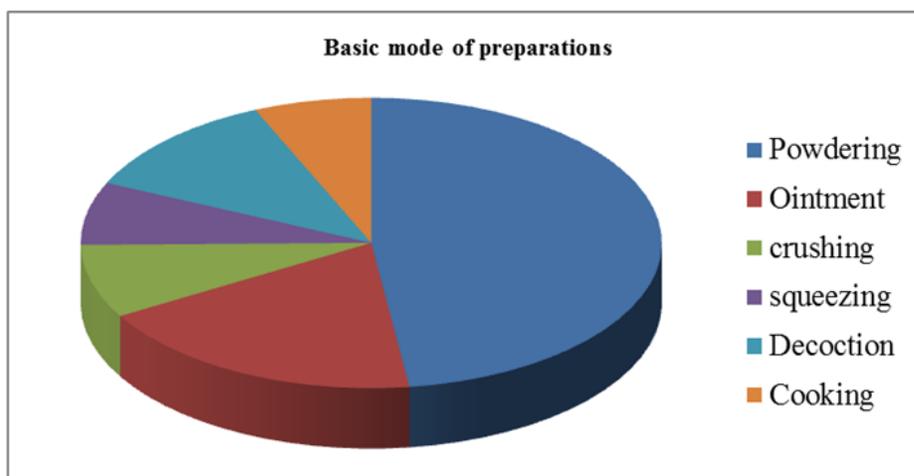
Mode of preparation and treatment: - the preparation of this medicine starts from hunting and killing *kuruphee* and slighting and cut out its *hadhooftu* and fleshes in fresh. Then giving to the patient to eat the fresh meat with its *hadhooftu* before eats other food.

Mechanism of Dose control: - Folk healer/community used varies *mechanism* to control the dosage of this folk medicine. For example, measuring the amount of *hadhooftu* based up on the status of the patient.

Preparation Mode of Folk medicinal animals

The medicinal animals have various methods of preparation for different types of ailments like crushing, powdering, Ointment and cream, squeezing, Decoction, direct use and cooking.

Figure 1: Preparation Mode of Animal based Folk medicine



Most of the traditional medicinal animal preparations were used in fresh form. Accordingly, Powdering is bones, fat; feathers and whole animals are dried and pounded until they form a powder. If preferred, the powder is strained to make it better. The powder can be fed to sick. Poultice is adding just enough hot water to the animal's material, usually in powder form, makes a poultice or a paste. The paste is applied on the affected area of the patients'. Ointment an ointment is made by mixing finely powdered animal products or materials or extracts with butter.

The ointment is applied to affected areas such as skin complaint or sprains. Decoction is one of the most commonly used preparations. One or several animal products are chopped into small sizes and added to clean water. The water is boiled for intimately for 10-20 minutes in clay or steel pots.

The Curative Power and management of Folk Medicinal animals

Most of folk medicine is a mixture of material and spiritual culture .because believe the curative power is high because society has a preoccupied mind with the curative power of the medicine. The other things can be seen is the relationship between patient ant and the traditional healer which ease the medication simple and transparent. The knowledgeable person knows the culture and beliefs of the society and can understand the way people narrate their pain and illness³³. This includes prayers and blessings during treatment. The society believes that those knowledgeable people are given from God (*Waaaqaa*). The people of the study area know that the disease from God and also both treatment and their medicine are from God. This makes the treatment of folk medicine half spiritual and treatment through medicine from animal or plant found around.

Furthermore, one can understand this from the ways of taking the folk medicine prepared from animal which are used in day to day life as a food, but while taken as medicine, there are criteria's like a staining from food and drinks, contacting people, passing over the river, not to call the name of anyone, shadow of the person, which are related to believe system when we see it from the emic point of view but ethically it may be related to the curative power of the medication. This taboo is not only for the patient, it also can see from the healer side and the family who care to the patients. This means both healer and patient respect and believes in the tradition and taboos related to the medication³⁴. On the other hand, most of diseases which cannot treat at hospital are successfully cured at folk healer experts. For instance diseases of the *dhukkuba xannachaa* gland, bat disease *dhibee shimbira*, *kintaarotii*, *dhikkuba abbaa sangaa* and the like can be easily cured by folk medicinal animals.

