Indigenous Ill-health Perception and Healing Practices: Socio-Cultural Qualitative Study in North-Eastern Ethiopia

Mesfin Haile Kahissay

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By: Mesfin Haile Kahissy (B. Pharm, MSc)

Research Supervisors:

Dr. Teferi Gedif (B. Pharm, MPH, PhD)

Prof. Heather Boon (BScPhm, PhD)

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SCHOOL OF PHARMACY
DEPARTEMENT OF PHARMACEUTICS AND SOCIAL PHARMACY

This is to certify that the thesis prepared by Mesfin Haile Kahissay, entitled: *Indigenous Ill-health Perception and Healing Practices: Socio-Cutliural Study in North-Eastern Ethiopia* and submitted in partial fulfilment of the requirements for the Degree of Doctor of Philosophy (PhD) in Social and Administrative Pharmacy complies with the regulations of the University and meets the accepted standards with respect to the originality and quality.

Signed by the Examining Committee :

Examiner: Zubin Austin (Prof.) Signature _____ Date 8 June 2017

Examiner: Mirgissa Kaba (PhD) Signature _____ Date 8 June '17

Advisor: Teferi Gedif Fenta (PhD) Signature _____ Date 8 June 2017

Advisor: Heather Boon (Prof.) Signature _____ Date 8 Jun/17

Tesfa Moreo

Chair of the Department

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LIST OF ORIGINAL PAPERS

This thesis is based on the following papers which will be referred in the text by Roman numerical.

I. Mesfin HK, Teferi GF. Heather B. 2017. Beliefs and perception of ill-health causation: A socio-cultural qualitative study in rural North-Eastern Ethiopia. BMC public health;17:124
II. Mesfin HK, Teferi GF. Heather B. 2015. Religion, Spirits, Human Agents and Healing: A Conceptual Understanding from a Socio-Cultural Study of Tehuledere Community, North-Eastern Ethiopia. BMC Journal of Religion and Health (Submitted).
III. Mesfin HK, Teferi GF. Heather B. 2015. Traditional healing and primary care: A socio-cultural study in a rural Tehuledere community, North-Eastern Ethiopia. Ethiop. J. Health Dev.;29(2): 127-136
IV. Mesfin HK, Teferi GF. Heather B. 2015. Popular Health-Care Systems and Primary Health Care: A Socio-Cultural Study of Tehuledere Community, North-Eastern Ethiopia. Ethiop. J. Health Dev.;30(1): 29-43

ABSTRACT

Introduction: When integrated with 'modern' medicine, well developed indigenous medicinal knowledge and practices have the potential advantage of reducing overcrowding of primary care services. However this aspect is not well studied in the Ethiopian setting. Therefore, this study explored the indigenous medicinal beliefs and practices used by communities in North Eastern Ethiopia in the management of health problems in their homes using a conceptual framework adopted from Kleinman's Cultural Systems Model, the Murdock illness causation model, and the Padela God-centeric healing model.

Methods: Ethnographic methods were used for this study. Participant observation was supplemented by ten focus group discussions (FGDs) (n=96) and 20 in-depth interviews conducted with the key informant community members. The analysis and interpretation was informed by thematic and narratives strategies.

Findings: The findings indicated that the *Tehuledere* people's worldview of health, health problems and healing systems is closely linked to their day-to-day cultural lives. They had widespread perceptions about causes of illness. They perceived that illnesses might be caused by the wrath of God or gods, '*qolle or quteb* (spirit possessions); natural causes (e.g., environmental sanitation and personal hygiene, poverty, biological such as organic deterioration and accident and psychological factors such as stress) and societal causes (e.g., social trust, experiences of family support and harmony; and violation of social taboos). Therefore, the explanatory model of illness causation in this community was very similar to that of the Murdock model with one key difference: social elements need to be added to the model. The major factors associated with use of indigenous medicine included: the perceived etiology of illnesses; the availability and acceptability of health-care services; the relationship between the health-care practitioners and the patients; socio-economic factors (cost of health care expenditure); and the influence of social networks and/or social relationships. It was found that in *Tehuledere* pluralistic health-care resources were used either independently or concurrently with biomedicine. The study identified that religious and spiritual healing, bio-medicine, 'folk' or indigenous healing systems, and popular or home-based medicine, were the major types of health-care options.

Many of the *Tehuledere* people attribute illness to the wrath of supernatural forces. Thus, healing is thought to be mitigated by divine assistance obtained through supplication and rituals and through the healing interventions of nature spirit actors such as *Woliy* (Muslim saints) and *Kalicha* (Muslim voodoo). Also seeking God/Allah/ and nature-spirit forgiveness with ritual '*Dua* (Prayer), *Tsebel*/holy water/, '*wodaja'* (harmonizing the spirit to heal evil), '*Chelle'*/ goddess of fecundity/ were practiced for certain ailments such as *jinn* and *Buda*. Moreover, Traditional health practitioners (*kitel betash* or herbalists, *'awalaj'* or birth attendants and *'wogesha'* or bone setters) were consulted for preventive, protective and remedial care of the participants and their families. Instances of self-medication were also encountered in the participants. The participants apply home remedies for prevention and remedial purposes. Treatment is meant for those apparent ailments such as *Nedad* (malaria), *Mich* (acute febrile illness) and *Gunfan* (flu) and other relatively common health problems. Otherwise the popular agents refer to the biomedical experts if no progress was seen subsequent to treating with home remedies. The findings further demonstrated that bridge of caring was built between the traditional healers and the primary health service (i.e. the health posts) in the management of perceived common ailments, such as *yewof beshita* (jaundice) and *yelig tilat* (herpes zoster) in the village. Another bridge of care was also built between the health posts and the health center for the management of the other health problems, such as HIV/ AIDS and tuberculosis, which the study communities experience as critical incidents. The role of health extension workers was very important for this integration. The increased accessibility in the modern health care appears to have been both a blessing and curse to the area, as the indigenous communities competed to find a place for their healing system within the new health system. The findings also identified communication and attitudinal problems that exist between the communities and modern health care providers.

Conclusion: The indigenous health care mechanisms of the study community address basic elements of primary health care such as fostering self-care and self-reliance, community participation and the use of indigenous medical practices for the maintenance of good health. It is within this area that the study communities appear to express the greatest concern related to the 'natural', 'spiritual` and `societal` health of their homes and villages. Since people in the study communities believe that spiritual , indigenous healer and home

remedial healings are health care options among multiple health-care resources, successful rural primary health care strategy would give due attention to such local resources. This will help to ensure the optimal utilization of Ethiopia's limited resources. This study suggests that there should be a clear plan as to how indigenous medicinal practices can be supported within a health care systems approach.

Key Words: Indigenous health knowledge, primary health care, Illnesses, health, Religion, Spirit, home remedies, qualitative, Beliefs, *Tehuledere*, Ethiopia.

ABBREVIATIONS AND ACRONYMS

AAU	Addis Ababa University
AIDs:	Acquired Immuno Deficiency Syndrome
FAO:	Food and Agriculture Organization of the United Nations
FGD:	Focus Group Discussion
FMOH:	Federal Ministry of Health
HEWs:	Health Extension Workers
IBCR:	Institute of Biodiversity and Conservation Research
IFS:	International Foundation for Science
IMK:	Indigenous Medicinal Knowledge
IUCN:	International Union for Conservation
KAP:	Knowledge Attitude and Practice
PHC:	Primary Health Care
TCAM:	Traditional medicine/Complementary and Alternative Medicine
TK:	Traditional Knowledge
TKS:	Traditional Knowledge System
TM:	Traditional Medicine
TWIO:	*Tehuledere Woreda* Information Office
WHA:	World Health Assembly
WHO:	World Health Organization

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USE OF TERMINOLOGY AND CONCEPTS IN THE STUDY

Indigenous

This dissertation uses the term ‘indigenous’ as articulated by Roberts (1998) who conceptualizes the term ‘indigenous’ as specific groups of people who are grouped under the criteria of ancestral territory, collective cultural configurations, and historical location. The terms 'indigenous', traditional', 'local' and 'cultural' are used throughout the thesis in reference to the therapeutic practices, medicinal plants and related bodies of knowledge found among the study communities. In keeping with current conventions, therefore, these terms are used interchangeably throughout this thesis.

Indigenous Medicinal knowledge (IMK)

Indigenous medicine knowledge can be conceptualized as the native medicinal services and wisdom which is one of a kind to a given society (Young, 1983). Konadu (2007:3) additionally clarifies the thought of "indigenous medicinal knowledge*”* as *something which is stored in people’s memories and activities. It is communicated as stories, songs, folklore, proverbs, dances, myths, cultural values, beliefs, rituals, community laws and local dialect.*

Moreover, Konadu (2007:20) conceptualizes “indigenous medicine” as it talks about issues, for example, how healers and indigenous knowledge frameworks consider and decipher medicine. In his study Good (1987:18) argues that "indigenous medicine knowledge " is "the impression of the general public's aggregate restorative convictions about the causes for wellbeing issues and decisions of treatment options." Today's indigenous knowledge in ethno- medicine is, along these lines, the result of the collected encounters of local communities with their local biological community, which has additionally allowed them to keep up their socio- cultural character (Hirt & M'Pia, 1995). The Indigenous medical framework is, consequently, a part of the most vital components of indigenous knowledge framework.

Current definitions found in the growing literature on indigenous knowledge (examples cited below) refer to systems of thought pertaining to all aspects of human life, including the management of health and natural resources, which are found in 'traditional' cultures.

These are often contrasted with, but viewed as analogous to, 'modern scientific' understanding.

> ". . . the local knowledge that is unique to a given culture or society - contrasts with the international knowledge system which is generated through the global network of universities and research institutes."(Warren et al., 1995: p.15)

Relating to this study, IHK comprises the health knowledge (remedies and treatments) carried by the *Tehuleder* community. The IHK refers specifically to the local approaches, treatments, home remedies and strategies used by the *Tehuleder* community in managing health problems in their locality.

Indigenous Medicine

The different terms connected with "indigenous medicine" include: 'Traditional Medicine' (TM), Unconventional Medicine (UM) 'Local Medicine (LM)', 'Folk Medicine (FM)', and 'Spiritual Medicine (SM)'. They are regularly utilized reciprocally (Mekonnen, 1988; Konadu, 2007 and Young, 1970). Be that as it may, in this study, the investigators wants to utilize the idea of "indigenous medicine" as at times those specified different phrasings have been given negative intentions.

Indigenous medicine is an exceptionally wide idea. It is comprehensive in nature on the grounds that it delivers numerous issues identified with socio- cultural, economical and ecological context of a community of indigenous medicine. For instance, Dubos (1968) characterized indigenous or customary medicine as the sum total of a person's or groups' health related knowledge, beliefs, techniques, roles, norms, and values. Moreover, one of the working definition of "indigenous or traditional medicine" by World Health Organization (WHO, 2002: 1582-91) is that "it is the sum total of all knowledge and practices, whether explicable or not used in the diagnosis, prevention and elimination of physical, mental or social imbalances and relying exclusively on practical experience and observation handed down from generation to generation, whether orally or in writing."

This dissertation uses the term 'indigenous' medicine to characterize what is often referred to as local medicine or 'folk' medicine practiced in a particular society and which is thought to differ from 'modern' medicine or biomedicine. It uses a holistic approach to

seeking to maintain the life equilibrium involving the mind, body, and the environment (Winkelman, 2009).

Home

The home is classified as a complex terrain, in which closely-related family members live and interact, as well as serving as the locus of shared food and resources. It is seen as an organisational structure that is constructed around a certain hierarchy, and around certain interactions and organisational norms, often containing hidden aspects to its organisational life. Personal and private matters, such as illnesses, are declared in, and contained at home.

Primary health care (PHC)

Refers to '…essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process' (WHO, 1978).