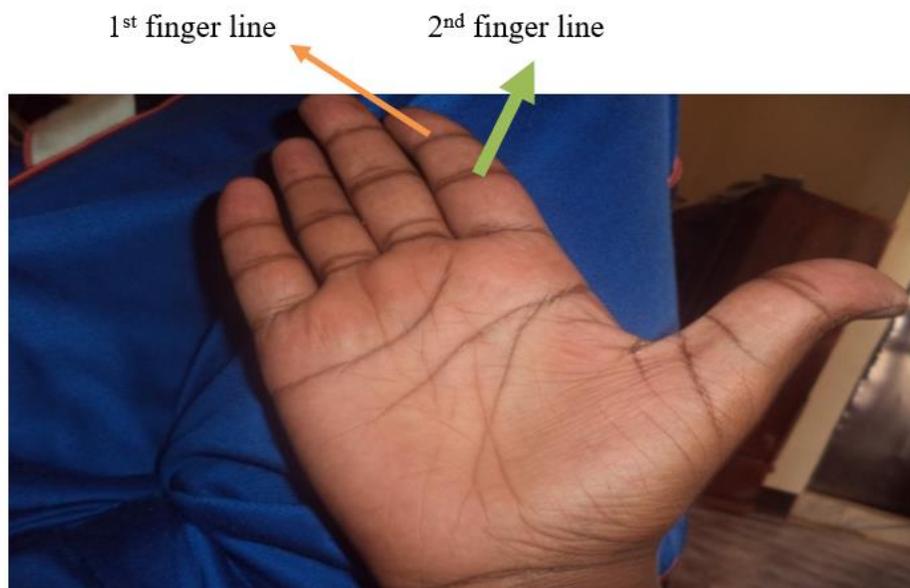
³³ Interview with Obboo Bariso Abdo,2016 Mattuu District

³⁴Interview with Obboo Hailu Legese,2016 Mattuu district

The Dosage of Folk Medicinal animals and mechanisms to control

Dosage is a difficult concept to grasp; partly, this is because of the limitations of human knowledge about the power of folk medicinal animals, but also the result of variations in our concepts of how animals may contribute to health. There are many ways in which the *Macca* Oromo/folk healers control over and under dosing of folk medicinal animals during healing. Most animal based medicines are well tolerated by the patient, with fewer unintended consequences than pharmaceutical drugs. Therefore, it needs trial and error to get the right dosage. Most of the time they use *barruu qubaa* finger lines, *geeba* traditional cups, *hadhooftuu* clay cups, *Gabattee* for cattle, Spoons and *fallana* fork any other measurements³⁵.

Figure 2: The finger line uses in dose control



Source: Taken during field work

The Significances of Folk Medicinal animals out of medication

Folk medicinal animals are used for different purposes from the many some of them are the followings:-healing and preventing diseases, building body, Environmental protection) and used as sort of belief system.

Environmental Protection

The acquaintances between folk medicinal animals and natural environments are complex and never broken according to data generated from FGDs in the study area. For the clarity of these concepts folk healers of *Macca* Oromo have said that ‘it is unthinkable to practice indigenous health care system out of conserved natural environment. Intentionally or unintentionally the folk medicine has the greatest role in protecting environment. Thus, they always care for their natural

³⁵Interview with Aadde MabrateTakelign,2016 Mattuu district

environment from which they collect folk medicinal drug made from leaves, herbs, roots, bark, animal, mineral substances and other materials found in nature.

In other hand the interconnections between folk medicinal animals and the natural environments may be seen in the health linkage. Deliberations of the relations between indigenous healing practices and biodiversity are authoritative mainly when as the position of the significance of previous as a source of primary health care system especially for community those who live in rural areas.

Building Strong solidarity between folk healers and the community

The Oromo of the study area have a culture in which they respect and promote their *ogeessotaa* folk healers. Most of the time they consider Single *Ogeessaa* as a health care institution of the community. The reason behind this respect ion and promotion is derived from the roles they play in healing practices. Based on the commitment and multidimensional treatment individuals or community may encourage and awarding bull or *goromsa* as a special gift. In other way, there is no gap in between the patient and his/her healers regarding to their culture, belief system, philosophy and the like and they participate in the same social associations. In the long term this closeness, respect ion and promotion have vital potential in building Strong solidarity between folk healers and the community.

Preserving and caring Cultures

The whole practices of folk medicine are a full of culture and cultural aspects according to *Macca* Oromo. They also take it as the upkeep of folklore elements. According to data obtained from FGDs folk medicine in general and folk medical animals, in particular employee material cultures, performing folk arts and spiritual practices. And indigenous healing practices have the potential to magnify Cultural, social, socio-political, and economic background of the community.

Healing and preventing diseases

As discussed above animal body and their product can serve as diseases healing and preventing people and livestock from diseases. This can be used in different ways of intake as orders by the folk medicinal expert and few of the medicinal animals are publicly known by society. In Oromo society every disease has medication system which is unique for the Oromo people, especially those related to the belief system. In the treatment strategy or process, we can find different and complex tasks, but all has their own logic i.e. important to that curing system.

Folk beliefs and practices exist within largely organized systems of health belief systems. Furthermore, these systems include sets of values, attitudes, and expectations partly taught by culture and partly developed by individual through unique life experiences that challenge these culturally provided “world view”. The question, “Why do you believe that works?” cannot be answered purely on the basis of observations about a healing practice itself, but must include its cultural context. For example, the belief in the efficacy of herbals as a universally effective healer is associated with a high valuation of age and experience, characteristics of wise healers as exemplified by traditional herbalists. That status includes the observation that many health ideas are today conceiving serious medical scrutiny. Oromo believes that ‘*Waaqa*’ blesses us with natural medicines, even though all of us are not quite familiar with which one is for which. Only

the 'ayyaantu' are acquainted with some of them and they disclose the mystery to one of their offspring to keep their secrets. This adds up their medicinal values and healing powers.

From the personal observation, we can understand that natural healing practice is safer because they are more like food than medicine connoting a nurturing *mechanism*. Health belief systems must be understood in both their individual forms, as represented by single, real patients, and in the idealized, cultural forms that help in the analysis of overall social interactions, such as the relationship of a particular set of beliefs for specific groups. Understanding individual folk medical beliefs are impossible by isolation. Neither can they provide a starting point to examine the interaction of modern medicine and folk tradition³⁶.

Factors Affecting Folk Medicinal animals

The folk-medicinal animals changed from the past to some extent. Because of various factors like the scarcity of folk medicinal animals (wild animals) change in environment (forest), this includes internal and external factors which contribute to the up down of this indigenous knowledge. Thus, Islamic, Christian and introduction of foreign medicine influences ethno medicinal animals in the study area.

Deforestation

A forest coverage and wildlife are primary capitals for folk medicine in bold and animal based medicine in particular. In study area the folk healers were considered forest as an ocean of indigenous healing practices. Because in the forest there are folk medicinal plants, animals and other creatures which may utilize as an input for folk medicine. However, today this all natural gifts were faced challenges for the reason that factors such as their sprouting response following cutting or burning, their ability to invade disturbed areas, and their presence or absence in soil seed banks. In addition, there is no repeated after cycles of cutting and burning forest fire wood. These are powerful risk and affects folk medicinal animals in the Oromo of study area. In this sense it demands Sustainable management of the forest in general and medicinal resources (plants and animals) because of their value as a prospective foundation of new medication and the huge belief on folk medicinal animals.

Religious Views

Religious view in a sense refers to attitudes towards mythological, supernatural, or spiritual aspects of a religion. It varies from one religion to another. This has its own factors on the indigenous knowledge of the native people. Thus, modern and the western religious and their followers have not positive attitudes towards folk medicine in general and animal based medication in particular. For instance, African medicine was regarded as unscientific and some of its treatment methods were considered anti-Christian. Traditional healers were regarded as heathens because of their participation in African Traditional Religion. Thus, Africans who became Christians were discouraged by the church from taking part in African traditional religious rituals and from consulting traditional healers (wcc-coe.org/wcc/what/interreligious/cd33-02.html).

³⁶ interview with Sabri Tolasa, 2016, Mattuu district

Negative attitudes of the community towards the Folk Medicine

The attitude of the society, especially the youngsters are very discouraging this indigenous knowledge because of education and what they call modernity. They understand this medicine as backwardness. Most traditional healers felt undermined because of social pressure. Some people undermined the traditional healers and this made it difficult for the patients to even tell them that they have been to a traditional healer before coming to the clinic or hospital when they go there. Most of the time, this has seen educated communities and current generation. Accordingly, some medical doctors/nurses did acknowledge that they undermined traditional healers. Particularly, some traditional healers also discriminate against each other according to the type of traditional healer (bone settlers, midwifery's, spiritual healers and the like) one is. Some look down upon others. Some herbalists don't believe in spiritual healer (diviner) saying they lie to people. In general, traditional healers have a lot of respect for their people.