GLOSSARY OF INDIGENOUS TERMS

Abagar (“father of the land”)		: Muslim mediator in the countryside who reconciles people in the name of divine authority (God) but not on the basis of sharia. They are known as a peace maker for conflict and various ritual healings and cursing those who lie in front of *Rekebot*, place of truth. Both Christians and Muslims may appeal to an *abagar*.
Awdiq (Epilepsy)	:	A disease which leads to an occasional loss of balance and consciousness
Barile (Tinea Capitis)	:	A minor skin disease with mild itching; it changes the colour of the skin to light-grey
Buda	:	Ill-health resulting from the thoughts and actions of ‘evil-eyed’ persons
Kh’at (Catha edulis)	:	A mildly stimulant drug (leaves) chewed during group or individual ritual ceremony, as well as for entertainment
Chefie (Eczema)	:	A communicable skin disease that begin with skin rash and itching and later on causing sores
Du’a	:	A form of prayer organized by Muslims to seek the help of Allah in order to resolve health-related or any other problems
Jinn	:	A disease believed to be caused by satanic possession
Kebele	:	The smallest local administrative unit in Government Structure

Kintarot (Haemorrhoid*)*	:	A disease which usually causes a very painful sore around the rectum; this term is also used to denote other types of skin diseases, for instance, wart
Lefie	:	A disease causing a swelling and burning sensation, later on resulting in a sore
Lemts (Vitiligo)	:	A disease which makes the colour of the skin unusually white
Sheik	:	A title name for senior educator in the Ethiopian Muslim Mosque
Neqersa (Scrofula)	:	A disease which initially appears as a swelling, and later on, develops into a deep sore
Qalicha	:	A person (male) known, among Ethiopians Muslim, to have special spiritual power and knowledge; he is believed to be capable of forecasting the future as well as revealing hidden facts, and resolving individuals' problems.
Qoroqor (Dandruf)	:	Fungal-like infection which usually attacks the skin on the head, and causes sores
Qunch'ir	:	A disease which initially causes small swelling, then small sore, but eventually brings about much harm on the nose
T'ella	:	A home-made alcoholic drink (traditional beer Ethiopian). It is brewed from various grains, typically *teff* and sorghum. Dried and ground *gesho* leaves are used for fermentation.
Tsebel	:	Holy water

Wodaja	:	A group ritual ceremony carried out in many houses of Muslim traditional healers, whereby a person with health or any other problems is helped through prayers and songs
Yelij-t'iIa (Herpes Zoster)	:	A serious skin disease, that starts with a skin rash and causing very painful sores
Zar	:	Ill-health which results from evil spirits possessing a person

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CHAPTER 1: INTRODUCTION

1.1. Background of the Study

The study of indigenous medicine has been the focus of increasing academic attention (Coulter et al., 2014). As literature shows indigenous medicine is part and parcel of many primary health-care systems. An estimated 80% of the African population depends to varying degrees on indigenous medicine for healing and preventing different health problems (Junaid and Nasreen, 2012). This is largely because indigenous medicine is deeply embedded in the socio-cultural aspects of the society and 'modern' health services are scarce and deficient in many communities (Bishaw, 1988; Kaba, 1993; Konadu, 2007). The use of indigenous medicine still remains the main source of health-care coverage and plays a great role in the lives of millions of the people of Africa (Samuel, et al 2014; Mwangi, 2004). Ndege (2001) states that Africans' holistic perception of health and disease is an integrated concept that considers not only the biological malfunctions of the body but also the religious, moral, political and economic influences that affect the body. Cunningham (1993) also pointed out that indigenous medicine continues to be in high demand in health-care systems in Africa as a supplement to 'modern' medicinal practice and use. According to Winkelman (2009), the use and preservation of indigenous medicine has been influenced by different cultural, environmental, and historic conditions of local communities.

In the Ethiopian context, Pankhurst (1965) and Bishaw (1988) noted that, as elsewhere in Africa, Ethiopia is rich in indigenous medicinal knowledge. Many people still rely on utilizing plant and animal products for preventing and healing of health problems. Due to its long period of practice and existence, indigenous medicine has become an integral part of the culture of the Ethiopian people (Kaba, 1993). This means that customs, traditions, religious beliefs, practices, and health-related values may all influence the health- seeking behavior of many Ethiopians (Bishaw, 1988). Furthermore, Torry (1967) and Kaba (1993) stated that the traditional health beliefs and practices of the Ethiopian people are established in their culture and environment.

Environment and indigenous medicine have a noticeable connection that seeks to identify and make sense of culture and biodiversity (Winkelman, 2009). The relationship can be

exemplified by long traditions of healing powers associated with the earth's natural system, including medicinal plants, animals, minerals, air, and *tsebel* (holy water). More specifically, the natural environment can shape the medicinal expertise and practices employed by each indigenous group (Battiste and Henderson, 1996). Similarly, Dubos (1968) further argued that indigenous medicine is tied to the land and spiritual laws. Understanding indigenous medicine in relation to cultural and environmental perspectives might, therefore, enable medical doctors to use these powerful symbols of indigenous medicine to more effectively treat and manage patients afflicted with a wide range of health problems (Barnes & Sered, 2005).

Ethiopia is endowed with knowledge on how to prepare and use medicinal plants to cure different sorts of health problems (Dawit and Ahadu, 1993). According to Dawit (2006), more than 95% of indigenous medical preparations in Ethiopia are of plant origin. According to (FAO, 1999), there are about 6,000 -7,000 plant species in Ethiopia, of which about 10% are thought to be endemic to the country. Up to 1,000 plant species have been reported to be used for medicinal purposes in the country (Kloos et al. 2014, FAO 1999).

Indigenous medicines are, therefore, important as a remedy for disease and injury as well as for primary health-care. There is still wide spread recognition and interest in indigenous medicines due to their socio-cultural acceptability, accessibility, affordability, and bio-medical values for the local people. With respect to the value of indigenous medicine for health-care, this study aims to explore the indigenous medicinal knowledge and cultural and environmental values to the *Tehuledere* people in North-eastern Ethiopia. The study, therefore, seeks to identify the evolution and values of indigenous medicine in *Tehuledere* from socio-cultural perspectives.

1.2. The Problems

Over one-third of the population in developing countries lack access to "modern" health care systems (WHO, 2011). The "modern" health care system has also several short-comings. Apart from a general shortage of personnel, there are wide geographical discrepancies in the access to health care facilities. In addition, modern services are often not affordable and/or culturally ill-suited to handle the range of illness in a society (Bishaw, 1988). Enacting the principle of a right to health care into practical action is a daunting task

for most developing nations like Ethiopia where the seeds of ill-health are to be found in the prevailing politico-economic conditions in Africa. In this situation, people globally rely on indigenous medicinal knowledge system as an alternative service along with the "modern" one (Kassaye et al, 2006).

Between 70% and 95% of citizens in a majority of developing countries, especially those in Asia, Africa, Latin America and the Middle East, use traditional medicines (TM), including traditional and herbal medicines, for the management of health and as primary health care to address their health-care needs and concerns (WHO, 2011). In Benin, Burkina Faso, Ghana and Zambia for example, 80%, >80%, 70% and 70% of the population rely on TM respectively (Kloos et al., 2014). Over 80% of the Ethiopian population relies on traditional medicine. This represents the majority of the rural population and sectors of the urban population where there is little or no access to allopathic health care (WHO, 2001). How these figures were calculated is not revealed in the WHO statistics, nor do we know the share of herbal medicine within these TM percentages. Most figures seem to refer to rural communities that have a limited access to conventional medicine and are surrounded by environments in which herbs are easily accessible (Bodeker and Kronenberg, 2002). However different studies indicate that a significant number of populations use TM in Ethiopia. For example, a study conducted in Bankogazer Woreda, Wombera district, and Berta ethnic group showed that the prevalence of TM uses during the two weeks period was 44.9%, 4 1.6% 25.2%, 4.6%, respectively (Mideks et al, 2005; Flatie et al, 2009; Guji et al, 2011).

In relation to the majority of the population having much interest to indigenous medicine, many scholars agree that the cultural, socio-economic and environmental circumstances are said to be the major factors affecting its function and distribution. Also, in the light of the significance of the indigenous health care systems, Hammond-Tooke (1987) states that indigenous medicine in many respects is better and more holistic than "modern" medicine because it is congruent with world-views of indigenous medicinal knowledge. There are a wide variety of conditions for which biomedicine does not have effective treatment upon certain health problems, which include: colds, depression, chronic pain, chronic fatigue syndrome, stress-related problems, anxiety attacks, back pain problems, pulled muscle, and

skin conditions (Hammond-Tooke, 1987). The provision of safe and effective indigenous medicine therapies could, thus, become a critical tool to increase access to health care, and to derive socio-cultural as well as psychological significance (WHO, 2001).

Like most African countries, Ethiopia relies heavily on indigenous medicine for its primary health care services. This is due to the presence of associated cultural and socio-economic factors. One advantage of preferring indigenous medicine is that indigenous healers are found within a short distance, are familiar with the patient's culture and the environment and the costs associated with treatments are negligible (Tebaber, 2006). Recent research suggests, however, that the situation is often considerably more complex than this explanation might imply. Some particularly pertinent insights are provided by a recent study among semi-rural communities in Tanzania, where specialised traditional health care is known to be considerably more expensive than local government biomedical services (Muela el al., 2000). Moreover, it is also argued that Ethiopian indigenous medicine is not only concerned with the curing of diseases but also with the protection, promotion and/or manifestation of human physical, spiritual, social, mental and material well-being (Kassaye et al, 2006).

Although a number of developing countries including Ethiopia depend on indigenous medicinal knowledge for healing their illness, the reviewed studies indicate that most of the indigenous medicinal plants and their use have declined due to the consequence of "modern" development and related climatic changes (Gidey et al, 2010). This is because human factors for various development activities could lead to radical ecological imbalance and the extinction of indigenous medicinal plants, and then the extinction of indigenous medicinal knowledge. According to Zelealem (2011), although the utility values of indigenous medicinal plants is multiple in various parts of the world, they are at risk due to the presence of multifaceted factors including "lack of scientific investigation and documentation, death of knowledgeable elder of the plant, deforestation, decreasing rainfall pattern and anthropometric influence." As a result, the abundance of such indigenous medicinal plants has reduced and become marginal from time to time. The indigenous medicine specialists or healers who maintain their profound knowledge of medicinal plants may die without transferring their knowledge to the next generation.

Furthermore, despite its existence and continued use over many regions of Ethiopia, indigenous medicinal knowledge has not yet been fully recognized. The 1993 health policy addresses the need to develop traditional medicine, including the adoption of directions and registration of healers, and its continuous reconciliation into the biomedical framework. Traditional medicine is placed as one of the eight priorities of the current Health Policy. It was accounted for that due consideration shall be given to the improvement of the beneficial aspects of traditional medicine including related exploration and its gradual integration into Modern Medicine (FMO, 1995).

Moreover, the national policy of indigenous medicine under the current Federal Democratic Republic of Ethiopia was issued as part of the Health, Drug, and Science and Technology Policy in 1993 (Fasil, 1998; Fekadu, 2001). Notwithstanding, little has been accomplished so far; such as the launch of registration /licensing healers or guidelines in May 2013, under proclamation number 661/2002 article 55. The healers in this directive include only those who use herbs and physical manipulation. But this directive did not acknowledge religious and spiritual healing system, healers who used herbs and rituals in the practices. Despite the fact that the country has clear policies which states about the need for preservation and integration to the "modern" health care system, its execution is not appropriately performed.

As a matter of fact, in Ethiopia, education, training and research in this area have not been given due attention and support. The quantity and quality as well as the safety and efficacy of data on indigenous medicine are far from sufficient to meet the criteria needed to support its use nationwide. By and large, there are lack of research data and insufficient attention of health care policies on indigenous medicine (WHO, 2000). Thus, a detailed investigation of indigenous medicinal plants is partly paramount importance for preserving the health cosmology of the people in Ethiopia in general and the study area in particular.

It is also frequently argued that indigenous medicinal knowledge is negatively stigmatized by biomedical practitioners. This makes some indigenous healers lose prestige and sometimes they are forced to practice in secret. Generally, there are two polarizations of contested theories on indigenous medicine. On the one hand, some theories, especially the biomedical perspectives criticized the "indigenous medicine" by associating it with

“harmful traditions” and as if it was a threat to human health. However, others, like social scientists acknowledge “indigenous medicine” by considering it as wholly embedded in the human culture and basic to the human health care systems (WHO, 2000). Nevertheless, both the “modern" and “indigenous” health care systems have to be understood from the perspective of the consumer, environmental, and cultural context of the settings (Winkelman, 2009).

Although the research works on indigenous medicine are limited, there are a number of studies from different perspectives. Most of the explorations conducted so far take various perspectives such as historical, anthropological, and biomedical or public health. With respect to those taking a biomedical perspective, the vast majority of the previous studies have focused on the medicinal plants in Ethiopia. However, for the greatest part, these ethno-botanical inventories present botanical and pharmacologic data disembodied from their social and cultural contexts; they do not accommodate theoretical or conceptual issues (Green et al, 2006; Han, 2000). Usually they fail to give careful attention to the specific circumstances and contexts in which indigenous medicine utilization occurs. In other words, most of the data obtained from the biomedical research perspective provides little information about how to integrate indigenous medicine with the “modern” one.

Merid (1975) and Pankhurst (1965) worked on the historical aspects of indigenous medicinal knowledge. Young (1970), Bishaw (1988), Kaba (1993) and Abraraw (1998) have researched on indigenous medicinal knowledge from anthropological vantage points. But these anthropological works did not give detailed attention to the effect of environmental change on the indigenous medicinal plants. They also failed to give focus to the knowledge transfer systems of indigenous medicinal knowledge through generations. Moreover, biomedical and public health research works, for example, Getachew’s (2002) and Kassaye’s (2001) only highlighted the Knowledge, Attitude and Practice (KAP) of indigenous medicinal knowledge and health related issues. They did not look deep into the socio-cultural and behavioral aspects of indigenous medicine and its healing system.