According to data generated from FGDs, some nurses indicated that traditional healers seem to be very influential on their patients and this makes them good counselors and an entry point to the community for education purposes. The nurses believe that patients start with traditional healers and when they see that their medication doesn't work, they then go to the hospital/clinic. On the other hand, the traditional healers don't believe that the patients visit their clinics, making their visit to the hospital or clinic. Special some biomedical experts are undermining the indigenous healers by saying "These traditional healers can't even tell you what they gave you as a patient. It's worse when they say some herbs are more useful when they are rotten." Indigenous healer," Even though, many people still needs our help."

Expansion of Biomedicine

Medical personnel associate folk medicine and treatment with people of poor education, backward culture, and lack of civilization. They can neither prove its non-medical status to be stopped anytime. The matter is more complicated. It is better for our physicians to be aware of their patients' beliefs and practices; patients usually conceal these from physicians. After developing awareness, the physicians should identify the risks involved, such as direct risk (e.g., liver toxicity) or the risks of conflict with medical advice (e.g. using medicine indicates lack of faith). The absence of risk proves the continuities of beliefs and practices as patients' health resources; their medical implications may change over time. Risk-prove in the practices and beliefs of the patient must be followed by the assessment and comparison of his/her commitment to it and to that of medical treatment. The strong commitment of the better the physician engages in negotiation between the frameworks of medicine and that of the patient's. This demands drawing the nature of the practice or belief of the patient and its role within the patient's health system. The understanding of ethnographic interview methods or a willingness to draw upon non-medical experts for consultation (such as faith healers and herbalists to folklorists and anthropologists) is necessary to this effect.

Such negotiations could lead to complete compliance; but not very often. All these are intended to deliver improved medical care, minimize risk, and create doctor-patient cooperation. The negotiations can be simple in some cases and complicates in others. But the path is more vital than the direct impact on managing the case at hand. It makes doctors and nurses familiar with the beliefs and practices of the patient population and the functions of the beliefs and practices in the cases of specific diseases. Textbooks do not provide such information; having designated cultural

specialists on every health care team is infeasible. Therefore, the primary role of the folklorist herein is educating; clinical consultation is another role. Folk medicine has therapeutic values, besides having psychological benefits in relieving anxiety. Studies show that plants taken to be of medical values exhibit strong cases of facts. Assumptions about folk medicine demand reconsidering and reassessing. Health professionals better learn more about the traditions of their patients to serve them well. Following are some important concepts about folklore in medicine.

CONCLUSION

The current study shows that nineteen (19) animal species were being used to treat nearly 23 different ailments and results show that ethno zoological practices are an important alternative medical practice by the *Macca* Oromo tribe living in *Mattu* district. A total of 19 folk medicinal animals; (mammal species 11, reptiles 5, and 3 Birds) were identified as being used for medicinal purposes in *Macca* Oromo, south western Ethiopia. According to the present study also indicates the very rich with folk medicinal animals (ethno zoological) knowledge of these people in relation to folk medicine.

Moreover mammals, reptiles and birds from the team and wild have been used in the field of traditional medicine for different purposes. So there is a critical need to properly document to keep a record of the ethno zoological information. We hope that the information generated in this study will be useful for further research in the field of ethno zoology, ethno pharmacology and conservation approach. Furthermore, there is a need to involve traditional healers on all the aspects of traditional medicine, including the preparation of pharmacopoeia for evaluating all medical plants and other substances used in drugs, giving therapeutic indicators, and methods of preparations and dosages, as well as awards of grants for research on traditional medicine in collaboration with other interested institutions and organizations and harmonization between traditional and modern medicine. In order to improve the prospects and potential benefits of traditional medicine to society, the contribution of both health care systems needs to be considered.

RECOMMENDATIONS

Based on the finding of the study, the following recommendations are forwarded: Folk medicinal animals are primary to the indigenous cultures, knowledge and it serves as a means of preserving other genres of folklore. So, all concerned governmental and non-governmental bodies should take into account this issue and design strategies to create positive attitudes among the current generation by raising awareness about the folk medicinal animals and their utilization. The indigenous knowledge and skill of folk healers or practitioners must be encouraged and protected. This could take the form of legally registering or licensing so that they will be encouraged to make use of their knowledge confidently. This can also contribute to the respects of property or patent rights not only through certification but also through organizing them at different levels, which promotes their indigenous knowledge and medicinal animal value.

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CONFLICT OF INTERESTS

We declare that there are no financial, professional or personal competing interests that might have influenced the performance or presentation of the work described in this manuscript.

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