Though previous attempts remain very important in providing insights into the understanding of indigenous medicine in terms of the therapeutic value of medicinal plants,

they fail to investigate the numerous socio-cultural and symbolic aspects of this form of medicine. On top of these, they did not fully explore how to enhance and develop the beneficial aspects of indigenous medicine, including pertinent research to explore possibilities for their integration into "modern" medicine. When integrated with 'modern' medicine, well developed indigenous medicinal knowledge and practices have the advantage of reducing overcrowding of primary care services. However this aspect is not well studied in Ethiopia. In line with this, the "modern" health care institutions and policies do not fully recognize the important role indigenous medicinal knowledge plays for the efficiency of health care system in a society (WHO, 2000).

This study, therefore, deals with the socio-cultural contexts of indigenous medicinal healing systems in *Tehuledere*, which is found in the Amhara regional state of north-eastern Ethiopia. *Tehuledere* is known for its very impressive and unique societal and medicinal related indigenous beliefs and practices. However, there has been little or no study, done on indigenous medicinal practices and healing systems. This study, thus, aims to fill this gap by investigating and analyzing the socio-cultural values of indigenous medicines among the rural communities in *Tehuledere*. This enables to bridge the gap and provides further insights into the indigenous medicine in the socio-cultural dimensions of the study area.

1.3. Positionality and Rationale

The investigator`s unique position as a member of the study community and as a biomedical professional involved a certain amount of cognitive dissonance for him as he dealt with the paradox of being expected to uphold both modern and traditional practices. Given this unique position, the researcher`s aim has been to expand upon these experiences based on phenomenology (i.e. the sensibility of his lived world) (Johnson 2000) as well as his own life course. This project grows out of his own real life experiences, and not simply as the result of a PhD programme. Throughout his childhood and schooling, and through his working life, he has lived in a social world where indigenous practices are being used by the people in his immediate community.

Therefore it is the researcher`s intension to understand why indigenous medicinal practices have not been given much attention by health policy makers at the national level. The

researcher also wanted to discover the reasons why both biomedical and indigenous health care systems have not been well-integrated to effectively tackle the health problems of a society. Taking the above issues in mind, the researcher believed that the best way to come to grips with the issues involved was to investigate the socio-cultural values of the beliefs and perceptions of indigenous medicinal healings and the knowledge of their use in the study area, *Tehuledere Woreda*.

In view of the above information, this study in *Tehuledere Woreda* was attempted to provide an in-depth exposition of the community's cosmological system, and delineation of the categories and functions of indigenous medicines. Moreover, it tried to give an insight to a discussion on the lay people perspectives on the socio-cultural contexts of healing practices. Additionally, it tried to problematize western conceptions of "indigenous medicine" with a special attention to different approaches to health, illness, and identity. The intent of this study was also to show how ethnographic research on indigenous medicinal healing practices can better enrich our knowledge of the cultural and symbolic values of indigenous medicine and improve the health of peoples in remote rural areas.

Therefore, this study ought to fill the research gaps recognized in the reviewed studies on the present status of indigenous knowledge and utilization of indigenous healing in Ethiopia in general and the study area in particular. To preserve indigenous medicinal knowledge, an ethnographical study of socio cultural group will be significant.

The proposed study therefore makes it obvious that indigenous medicine and know-how and many indigenous medicinal practices are energy saving, culturally friendly, and cost effective. Therefore, in numerous communities, they are bit by bit or all of a sudden eroded (Zemede, 2001). This obviously shows first a need to improve our understanding and use of indigenous medicine as an instrument for sustainable health development and second revise some of our present conceptual, theoretical, and methodological understandings with respect to indigenous medicine.

1. 4. Scope of the Study

Although indigenous medicinal healing are not investigated in detail in different areas of the country, this research focused in terms of geography and theme. Geographically, it is

focused on *Tehuledere Woreda* for the following reasons. First and foremost, *Tehuledere* is the center of a unique, religious, medicinal and environmental indigenous knowledge system. It is culturally rich in indigenous medicinal practices. Besides, *Tehuledere* is located in diversified ecological zones such as lowland, high land and hill side geography, which, may help the researcher to explore the availabilities of various indigenous healing practices in the study communities.

In terms of thematic issue, this study attempted to examine only the socio-cultural contexts of indigenous medicinal knowledge with particular emphasis on peoples' beliefs and practices. The study focused on the local peoples' indigenous medical beliefs and practices, knowledge transfer system, and their health seeking behavior towards indigenous medicinal knowledge.

1. 5. Significance of the Study

This study have vital implications for the study of indigenous medicinal knowledge systems in Ethiopia in general and the study area in particular. It can also serve as a guideline and an input to health professionals, local administrations, policy-makers, organizations and health institutions the way to use and manage indigenous medicine properly. More specifically, it can be useful in knowledge building with regard to sustainable development, documentation, management and use of knowledge capital for developing socio-cultural contexts-based health care system. It will also provide some important directions as to how to engage the participants in an open dialogue about visions, management procedures and strategies for the development of indigenous medicinal knowledge practice.

Given the great importance of indigenous medicine in the overall health-care system of the country, the study in rural *Tehuledere* is relevant in light of the following facts.

a. Improving the health conditions of people is highly valued; and indigenous medicine has its own contribution to the fulfillment of this lofty goal. Therefore, we have to pave the way for the promotion of indigenous medicinal healing systems of the communities based on a study which identifies the local beliefs, practices,

and interpretations of illnesses causation, as well as systems and means of treatment.

b. Indigenous medicine has been used throughout human history. Nevertheless, there remains a lot to be researched in this area. Hence, this study will make a contribution to developing primary health care model about the traditional ways of treating various illnesses, and simultaneously, serving as a stepping stone for further studies in this special area of indigenous way of managing health.

c. The study can suggest ways in which indigenous medical practices can be promoted side-by-side with modern medicine so that people could benefit from this complementary aspect between the two therapeutic systems.

1. 6. Structure of the Dissertation

This PhD thesis is prepared as per the Guidelines of Dissertation/ thesis writing by the Department of Pharmaceutics and Social Pharmacy, School of Pharmacy, College of Health Sciences, Addis Ababa University. The thesis is emanated from four manuscripts and structured into 5 chapters.

Chapter I deals with the introductory section. It outlines background information, the problem statement; scope of the study; significance of the study; literature review and theoretical framework of the study and describes the structure of the thesis. It conceptualizes the theoretical perspectives of symbolic or interpretive and conceptual framework for illness causation and the Kleinman's cultural system model. The literature review relates the concepts and empirical issues to the context of the research. **Chapter II** present the objectives and research questions of this inquiry. **Chapter III** provides a detailed account of the qualitative methods used for data collection and analysis. It also presents a brief overview of the study area (*Tehuledere Woreda*), focusing on the location of the study area, climate, population, economic basis, social organization, language, and cultural features of the study area and the infrastructural facilities, such as number of modern health facilities.

Chapters IV present the major research finding and discussion of the four manuscript included in this thesis. By integrating the findings of each of the individual papers, this

chapter provides a discussion that addresses and answers the goals of the research. This chapter also describe the limitations of the research. **Chapter V** presents the conclusions, recommendations of the thesis and makes recommendations for further research. Lastly, each papers written as a complete paper and includes an abstract, research questions, background/introduction specific to the title, methods, results, discussion, and/or conclusion are attached at the end of references.

1.7. Literature Review and Theoretical Framework

The primary focus of this section is a review of literature on various components of the study namely; indigenous knowledge, indigenous knowledge of health care and primary health care and review of theoretical perspectives employed to design this thesis.

1.7.1. Literature Review

This section describes the related literature review. The primary aim is to conceptualize primary health care and the role of indigenous medicine. Further the review provides an overview of the historical development of indigenous medicine from the global perspective in general and in the Ethiopian context in particular. Third, it introduces the various characteristics of indigenous herbalists and healers, the beneficiaries' medical beliefs and practices, and their health seeking behaviours. Fourth, it tries to demonstrate major environmental influences on the sustainable use of indigenous medicinal knowledge and related challenges it faces. Fifth, it demonstrates the values of indigenous medicinal plants for tackling health care problems. Finally the review articulates the indigenous medicine and the research focuses so far in Ethiopia.

1.7.1.1. Primary Health Care and the Role of Indigenous Medicine

Primary health care includes individual care with health promotion, the prevention of illness and community improvement. Good primary health care incorporates the interconnecting principles of equity, access, empowerment, community self-determination and intersectoral coordinated effort. It includes a comprehension of the social, economic, cultural and also political determinants of wellbeing.

Primary health care is the fundamental vehicle through which a satisfactory level of wellbeing might make attained. It is concerned with the primary wellbeing issues in the

community and the services reflect the political and socio-economic patterns. In order to make this healthcare promptly receptive and adequate in the community, maximum self-reliance and community participation for health deployment are essential. Such participation empowers communities to deal with their wellbeing issues in the most suitable ways, and community leaders are in the preferred position to make rational decisions concerning primary health care and to ensure appropriate support for wellbeing tasks (Helman, 2000; Wolputte and Devisch, 2002).

Because of the high cost of primary health care, there was a critical requirement for developing nations to redistribute roles and responsibilities with the motivation behind decreasing expenses and in the meantime increasing efficacy and productivity. In general, facilities and health manpower were sensibly satisfactory. Numerous such nations, because of absence of satisfactory resources to satisfy these, adopted unconventional measures such as the exploitation of useful indigenous health practices. These incorporated a more extensive utilization of locally produced herbal medicines and the consolidation of indigenous health practitioners into the health team (WHO, 2002).

The utilization of indigenous medicine to meet primary health care needs first became a focus in 1978 when the World Health Assembly (WHA) drew consideration on the potential utilization of indigenous medicine by encouraging member states to utilize indigenous medical practices in primary health care. The World Health Organization highlighted the vital role of medicinal herbs in the medicinal services frameworks of numerous developing nations. This was fortified amid the Alma Ata Conference of 1978 where it was recommended that governments ought to give priority to the full utilization of human resources by defining the role, supportive skills and attitudes required for each category of health worker according to the functions that needed to be carried out to ensure effective primary health care. It was further suggested that a team composing community health workers, development workers, nurses, midwives, doctors, and where pertinent, indigenous medical practitioners and traditional birth attendants be constituted for primary health care delivery (WHO, 2004).

The Alma Ata Declaration suggestions commanded member states to characterize the role indigenous health practitioners and birth attendants could play as members of the primary

health care team. It became obvious that the goal of Health for All by the Year 2000 would never be accomplished unless all current community resources, including indigenous health practitioners, are prepared and utilized as a part of community wellbeing activities. This is outlined in the WHO Traditional Medicine Strategy in the Year 2000. The strategy was intended to help nations to develop national policies on the assessment of indigenous medical practice for the likelihood of its coordination into the National Health Plans. Indigenous medicine, if it is accepted, could give sound premise to a less expensive, accessible, and reliable health care delivery since it is culture-bound. A Traditional Medicine Policy was produced for the regulatory and legal mechanisms with respect to the promotion and upkeep of good practice and additionally to guarantee the quality, safety, and efficacy of the medicines (WHO, 2005).

Most African nations have so far perceived the critical role that indigenous medicine could play to meet primary health care needs. There is a general feeling that the eventual fate of traditional health practitioners is bright in light of the fact that it is broadly utilized and regarded, particularly by the rural population, which constitutes the larger part (WHO, 2005).

Perspectives on primary health care: Some Concerns

Equitable access to health services for all individuals is an essential principle of a medicinal services framework. Health care frameworks that neglect to give equitable access for various populations increase the gap in health inequalities. Access to and use of primary health care services is one pathway by which disparities; geographic, economic, and cultural can influence population wellbeing, and equitable access to wellbeing services keeps on being a common concern across geographic locations. For universally available health services, looking at how to convey these services and make them accessible regardless of geographic location from health providers' and patients' perspectives is needed. Previous studies have examined geographic access issues related to rural health care and services from the perspective of health care providers. However, less is known about how geographic access to primary health care contributes to health disparities from people's points of view (Wong & Regan, 2009).

In most industrialized nations, a larger number of ailments are culturally defined and still established in customary folklore and a large portion of them are believed to be hard to cure by modern medical practices. Likewise, certain terrible diseases, for example, diabetics and HIV and AIDS have also become traditionally viewed. Frequently these conditions are connected with customary convictions about the socio-cultural way of wellbeing, ailment and human suffering. These diseases have come to symbolize the general anxieties a few people have, for example, fear of the breakdown of ordered society, of invasion or of divine punishment (Hadorn, 1991).

It is contended that cultural values, socio-economic factors have implications on the viability of primary health care services. Researchers argue that endeavours at enhancing wellbeing and preventing ailment will be pointless unless larger social, economic and environmental issues are likewise addressed. These issues include the overpopulation, contamination and global warming. Another issue is the colossal disparity in wealth and resources between different parts of the world. It is assessed that the world's wealthiest, which is only 20%, are 150 times wealthier than the world's poorest 20%, and that the crevice between the two is relentlessly extending (Field and Briggs, 2001). The organization of any system of primary health care, whatever its ideology or origin, should always take these wider socio-economic and environmental issues into consideration. With a specific end goal to be genuinely compelling, it should always have some comprehensive cultural element in it.

Patients have a negative view of primary health care. Medicinal services are described by long lines at health centres, indifferent and regularly impolite health care workers, deficient clarification of the diagnosis and methodology performed dehumanize care and the therapeutic environment. The negative disposition towards primary health care models particularly among Africans is fortified by superstitious convictions with profound established traditions that make it difficult for them to comprehend and participate with modern health care providers and their services (World Bank, 1993).

Numerous health care problems managed by the comprehensive primary health care model are the outcome, direct or indirect of poverty, particularly the failure to afford sufficient food, housing, clothing, sanitation, transport and health care. For the rural poor of Third

World countries, another real obstacle to wellbeing and health care is not their cultural conviction frameworks, but the lack of physical infrastructure, especially roads, railways, bridges, electric power, telephones, clinics. Bad roads, infrequent or expensive public transport and long separations to go to a facility may impact their capacity and eagerness to look for medicinal consideration (World Bank, 1993).

The essential for the achievement of primary health care is subject to the acknowledgment of beliefs and perceptions about cultural factors affecting wellbeing. An effective health care practice grasps the patient's convictions and patterns of behaviour. Such convictions and conduct are represented by cultural beliefs. Patients usually make decisions regarding their health care by choosing when and whom to counsel, whether or not to comply, when to switch between treatment alternatives, whether care is effective and whether they are satisfied with its quality. Although primary health care models have been advantageous to patients, literature analysis demonstrates that the patients utilize the services just in part (Helman, 2000).

It was accepted that the principal contact between African patients and health care services ought to happen in the traditional healing system and subsequently, challenges health care workers to understand that the traditional health service is vital if primary health care is to succeed. Traditional health practitioners are portrayed as the most essential primary health care service in an African setting. The patient’s ability to visit traditional health practitioners and at the same time make use of primary health care services indicates his/her desire to exercise freedom of choice and the interrelationship between the two medical systems. It is in the patients’ best interest that each system respects the other’s different perspective (Chipfakacha, 1994).

Studies demonstrated that there are patients’ disappointment with the way in which primary health care services are rendered, for example, long waiting times at the primary health care clinics. Their dissatisfaction is regularly intensified by the way that they needed to leave without seeing a health professional or without medication. The patients have a tendency to lose their trust in the health service, or turn out to be sick, and cannot return for a prescription or further treatment. This brings down the compliance rate of patients with conditions, for example, tuberculosis with devastating effects for the individual and

the country. This circumstance requests that there ought to be well-trained and competent registered primary health care nurses, necessary commitment, responsible authorities, proper infrastructure and resources to render good quality health care (Rapakwana, 2004).

1.7.1.2. Historical Development of Indigenous Medicine in Ethiopia: An Overview

Indigenous or traditional medicine has a long history. It is a society conceived medicinal services model discovered everywhere throughout the world. The chronicled inception of indigenous therapeutic knowledge can be followed back to Egyptian and Babylonian system of human health care services and it later extended to China and India (Croizerier, 1968). The Ethiopian indigenous medicinal framework is fundamentally a subcategory of the African indigenous restorative framework with some influence from Egypt and Greece and has its own particular characteristic highlights (Endeshaw, 2007)

In the Ethiopian setting, the traditional life of the individuals is painted with the sign of extensive utilization of indigenous medicinal plants with different levels of complexity inside of the indigenous healing wisdom. It is mixed with religious thinking and different convictions. So that numerous species of Ethiopian medicinal plants have a long history of utilization as cures (Endeshaw, 2007). As indicated by (Fekadu, 2007), the historical backdrop of the utilization of indigenous medicine in Ethiopia uncovers that such utilize goes back to the time of the Axumite kingdom.

Many studies affirming to this exploration, and which specify, among other traditional practices, that an extensive number of medicinal plants were utilized for diverse aliments. Those articles stated that amid the period of the Axumite kingdom (seventh- eleventh C), around 8,000 plants were utilized as medicinal agents. This period was trailed by the Zagwe dynasty (eleventh- thirteenth C), amid which time around 2,800 medicinal plants were recorded to have been utilized (Berhane Selassie, 1971 in Fekadu, 2007). Also, amid the time of Gondarine kingdom (1636-1865), medicinal plants numbering around 2,900 were utilized. A manuscript was likewise recuperated from the remains of Aba Jifar's royal residence in Jimma amid the time of King Menelik II over 100 years ago. It included around 589 plants which were utilized as remedial agents. Near 700 medicinal plants were

additionally recorded to have been utilized amid the rules of King Hailemelekot through Emperor Haile Selassie I (1870-1974) (Berhane Selassie, 1971 in Fekadu, 2007).

Indigenous Healing practices from Imperial Era to Date

As demonstrated by researchers in the mid twentieth century, religious-based healers constituted a sizeable number of educated wellbeing professionals in the current Amhara area of Ethiopia. They provided their medico-magical services to a cross section of the region's population. However, the extension of western biomedicine and education represented an impressive test to the about monopolistic position of cleric healers. They needed to devise techniques to guarantee their survival in the changing society where the state was set on organizing the nation's health-care system along the biomedical lines. Cleric healers needed to discover approaches to work in a pluralistic restorative environment.

Notwithstanding the negative states of mind toward indigenous healers that were encouraged by elites and experts of western biomedicine during much of the first half of the twentieth century, the Imperial regime started to embrace a considerably more accommodative position toward indigenous therapeutics starting in the 1940s. The Imperial Government's backing of indigenous medicine was, to some degree, a signal toward protecting the nation's cultural heritage, and mostly a declaration of its backing for the counter colonialist patriot opinion that was starting to spread across the African continent. Cleric healers played an important role in opposing the Italian occupation. Beyond these nationalist and ideological considerations, be that as it may, the state, mindful of the shortage of western-style medicinal facilities and biomedical health-care providers in the country, was constrained to tap indigenous restorative assets and recognize the part of indigenous professionals in overcoming the country's pressing health problems.

The Emperor, whose authority was augmented by spiritual powers provided by cleric healers, was a strong advocate of integration. Perceiving the significance of indigenous therapeutics for the wellbeing of the Ethiopian population, the government issued two proclamations, in 1942 and 1948, which recognized the value of indigenous mending methods, while denying any practices that may jeopardize human life.

Article 8 of Proclamation No.27 of 1942 reads:

> Nothing contained in this proclamation shall be construed so as to prohibit or prevent the practice of systems of therapeutics according to indigenous methods by persons recognized to be duly trained in such practice provided that nothing in this Article shall be construed to authorize any person to practice any indigenous system of therapeutics which is dangerous to life.[1]

At last, the administration was additionally wished to regulate who could practice indigenous medication. Along these lines, the 1948 proclamation built up an arrangement of enrollment or permitting for indigenous healers. Licensing did not legitimize the work of all indigenous healers. Certain mystic healers, whose therapeutic services were for the most part centered on treating non-physical ailments, such as *Zar* shamans, were seen by Church leaders as potential threats to the spiritual leadership of the Orthodox faith and the security of the state.

While indigenous healers kept on confronting regulatory activities that debilitated their capacity to practice straightforwardly, the Imperial period represented an era of relative openness and freedom for indigenous healers, including religion-based healers. Be that as it may, the authority of religion-based recuperating was seriously undermined by the fast development of western training and proficiency and the development of printing during the Imperial era. What can be gained from the endeavors of the few perceptive individuals in the 1950s might be useful to recognize and clarify why experts of indigenous and biomedicine wretchedly neglected to enhance their unfriendly connections and bolstered the 'continuation of polarization and separate development' of the two medical systems (Kassaye et al, 2006). The foundation in 1979 of the Office for the Coordination of Traditional Medicine, an independent department within the Ministry of Health, had additionally failed to rectify past mistakes and made a genuine effort to train, organize, and register indigenous health practitioners and create an atmosphere of cooperation between

[1] See Imperial Ethiopian Government, *Negarit Gazeta*, A Proclamation Relating to the Registration of Medical Practitioners**,** No.27 of October 1942. Proclamation No. 100 of September 1948 reaffirmed the same principle. See Imperial Ethiopian Government, *Negarit Gazeta*. Sub-Article 3 (B), 1948. A similar legal provision was made in the 1957 Penal Code, in fact, with an addition of a phrase in Art.518 (4) which says 'no such person shall be authorized to practice except amongst the local community to which he belongs …'

indigenous and allopathic medicine. A historical appraisal like this one may be of assistance to comprehend why a medical pluralistic approach still remains a dubious issue to be figured with and being neglected as a practical and feasible alternative. As contended by Good, "Medical pluralism is a resource, not a barrier to better community health" (Good, 1987)

During the *Darg's* regime, the military communist government, that took control of the nation in 1974, indigenous recuperating practices including religion-based healers confronted new challenge. The *Darg*'s, with a communism political framework, endeavors to take out religion, including types of mending that depended on religious convictions, put religion-based medication in a mess, and upset the production of learned healers. Be that as it may, the deterioration of the public health framework and the adoption of the WHO's 1978 Primary health-care Strategy, convinced the military government to diminish its antagonistic state of mind toward indigenous healers. In recognizing the value of indigenous medical knowledge, nevertheless, the *Darg* stressed what it saw as is viable components, concentrating essentially on herbal remedies. In the meantime, it to a great extent dismisses the value of spiritual healing and the religious aspects of religion -based medicine. It concentrated for the most part on the training of traditional birth attendants, and avoided different indigenous healers from partaking in the primary health-care training programs. While it created a Coordinating Office for Traditional Medicine, and organized a limited number of seminars and workshops on indigenous medicine, these exercises did little to beat the suspicion that healers had of a legislature that had before endeavored to dispense with their practices.

The administration that succeeded the military regime in 1991 incorporated traditional medicine in its health policy. The 1993 health policy addresses the need to develop traditional medicine, including the adoption of directions and registration of healers, and its continuous reconciliation into the biomedical framework. Notwithstanding, little has been accomplished so far; such as the launch of registration /licensing healers or guidelines in May 2013, under proclamation number 661/2002 article 55. The healers in this directive include only those who use herbs and physical manipulation .But this directive did not

acknowledge religious and spiritual healing system, healers who used herbs and rituals in the practices.

The endeavors of successive Ethiopian governments to deal with indigenous healing system have neglected to accomplish a successful mix of indigenous recuperating practices and western biomedicine. Despite what might be expected rehashed assaults on healers combined with confused endeavors to characterize and control indigenous medicinal practices have disheartened healers from taking an interest in endeavors to coordinate them into the nation's wellbeing framework. In the meantime, state policies, since the Italian period, have undermined the act of religion-based recuperating that had once dominated the medical marketplace among the Amhara, and prevented the training of new generations of cleric healers. The knowledge imbedded in esoteric magico-medical texts and the capacity to legitimately convey it is in peril of vanishing.

Numerous cleric healers perceive that they have to give evidence of the hypothetical relationship between the material and non-material components of their treatments and their pragmatic worth. Moreover, they recognize that any push to build up an integrated system of medical care will require healers to cooperate to systematize religion-based medical knowledge. This cooperative exertion would likewise aim to produce new standardized magico-medical texts. At the end of the day, caring for the literate healing tradition is the same as caring for the health-care needs of the majority of the population. It is only with cleric healers' wholehearted participation and examination of mystical/restorative messages that the blemishes and inadequacies of the written knowledge that have happened over the past centuries can be redressed. By the same token, such a try would help scientists to value the feature of the Ethiopian religion-based restorative modalities in connection to the different schools of mending conventions that had been working and archived in various parts of the world.

Right now, be that as it may, such a collaborative effort is a long way from turning into a reality. Numerous healers stay impervious to withdrawing from a tradition in which restorative knowledge and its transmission have been closeted in mystery. Additionally, a considerable lot of the individuals who possess knowledge of religion-based medicine are growing old and there may not be time to develop the type of long term collaborative

project proposed here. Even the first step of creating healer associations which would begin the necessary collaborative work faces numerous difficulties.

Cleric healer question and suspicion of government initiatives in traditional medicine created during the *Darg* period have continued into the post-*Darg* years. At the same time, post-*Darg* governments have not altogether changed Darg strategies with respect to the treatment of indigenous healers. The post-1991 administration, parading itself as a promoter of another strategy in light of cultural, religious, linguistic and regional differences of the nation's multi-ethnic population, has done little to advance the strong culturally based arrangement of restorative knowledge that is the premise of religion-based recuperating. In the meantime the strategy of regionalism has obstructed the advancement of a national healers' association.

In this manner regardless of the general population's confidence and trust in indigenous mending practices, numerous cleric healers are harried by the continued underutilization of religion-based medico-magical knowledge, and by the gradual loss of qualified healers, as knowledgeable healers pass away and fewer and fewer new healers are being trained. All the more vitally, cleric healers are extremely worried about the harms delivered on the notoriety of religion - based recuperating by people who wish to ruin religion - based healers by underscoring the unsafe and unethical actions of the many fraudulent, ill-well-trained practitioners who claim to be practicing religion -based medicine.

The boundaries to building up a successful integration of indigenous mending traditions and primary health-care in Ethiopia have profound roots extending back to the early presentation of western medicine and education. Any effort to conquer the obstacles to integration need to comprehend this longer history and how it has transformed indigenous medical practices, reshaped the medical marketplace, and characterized the dispositions of both religion -based healers and the state.

1.7.1.3. The Values of Indigenous Medicine in the Ethiopian Context

The reviews from WHO (2002) state that significant numbers of the world's populations depend predominantly on indigenous medication, for the most part of plant source to meet their essential primary health care needs. Indigenous restorative plants have been ordinarily utilized all through the world including Ethiopia. Numerous looks into contend that it is

the foundation of customary treatment since most of the rural people rely upon these indigenous therapeutic plants for their health care (Bishaw, 1988; Giday et at, 2009).

In Ethiopia a significant number of people use indigenous medicine. About 70% of the Ethiopian population depend on indigenous medicines derived from indigenous plants (Bishaw, 1991 and Kassaye, 2001). There is also a large magnitude of use of interest in medicinal plants due to socio-cultural acceptability, accessibility, affordability, and biomedical benefits of the indigenous medicinal plants (Tilahun and Gidey, 2007).

It is further argued that more than 95% of the indigenous medical preparation is of plant origin and more than 80% of the people are dependent on plants for their health services (Dawit, 1986). According to Bishaw (1991), many of the rural Ethiopian population depend upon biological resources for day to day survival. Access to the plants provides a crucial contribution to livelihoods a buffer against poverty and health problems. Ethiopia is blessed with a rich plant biodiversity of more than 25,000 indigenous plants (Kassaye, 2001). It was also mentioned that some people utilize indigenous medicine as a second choice probably due to the stigmatization and marginalization of indigenous health care in the country.

As indicated by Fassil (2001), a significant number of population depend on indigenous medicine as their health care system. On the other hand, evidence on the quantity of plants utilized in indigenous medication and how they are utilized as a part of traditional treatment is not thoroughly reported. Be that as it may, numerous nations need complete inventories to their therapeutic plant species (WHO, 1993). Yet, such inventories are essential in investigation to distinguish one of a unique and important constituents. Medicinal Plants in indigenous health care cover the helpful plants for essential medicinal services and as solution for ailment and harm, and plants utilized customarily for foods and beverage which are trusted that they are useful for health (Asfaw et al., 1999). Because of its long period of practice and presence indigenous medication has turned into an essential part of the way of life of Ethiopian people (Kaba, 1993).

Indeed, even today, it is normal for individuals living in rural and urban regions to treat some commen diseases utilizing plants accessible around them, such as *Hagenia abyssinica* to expel tape worms, *Ruta chalepensis* for different wellbeing issues (Abbink,

1995). The proceeded with reliance on traditional medication is to a great extent adapted by economic and social components (Dawit et al 2003; Abbink, 1995). Modern medicinal administrations are difficult to reach to the larger part of the people because of their expenses. Because of deficient coverage of the “modern " restorative framework, and lack of pharmaceuticals and excessively expensive costs of " modern " medications, the majority of Ethiopians still rely on upon traditional medicine. The issue of guaranteeing the impartial delivery of modern health care has lent hand to such proceeded with reliance on herbal drug (Dawit et al, 2003).

1.7.1.4. Indigenous Medicinal Beliefs and Practices in Ethiopia

Indigenous medicinal services convictions and practices are developed against a foundation of consistent social connection and cooperation where adherence to social personality, group norms, and cultural customs play prominent role. In relation to this Foster and Anderson (1978) state that convictions in regards to wellbeing and disease express *larger psychological* components that shape the decisions individuals make about wellbeing related *behaviors* and practices. On account of socio- *cultural* perspective an anthropologist, the predominant *interests* include: *traditional medical system (Ethno medicine*), and medicinal work force, on a *concrete* level, *knowledge* of indigenous healing convictions and practices is essential in arranging wellbeing *programs* and in conveying *health service* of *traditional* people groups. "Indigenous medication" as a feature of a general public's medical norm, is an antiquated and culture conceived method, the sum total of a person or a group’s wellbeing related knowledge, convictions, customs, norms, rituals and symbols. It is expected to utilize plant and animal products and mineral extractions to heal a variety of health problems (Crozier, 1968). Thus, each cultural gathering of the group has built up its own mechanisms of perceiving, categorising, and treating health problems.

Similarly, in Ethiopia the indigenous medicine is also deep-rooted in the cosmology of the society and has been providing health care model found the entire world (Kaba, 1993). For the most part, numerous individuals have their own healing knowledge before the coming of “modern " medicine in Ethiopia (Pankhurst, 1990). Kloos & Zein (1993) have likewise contended about the common practice of indigenous medicine in Ethiopia as "ethno

medical convictions and practices keep on being generally taken after all through urban and rural Ethiopia, reflecting impressive cultural continuity and the persistently poor accessibility and quality of most modern health devices." In connection to this, the national 1982-83 rural health survey, (cited in Kloos and Zein, 1993) uncovers that a large portion of all wellbeing seekers in Ethiopia use indigenous healers and self-treatment.

Given the importance of indigenous medicine in Ethiopia, it is of paramount importance to seek deeper understanding of its underlying logical and curing circumstances in order to situate health programmes and clinical activities in the socio-cultural context of the communities (Getachew et al, 2002). Contemporary medical anthropologists utilize the idea of adaption to centre consideration on "people as dynamic, rational decision-makers who select from a scope of option practices or wellbeing looking for conduct contingent upon their knowledge resources and different variables" (Foster and Anderson, 1978:521).

An indigenous medical strategy is the reflection of the society's collective medical beliefs about causes of health problems and choice of treatment alternatives (Good, 1987). In this connection, Young (1970) suggests that Ethiopian medical belief system is the outcome of a long process of interaction and contact among diverse peoples and their traditions notably with the Arab world. According to Young (1970), medical belief system refers to "the set of ideas, opinions, and attitudes concerning health and health related circumstances and most medical beliefs are the reflection of the society's overview". An indigenous medical strategy is, therefore, believed to be the indication of beliefs about causes of illness, treatment of its problems, choices of treatment alternative, and other heath related ideologies.

Treatment strategies can be classified as home remedies, indigenous medicine by local healers, and "modern" medicine. Home remedies are the most popular and yet over-looked sector of heath care strategy among all societies (Helman, 2007). In Ethiopia, especially in the rural areas, it is common to seek treatment from home before any other action for health problems including malaria incidence (Kaba, 1993). The second aspect of home remedies is the use of some medicine at home level. It is common to have free flow of information about the therapeutic effects of a number of medicinal plants among members of the community. For overwhelming attribution of patients' illness to

supernatural causation, healers frequently combine magico-religious, rituals and empirical techniques, particularly medicinal plants and Holly water in their curative strategies (Kaba, 1993).

Indigenous healing, on the other hand, is often called “folk”, “non- western” or “local.” It is the major health care strategy that people turn to in case of ill-feeling after trying home remedies, usually; people seek treatment from local healers for comprehensive problems within which health problems are embedded. Local healers’ activities to deal with the causes of health problems and their possible treatment capabilities can only be understood with the wider community (Kaba, 1993).The “modern” medicine strategy is the other strategy that people tend to get for health care.

1.7.1.5. Health Seeking Behaviours

Wellbeing has always been mankind's most extreme preoccupation and it is diversely conceptualized in distinctive societies relying upon their socio-economic and cultural backgrounds. While some people refer to health as “a condition of total well-being,” others refer to it as “related to physical and mental well-being” (Dubos, 1968: 68). Culture is, hence, a lens through which life processes, including wellbeing problems, are perceived, interpreted, and consequent attributes are made. This is on account of "one response to wellbeing is frequently connected to the underlying cultural beliefs, values, and life experiences, which play an important role in the delivery of health care services” (Kaba, 1993:6). It is impacted by physical, biological, social, cultural, and behavioural factors. Health and the behaviour of individuals and the social groups to which they belong, are all part of the larger social environment of the community, society and culture in which they are situated, and these in turn are shaped by geographic and other physical environment factors (Last, 1987).

Kleinman (1980:12) conceptualizes illness and disease as socially constructed “explanatory models” that represent patterns of thought that provide answers to questions regarding etiology, symptoms, cause, course, and treatment. Becker (1990) describe wellbeing behavior as dynamic processes and suggest that patients’ adherence to treatment is determined by a set of predisposing, enabling, and supportive factors. Predisposing factors include health beliefs and attitudes toward the illness itself and the health services.

Enabling factors are related to the availability and accessibility of relevant health services. Supportive factors include emotional and practical support from family, friends, and health personnel.

Understanding wellbeing and wellbeing -related practices is related to specific culture, context, and ethnic-group. Medical convictions and practices are to a great extent subject to cultural foundations; people carry with them the presumptions, values, and knowledge that belong to their communities and make up their social identity. Culture and "ethnicity" create a unique pattern of beliefs and perceptions as to what *health* or *illness* actually means. Level of experience sharing has been indicated to represent for differences in the use of health services within ethnic groups after controlling for age, sex, and health status (Anderson et al, 1997).

Social scientists argue that the natural world is known, comprehended, interpreted, and mediated by culture. People from diverse cultures may have very different view of a particular disease, its causes or appropriate treatment and may cluster together and give different weight to various signs and symptoms of illness as well as they give different significance to affliction in different parts of the body (Waddel & Petersen, 1994). So also, as indicated by Inhorn & Brown, (1997a: 120) "perceptions may vary within a cultural entity, shaped by such factors as educational level, social status, and degree of exposure to an urban or cosmopolitan environment". The culture to which we belong strongly influences our values, including our attitudes towards health. Knowledge, attitudes and skills play an important part in the adaption and maintenance of specific behaviors, including many consciously health-related behaviors. This implies that the socio-cultural factors and environment influences knowledge and attitude of human's health care behavior (Farmer, 1999).

Some beliefs have obvious consequences that are rather adverse to communicable diseases. Belief in local remedies and some misconceptions often produce often a fatal delay in a correct care delivery. Beliefs in evil-spirits as the cause of the disease can lead to certain fatalism that makes active public health measures difficult to institute (Farmer, 1999). As many countries of Africa, misconceptions and beliefs in related to health care would affect the life of the Ethiopian people (Torrey, 1967). In Ethiopia studies indicate that factors

determining health care options are different. They include: age, sex, religion, educational level, ethnicity, income level, occupation and many others (Kloos & Zien, 1988). Hence, in this study, an attempt will be made to explore the impact of these factors for health seeking options of the community in Tehuledere area. Indeed, the study of health seeking behavior helps to perceive what people actually perform in order to be healed (Schirripa, 2010).

1.7.1.6. Current Challenges of Indigenous Medicine: Emphasis to Ethiopian

Presently, as a consequence of wide and unsustainable utilization, increasing economic importance, and ecological elements, indigenous healing practices using medicinal plant resources are lessening at a disturbing rate (Zemede, 2011).

The loss of medicinal plant diversity is intensified by loss of indigenous knowledge on therapeutic plants in Africa, as an after effect of the death of the elderly individuals who are overseers of this knowledge, and the rapid socio-cultural change of social orders, limiting the transfer of knowledge to younger generation. Furthermore, Ethiopian indigenous restorative knowledge is kept in strict secrecy; then again, it is dynamic in that the practitioners make every effort to widen their scope by reciprocal exchange of limited information with each other or through reading the traditional pharmacopoeias (Dawit, 1986). One of the essential dangers of indigenous medicine is the loss of species of medicinal value. There is evidence that extinction of such plants species is obvious. This is because of the fact that the change of climatic condition and disturbance and over exploitation by humans are causing major global reduction of plants diversity (Allen and Barnes, 1985).

Since indigenous medicine are frequently simple to access compared to “modern” medications, indigenous healers remain in high demand in the health care system as components to the “modern” medicine (Cunningham, 1997).

Indigenous knowledge on remedies in numerous nations, including Ethiopia has gone from one era to the next era verbally with great secrecy (Jansen, 1981). Indigenous medicine has been practiced for the last several thousands of years, but it found its legitimate place in the WHO program only about 35 years ago (WHO, 1978). Moreover, pharmaceutical businesses and numerous looks into on plant based medications have now re-found that

plants have much to add to the disclosure of new, effective, safe and profitable therapeutic agents (Pistorius and VanWiik, 1993). On the other hand, as indicated by Cunningham (1997) there are different constraints relating to the development of indigenous medicine. To specify some, there are need institutional backing for production and dissemination of key species for Cultivation; lack of appropriate technology for post-harvest and pre-processing purposes adapted productively and effectively; and insufficient documentation; scientific experimentation for verification of the herbalists' claims; and lack of preservation of medicinal extracts for extended shelf life.

The Ethiopian indigenous therapeutic information, which is available in rural communities, is propagated by listening in on others' conversations inside of families and groups. Attributable to this most of the time they are fragile and prone to be lost when groups emigrate to towns or to different cities. Likewise it can be lost by life style changes, for example, industrialization, and rapid loss of natural habitats (Dawit and Ahadu, 1993; Cunningham, 1997). Additionally, numerous studies contend that modernization and modern education has its own impact on the youth's interest to preserve and use indigenous medicine. It is shown that younger people have less medicinal plant knowledge as compared to older ones, which could be attributed to the lack of interest from the younger generation to learn and practice it due to the ever-increasing influence of modernization (Tesfaye and Sebissibe, 2009; Giday et al, 2010; Tilahun, 2009). With everything taken into account, the prompt and serious threat to the local medical practice appears to have originated from the expanding impact of modernization. This mainly because in one way or another potential threat to the medicinal flora is as a result of the increasing trend of using herbicides and the diminishing size of plots left as fallow lands. This study therefore attempts to give attention in the study area for the risk of loss of indigenous medicinal knowledge appears to be high in connection with lack of transfer of knowledge among family members and friends. And it emphasises on the need for creating awareness among community members about the significance of preserving and conserving indigenous medicinal plants before they disappear.

1.7.1.7. Indigenous Medicine and the Research Focuses in Ethiopian

Research on Ethiopian health care traditions has, to date, paid little attention to these vital socio cultural local contexts. Instead, it has mainly focused on medicinal plants and their specific constituents. In search of information on Ethiopian indigenous medicine, researchers have generally focused their attention on three main sources: the knowledge and practices of professional traditional health practitioners; Ethiopia's ancient medico-religious manuscripts, containing elaborate herbal recipes for a wide range of health conditions; and herbal markets. The following discussion provides an overview of the insights afforded by such investigations.

One can easily search that past research on traditional herbal medicine in Africa in general and Ethiopia in particular has focused on expert or specialist traditional health practitioners (i.e., traditional healers, herbalists, diviners and traditional birth attendants). According to Fassil, 2001, traditional healers in Ethiopia are generally accepted for their valuable knowledge regarding the therapeutic properties of plants. It is not surprising therefore, that the knowledge and practices of traditional health professionals have constituted an important subject of research on Ethiopian traditional medicine. Consequently, Ethiopian traditional health practitioners have been summarized by several researchers (Bishaw, 1991b; Kaba, 1993; Young, 1982; Gedif, 2002).

As observed by Fassil (2001) for her PhD studies in the "understanding of traditional health knowledge in North West Ethiopia":

*"……it is only recently that researchers have succeeded in involving the **debterra** in the documentation of traditional medicinal plants and their various uses (cited in Abebe & Ayehu 1993). The **debterra** have tended to be secretive about their knowledge, often claiming that disclosing information on the use of plants would compromise the efficacy of the remedies. The extent to which these claims are grounded in genuine cultural belief rather than pragmatic socio-economic interests, i.e. as a means for protecting their livelihoods, remains open to speculation. However, traditional healers have been known to sometimes deliberately provide incomplete or misleading information on the preparation and use of various herbal treatments. Hence, the reliability of the information*

provided and, more importantly, how it relates to current health practices in the public domain has not always been clear."

The other important area which attracts the attention of researchers is an ancient written health tradition. Different literatures confirm that African health traditions, including those in Ethiopia, are passed down over generations by word of mouth. However, Ethiopia also has an ancient written health tradition, which has been the focus of many studies to date. For example monasteries throughout the northern highland have ancient medico-religious manuscripts or *Etse Debdabe (herbal letter),* pharmacopeia for various ailments. But according to Taddese and Demissei, 1992: *What is conspicuously absent from these texts is the 'context', i.e. how these records relate to current local realities. Although it is postulated that many of the traditional practices of different cultural groups throughout the country are related to these written pharmacopoeia, there has been no systematic effort, to assess the extent to which this ancient literature reflects current local traditional health practices at the local level.*

Ethiopia is also blessed by medicinal species, about 600 native species, which have medicinal value. Therefore, a systematic inventory of the country's medicinal plant resources figures among the planned activities of the cross-sectoral research and development project was approved for World Bank support (IBCR, 1999). In line with this most botanists, natural chemists, pharmacologists, and, more recently, conservationists have concerned themselves primarily with native species considered to be 'major' or 'significant' for a variety of reasons: plants dominant in a particular community (e.g. Abebe, 1986); traded/in high demand (eg. Kloos et al., 1978); plants associated with adverse side-effects/ toxicity (e.g. Abebe, 1986) and finally, plants frequently cited in the prescriptions of traditional healers, or ancient herbal letters (e.g., Abebe & Ayehu, 1993).

Therefore, much of the work carried out so far, has ultimately been driven by an interest in particular medicinal plants and their specific constituents. Relatively little attention has been paid to the broader and dynamic social and cultural context in which indigenous medicine continue to be employed by ordinary people in local communities and knowledge about them developed and passed on. Hence, the approach of this study: to explicitly focus

on the indigenous knowledge and practices of community members in contemporary rural north-east Ethiopia from socio-cultural perspectives'.

1.7.2. Theoretical Frameworks

This section describes the theoretical perspectives that guided the design of this thesis. The present study framework was informed by the following theoretical perspectives namely; The Interpretative Approach, Conceptual framework for Ill-health Causations, the God-centric healing model and Kleinman's cultural systems.

1.7.2.1 The Interpretative Approach

According to Good (1994) the interpretive paradigm complements an interactivist position. This is due to the fact that social practices and meanings interact in the organization of illness, for one of the central efforts in healing is to symbolize the source of suffering to find an image around which a narrative can take shape (Good, 1994).

Good (1994) in Kleinman (2009) also uses anthropological analysis to show how "meaning" is created in illness, how cultural values and social relationships, the experiences of the body and sickness situate suffering in local moral worlds. Kleinman's (2009) work combines an interest in complex medical systems and detailed ethnographic analysis of illness and healing in a particular culture. His theoretical development is linked to symbolic and interpretive writings. This creates an opportunity to investigate how local medical worlds - including those of ethno-medicine - formulate and respond to illness, correspond to aspects of reality, produce distinctive forms of medical knowledge, and shape a crucial dimension of human experience. This study explores how meaning and knowledge, with a focus on indigenous medicine, are made in a world of human experience which is formulated and held through symbolic forms and distinctive interpretive practice. This approach was particularly helpful because it enabled sickness associated with ancestral spirits to also be interpreted as a symbolic form of communicating, as a reminder of an outstanding ritual, as a punishment for unacceptable behaviour and as an explanation for the malevolent inflection of harm, etc. (Good, 1994).

In line with this, Kleinman (2009) states that in conventional medicine meaning is attributed to symptoms as they relate to the physiological state of the client. In contrast in the interpretative approach, the disease is distinguished by the client and the way in which

the sick person, his or her family, and social networks construct or perceive, explain and respond to sickness. This approach to illness and health demands a shift from an emphasis on the diagnosis of pathology. Unlike relying solely on diagnostic categories, an understanding of the content and meaning of illness demands the subjectivity of the illness experience be inserted into the therapeutic relationship (Hahn, 1995).

It is also argued that culture provides a symbolic bridge between interpretive meanings and the human body. This theoretical reflection enables the study to explore how medicine constructs meaning and facilitates an examination of how the medical world and its objects are built up for those learning medicine. The world of medicine is accomplished not only by learning the language and knowledge base of medicine, but by learning quite fundamental practices through which medical practitioners engage and formulate reality (Good, 1994). It is also argued that this theory would help to understand how people produce meaning from symbols. It facilitates the health care practitioner-patient relationships. Furthermore, the interpretive approach can assist the researcher to collect information about the view of the community under study pertaining to indigenous healing activities (Laughlin, 1997).

A number of anthropologists have argued that the main components of ritual healing are based in the symbolic and meaning-making dimensions of rituals. For example, Dow (1986) described the healing processes as a 'generalized symbolic medium particularized in such a way as to effect the transaction of emotions in the self-system'. He focused on the primacy of shared mythic worlds which the healer manipulates and dramatizes to fit the client's problems. In relation to this, Kinsley (1996) explains that healing is often a symbolic process that healers are masters at employing symbols and rituals in their treatment of illness. He also explores the ways in which health, sickness, and healing are inextricably related to religious or moral concerns, themes, and practices in almost all cultures.

For the purpose of this study the investigators believed that interpretive and/or symbolic approach was helpful to understand people's values, beliefs, and worldviews of meaningful indigenous medicine in the study area. Understanding a person's worldview and beliefs and the ideological level of culture, provides the template for addressing the global effects

of culture on health behavior (Helman, 2007; Laughlin, 1997). It is apparent that the power of symbols affects not only our perceptions and experiences, but even our physiological realities. The applicability of interpretive and symbolic anthropology is, therefore, reflected widely in the healing traditions of non-western cultures in a way that cultural meanings create the socially acceptable and valued legitimated healing processes and link beliefs to physiological processes (Kleinman, 2009).

Below is the researcher's conceptual framework of the socio-cultural model that illustrates the traditional conceptions of illness causations and associated people's health care options (Kleinman, 2009; Murdock 1980; Padela et al., 2012).

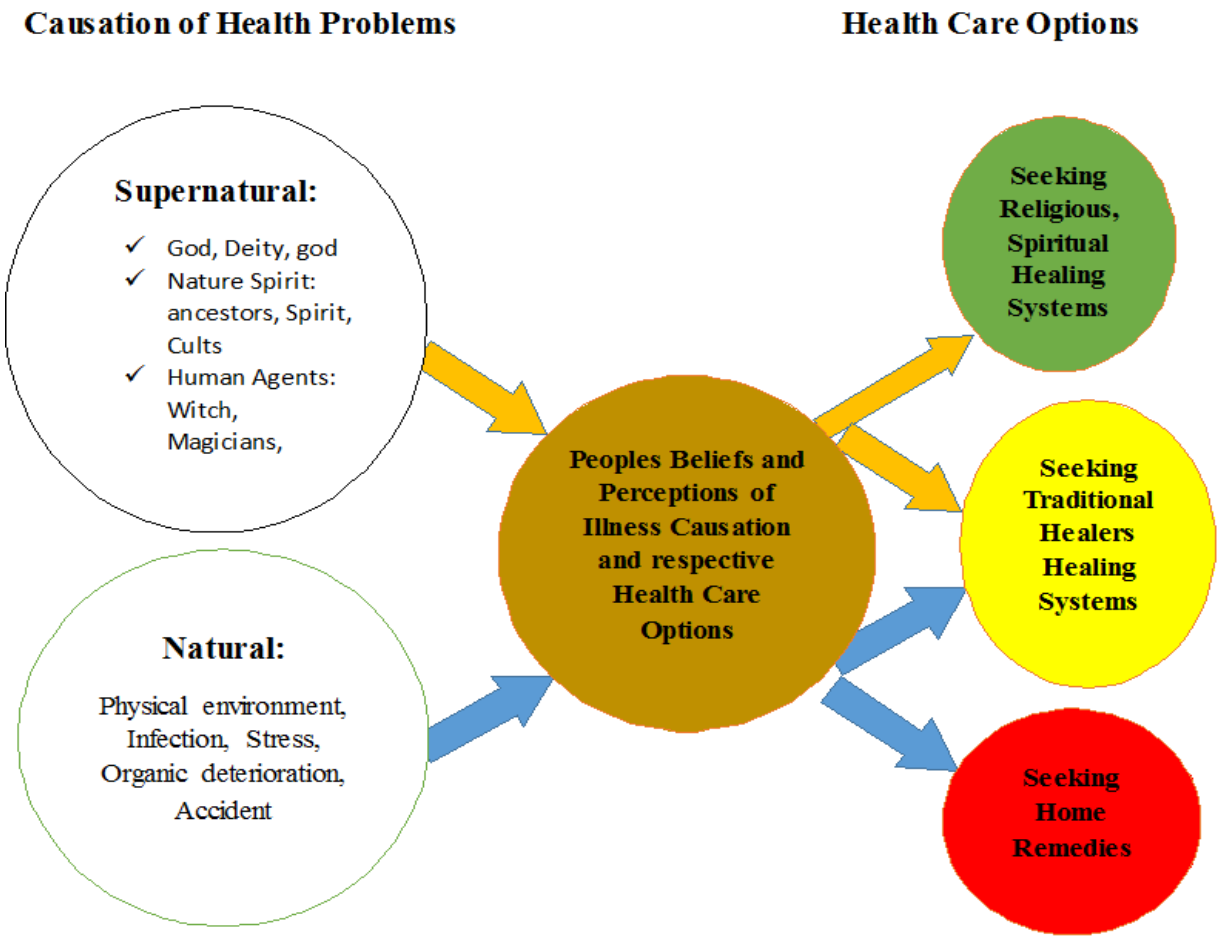

Figure 1: Conceptual Framework of the Study: medicinal health care beliefs and practices and health seeking behaviour.

This framework illustrates Murdock's description of the conceptions of the people he studied towards the causations of illness and their associated health care seeking behaviour. However, the arrows from the centre to outside explain the factors of health care behaviours of ill-persons. As Green (1999) argues theories of illness causation open the way to illness prevention. If one knows what causes a disease, one has also ideas on how to prevent it.

1.7.2.2. Conceptual framework for Ill-health Causation

To conceptualize the ill-health implications and determinants of the study communities we chose to use the ill-health theoretical model from Murdock. As per Murdock Concerning disease causation, the first anthropological distinction to be made is a basic dichotomy between theories of natural causation and theories of supernatural causation. Since medical science does not recognize the validity of supernatural causes, their classification depends exclusively on the anthropologist. For the natural causes of ailment, in any case, primary reliance must be put upon classifications pinpointed by medical science, and the anthropologist's role is constrained to setting them in a framework suitable for comparative analysis (Murdock 1980).

As indicated by Murdock, a theory of natural causation is any theory which regards the impairment of health as a physiological consequence of some experience of the in a way that would seem reasonable' to modern medical science. Under this general category, there are five distinct types of illness causation: infection, stress, organic deterioration, accident, and overt human aggression (1980:9-10). Murdock's world survey demonstrates that the various societies included in the study give varying degrees of importance to the five theories of natural causation.

The other important category indicated by Murdock (1980) is that of supernatural causes of illness. Under this second category, we find three general classifications having their own sub-categories: (i) theories of mystical causation (fate, ominous sensation, contagion, and mystical retribution); (ii) theories of animistic causation (soul loss, and spirit aggression); and (iii) theories of magical causation (sorcery and witchcraft).

While analyzing both the natural causes and the supernatural causes, one can say that the value associated to each of them varies cross-culturally. There are societies which attribute

many of their health problems to infection, organic deterioration, etc., while others focus on fate: mystical retribution, spirit aggression or any other causes of disease or illness. Nevertheless, the two major classifications (categories), i.e., natural causes and supernatural causes are basic frames of investigations in the anthropological studies of diseases and their treatment modalities. Similarly, the ordinary people often give causal explanations for their health problems, and the explanations mostly fall in either of the two major categories, though one cannot deny the fact that some individuals refrain from (or fail to) give such causal explanations due to various reasons. There are also cases in which individuals provide overlapping causal explanations. Below was the researcher's conceptual framework of the socio-cultural model that illustrates the indigenous conceptions of illness causations adopted from the above author.

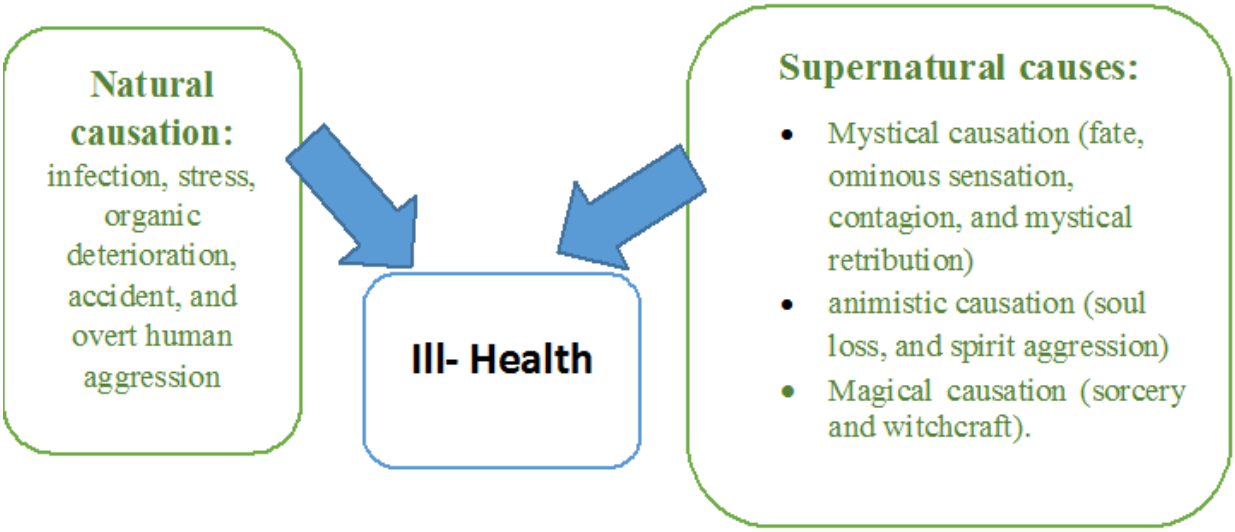

Figure 1: Conceptual Framework of the Study

1.7.2.3. The God-centric healing model

The God-centric healing model described by Padela et al.'s exploration of agents and their roles in healing in the Muslim community was a key sensitizing concept that guided the design of this study (Padela et al., 2012). Padela and his colleagues conducted qualitative exploration involving the major ethnic groups within the American Muslim community, a conceptual model emerged of the key agents in healing. The participants related a God-

centric narrative wherein God's will was manifested in the granting of good health or the plight of illness. Moving from illness to health was said to require the individual to seek God's cure directly through prayer, supplication, and recitation of the Qur'an, or indirectly through human agents, and sometimes both. The indirect means of restoring health are found through imams (the individual who is a prayer leader, chief sermon giver, and spiritual advisor to the congregation of a mosque), family members, health care providers, and one's friends and community. Each agent is viewed as God's instrument, and has various roles within the healing process. Given the importance of religion in the studuy community, this model provided a starting point to explore the role of God in perceptions of illness, health and healing.

1.7.2.4. Kleinman's Cultural Systems Model

Kleinman explained illness as cultural idiom, and saw a relationship between beliefs about disease causation, the experience of symptoms, specific patterns of illness behaviour, decisions concerning treatment alternatives, actual therapeutic practices, and evaluations of therapeutic outcomes(Kleinman, 1980). Thus for Kleinman the health care system is a model that includes health, illness and the health care-related aspects of societies as articulated in cultural systems of those societies. Each arena in the three overlapping arenas (the popular, the folk and the professional arenas) of Kleinman has its own ways of explaining and treating ill health, defining who the healer is and who the patient is and who the patient is, and specifying how healer and patient should interact in their therapeutic encounter. Most health care systems contain all three health arenas within which illness is experienced and responded to. These were also important sensitizing concepts for this study.

The popular arena

The popular arena is known as the lay, non-professional, non-specialist domain of society, where ill health is first recognised and defined, and health care activities are initiated. It includes all the therapeutic options that people utilise, without any consultation or payment of folk healers or medical professionals. The popular arena is seen as the real site of PHC because the family is the main and primary health resource and most

ill health is identified and then treated within the home or family. Most health care in this arena takes place amongst people already linked to one another by ties of kinship, friendship or neighbourhood, or even membership of work or religious organisations. This means that both the patient and the healer share similar assumptions about health and illness, and misunderstandings between the two are comparatively rare (Gilbert et al., 1996).

The folk arena

In the folk arena, certain individuals specialise in forms of healing that are either sacred or secular, or a mixture of the two. These healers are not part of the official or public medical system, and they occupy an intermediate position between the popular and professional arenas. Most folk healers share the basic cultural values and world view of the communities in which they live, including beliefs about the origin, significance and treatment of ill health. When they heal people who are ill they frequently involve the family in diagnosis and treatment. The healer is usually surrounded by helpers, who take part in the ceremony of healing, give explanations to the patient and family, and who answer any queries (Fink, 2002). This is similar to the way Berg explains the role of traditional healers. From a modern perspective, this type of healer with helpers, together with the patient's family, provides an effective primary health care team (Berg, 2003).

The professional arena

The professional arena comprises the organised, legally-sanctioned healing professions, such as modern Western scientific or allopathic medicine. It includes not only physicians of various types and medical specialties, but also the recognised allied professions such as nurses, midwives or physiotherapists. Healers in this arena have the power to question or examine their patients, prescribe powerful and sometimes dangerous treatments or medication, and deprive certain people of their freedom by confining them to hospitals if they are diagnosed as psychotic or infectious. When consulting a professional, the ill person is removed from family, friends and community, at this time of great personal crisis. Patients undergo a standardised ritual of 'depersonalisation', and become a numbered 'case' in a ward full of strangers. The relationship of the health

professionals with their patients is often characterised by distance, formality, brief conversations, and often the use of professional jargon (Jansen, 1973).

1.7.3. Conclusion

The literature reviews noted that the need for conceptualizing indigenous medicine from the historical, socio-cultural, functional, and primary health care dimensions. Also, in this section, theoretically, it has been given due emphasis on interpretive theory, Murdock illness causation theory, God-centric healing model and Kleinman's cultural systems model approach. Adoption of the models produced quality data about the indigenous knowledge and practices that are important for the prevention and protection of oneself against attack by perceived ailments and the knowledge of administering certain indigenous medicines for remedial purpose. This is because it is assumed that culture provides a symbolic bridge between interpretive meanings and the human body.

CHAPTER 2: STUDY OBJECTIVES AND RESEARCH QUESTIONS

The study has the following general and specific objectives.

General Objective

The general objective of this study was to to investigate and analyse the indigenous medicinal practices and healing systems in general and the socio-cultural values associated with indigenous medicines among the *Tehuledere* of North-east of Ethiopia in particular. Based on this general theme, we specifically focused on explorations to identify the local peoples' beliefs and practices of indigenous medicines in the study area.

Specific Objectives

The specific objectives of the study were to:

1. Understand the perceptions of ill-health causation among the study community
2. Explore the relationship among religion, spirits and healing in the *study* community
3. Explore the traditional healer healing practices among the study communities with the goal of constructing a rural primary health care model
4. explore the popular or lay healing practices among the study communities with the goal of constructing a rural primary health care model

Research Questions

Research Question: Following from the objective of the research, the research questions explored include:

1. How do adult community members of *Tehuledere* understand ill-health causation?
2. How do people experience religion, reverence of nature-spirits and human agents in health and healing?
3. How do people experience the management of health problems using traditional healers?
4. How do people experience the management of health problems using traditional healers?

CHAPTER 3: RESEARCH METHODOLOGY

This section describes the methodological framework of the study. It focuses the philosophical foundations, study design, issue of reflexivity in the collection of data, selection of the study sites, methods of data collection, and sampling techniques of the respondents. In addition, it discusses method of data analysis, ethical considerations, and fieldwork experiences and challenges of the study.

3.1. Philosophical Foundation: Ontological, Epistemological and Axiological Considerations

A research philosophy describes the assumptions and research strategies to be undertaken in the investigation. In choosing a research methodology, researchers need to ensure congruency between their paradigmatic stance and the objectives of the study and the research question they wish to address. This is important in order to understand how worldview or beliefs may guide researcher actions, and has the potential to influence research outcomes. The three main philosophical dimensions to distinguish existing research philosophies are ontology, epistemology and axiology. The first branch of research philosophy is ontology and it is concerned with the nature of reality and existence. The second philosophy is epistemology. It is the belief on the way to generate, understand and use the knowledge that deemed to be acceptable and valid (Higgs, Trede & Rothwell, 2007).

According to interpretive philosophy, there are many truths and meanings of a simple fact and these are suitable for every situation and for every research problem (Johnson and Christensen, 2010). The interpretive paradigm seeks to understand, interpret, and search for meanings and theories. It encompasses a number of research approaches, including hermeneutics, ethnography and narrative inquiry. The interpretive paradigm has the central goal of seeking to interpret the world. In this paradigm, knowledge is generated through search for meanings, and through looking for the relationships between symbols.

The interpretive ontological position taken for this study invalidates the thought of a fixed objective reality. It was accepted that the reality related to perceptions of illness causation and managing health problems in the indigenous communities would not be a fixed,

single, or quantifiable phenomenon. Instead there would be different realities, that these realities would be shifting and emergent, and a product of the subjective experience of the individual community members. This prompted the understanding that if the design of this study was to strike a harmony between profundity of comprehension and minimizing structure, semi-structured interviews with individuals would be suitable. Perceiving that "reality" for any given individual might be alterable, it was critical to plan a study with beginning participatory observations and followed by focus groups as well as in-depth interviews to explore how the study communities perceived ill-health causation and healing options.

One's epistemological position depends on the response to the philosophical inquiry of "what would we be able to know?" The interpretivest viewpoint taken for the proposed research prompted the presumption that within our sample of *Tehuledere* communities, multiple interpretations of the same phenomenon (i.e. beliefs in ill-health causation and health care options)were conceivable. From this point of view it was comprehended that giving research participants the opportunity to present their perceptions of their socio-cultural shared experiences as part of focus group and face-to-face interviews would be helpful.

This study used a qualitative exploration of beliefs, practices, healing systems, and personal meanings of indigenous medicine. These were collected through in-depth interviews, focus group discussions, observation as participant, and field notes. This information helps to understand human worldviews and elucidate the emic or insiders' perspectives instead of focusing merely on the etic or outsiders' perspective. This was, therefore, an important process of understanding a social problem based on building a complex, holistic picture, formed with words reporting detailed views of informants and conducted in a natural setting (Spardley, 1980).

As to the collection and analysis of data, it was likewise vital to consider the inquiry of "what are the investigator fundamental values?", and to guarantee that his own values were not obstructing his capacity to comprehend the encounters of the participants in his study. The concern was to ensure that the voices of the respondents were represented as precisely as possible through the observation and

interview, and this implied that the earlier knowledge, experience and perspectives related that he had gained through his own encounters must be isolated from the investigation of the phenomena at hand in order for him to remain as open as possible to understanding the encounters of his participants. The qualitative research methodology which gave the best fit with his ontological, epistemological and axiological positions as well as his primary exploration inquiry was ethnography.

3.2. Methods

The qualitative researcher's interest on detailed description and understanding of phenomena within the appropriate context suggests what type of research methods will be methodologically acceptable. Typically, qualitative research design has the following important features (Barbie & Mouton, 2006):

- A detailed encounter or engagement with the object of study
- Selection of a small number of participants to be studied
- Openness to multiple sources of data (multi-method approach)

We explored our inquiry using ethnographic methods. According to the Blackwell Dictionary of Sociology, "ethnography is a descriptive account of social life and culture in a particular social system based on detailed observations of what people actually do" (Johnson, 2000: 111). Ethnography seeks to understand the social behavior of people living in their natural settings. In this case a culture-sharing group (*Tehuledere*, the study communities) values, behaviors, beliefs and language were described in relation to their local ill-health perceptions and health care options. Given the study's specific concern with the socio-cultural context in which the meaning of ill-health and health care options were constructed, the relevance of the ethnographical method of participant observation was well-recognized. Given that a much longer time frame was usually required to employ this method fully, it was the commitment of the researcher to incorporate its basic principles, i.e stay in the field for long time as an observer (Martin, 1995). An overview of the research methodology and methods is presented in Figure 1.

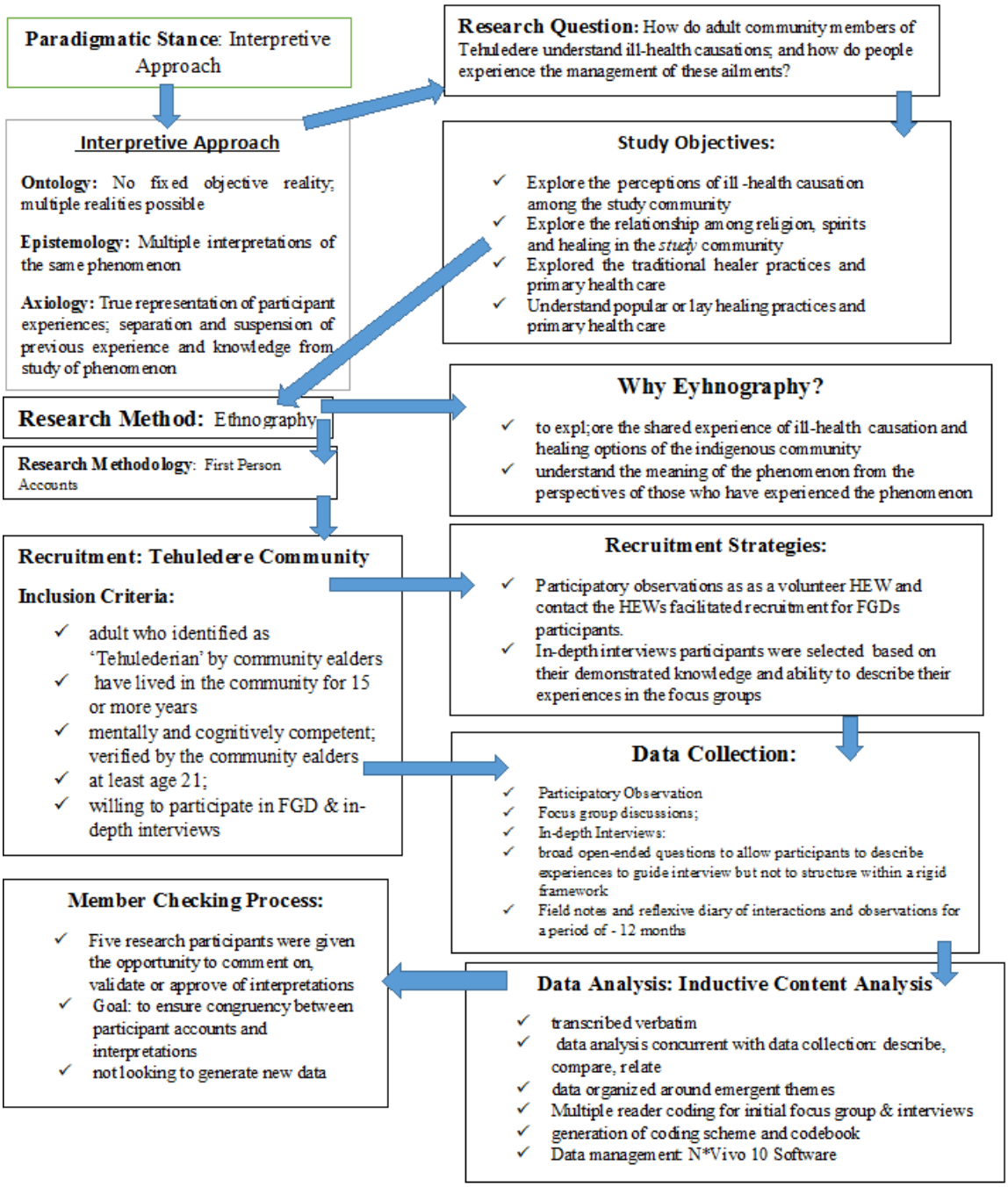

Figure 1: Overview of Research Methodology and Methods

3.2.1. Reflexivity: the Principal Investigator Status as an Indigenous Ethnographer

The principal investigator's status as a "native" offers certain strengths and insights into the cultural issues he was exploring, as noted by Anderson, who stated that "as ethnographers, social scientists on familiar terrain will achieve a greater understanding than elsewhere, because they do not have to surmount linguistic and cultural barriers" (Anderson, 1992: 101). However, despite the relative lack of linguistic and cultural barriers, he had faced the problem of navigating conflicting roles within the culture since he is a member of the educated elite (a University lecturer) and a member of the study community. He had to practice non-judgment and to maintain an awareness of cultural relativity in his work. He maintained an awareness of insider bias and the nature of his conflicting roles, as he is involved in two health systems, one considered orthodox and one unorthodox. He approached this ethnographic work as an "Amharic" speaker and tradition bearer, a member of the "Amhara" elite, and also as a very senior pharmacy professional. He reflected on how these influence his own perceptions, as well as the ways in which other people respond to him. He was also faced with the challenge of being perceived as a powerful individual based on his position as a member of the elite and senior university lecturer.

All of these issues concerning competing roles and social perceptions related to the concept of insider bias, which has both advantages and disadvantages when conducting ethnography. In his case, the advantages included being able to use existing networks and contacts within the indigenous institutions, including the indigenous and religious leaders and the local health officials, and gaining access to a much wider cross-section of people than might otherwise have been available to him. On the other hand, it might be impossible to know the extent to which his informants were open in the perceptions and opinions they share with him or whether they were telling him the things they think he want to hear. The use of open-ended questions, as well as efforts made to engage informants in informal conversations on others topics they themselves raised, were among some of the measures taken to mitigate these limitations.

3.2.2. The setting

A brief description of the national and regional administrative structures is essential for an appreciation of the general position of the study area in the national context. Under the current scheme of governmental structure introduced in 1992, the Federal Democratic Republic of Ethiopia is organizationally and geographically divided into 9 *kilils*, officially called as 'national regional states', and two cities (Addis Ababa and Dire-Dawa). The *kililis* constitute political, juridical and administrative divisions, which reflect the diverse ethnic composition of the population of the country. Each of these states consists of several sub-regions designated as zones. The next lower level of administrative organization is the *woreda* or district (which is often informally divided into smaller subunits known as *ketenas*). Finally, at the grassroots level, is the smallest unit of administration known as the *kebelie*, which directly represents the residents of local communities by whom its officials are elected. The *kebelie* also serves as a functionary of the national and regional state governments within its own jurisdiction. The *kebelie* plays a crucial role in local governance, including the maintenance of local security and in the resolution of legal issues and conflicts. It also serves as an instrument for political mobilization and control on behalf of the national and regional state governments.

In January 2012, preliminary visits were made to *Wollo*, north-east of Ethiopia, including both to the *Woldia woreda* of the North *wollo* Zone, as well as to the *Tehuledere woreda* area. Following this preliminary investigative period, the *Tehuledere* rural *woreda* was selected as the study area in consultation with local authorities and the investigator advisors, based on a number of practical considerations. First, casual observations suggested that the *Haiq* area, perhaps more patently than the *Woldia* area, reflects the impacts of ongoing deforestation, which is recognized as a threat to medicinal plant supplies and the associated local knowledge. The need to capture this potentially 'threatened' traditional knowledge was viewed as particularly opportune for this study. Second, the location of the rural *Haiq Zuria woreda*, close to the major urban centre of the Zone, i.e., *Dessie* town, was also considered particularly favorable, as this would greatly facilitate arrangements for local transportation. Third, conducting an anthropological research is of paramount importance in this area as it has unique cultural, environmental, landscape, and variety of plant species that do affect the nature of indigenous medicinal

knowledge system. Finally, as the administrative capital of the south Wollo Zone, Dessie town, provides a base not only for diverse prominent professional traditional health practitioners, but also serves as the seat of the Zonal Health Bureau and various government agencies concerned with policy-making and development. Close access to these institutions was expected to facilitate the research.

Therefore, ,the study was conducted in the area known as *Tehuledere woreda* (district) in a region known as south *Wollo* located in the north-east part of Ethiopia (Appendix 1). *Tehuledere Woreda* is among the 18 Woredas of South Wollo Zone of the Amhara Regional State. The *Woreda* is situated in the northern part of South Wollo Zone. The *Woreda* is crossed by the Addis Ababa-Mekele road. The capital of the *Woreda*, Haik, is situated 430Kms away from Addis Ababa and only 30Kms from Dessie in Northern direction.

According to Tehuledere *Woreda* Information Office (TWIO) the total area of the *Woreda* is 45,800 hectares with a population of 152,107. Currently, there are a total of 23 Kebeles administered by the *Woreda*, of these 19 rural Kebeles, 2 urban Kebeles and 2 rural town Kebeles are included. The area is characterized by diverse topography. The major relief features that exist in the area are mountain, undulate, plane, and valley. The common topographic feature that covers up 48% of the Woreda is undulate. Of the *Woreda's* total area that is covered Mountains account 26.4%. Plane is the third major relief feature as it takes up 13.3% of the study area. The share of Valley covers 12.3% of the total area of the *Woreda*. Another good indicator of the area's topographic characteristics is the range of elevation. The highest elevated spot of the Woreda reaches 2,928 m.a.s.l. and the lowest elevated point has an altitude of 1,400 m.a.s.l. (TWIO, 2014).

The area is also renowned for the presence of relatively large fresh water lakes. The one well known for its recreational, economic, and religious importance is Lake `*Logo*`. This lake has an area of 23km^2 and has maximum depth of 88 meters. The lake is very close to the Woreda capital, Haik. It could be easily seen while traveling north wards across Addis Ababa – Mekele Road. The other major lake of the Woreda is Lake *Ardibo* with an area of 21km^2 and maximum depth of 66 meters. The *Woreda* has 11 perennial rivers. The major ones are *Kete* River, *Anqerqeha* River, *Burka* River, *Mekawabeba* River, *Fwafuate* River,

and *Gelana* River. These rivers originate from different parts of the *Woreda* and all rivers flow in the Eastern direction. Consequently, all of them are tributaries of the Awash River. According to TWIO, there are 229 springs that don't dry out all year round (TWIO, 2014).

The people in this area are known as the *Wolloye*, are members of the Amhara ethnic group and are largely adherents of Muslim religion. Owing to the large Muslim population, there are 37 mosques in the study area. Orthodox Christianity is the second major religion. There are 19 churches and one monastery (TWIO, 2014). The *Wolloye* speak Amharic, the most widely spoken official national language of Ethiopia.

The culture of the *Tehuledere woreda* reflects a mix of pre-Christian indigenous beliefs, as well as Christian, Muslim and migrant Cushitic Oromo (largest ethnic groups in Ethiopia) influences. After their migration from the southern part of Ethiopia, before embracing Islam as their religion, the people of the *Tehuledere* region continued to make use of their indigenous Cushitic beliefs and practices (Asnake, 1984). The indigenous religion of the people of this region recognizes the existence of a Supreme Being and other lesser spirits, namely, the `*ayana*` spirits which are believed to serve as intermediaries between man and the Supreme Being (Trimingham, 1964; Krapf, 1968). However, most of these indigenous beliefs have been absorbed by, and reoriented into, the Islamic traditions which currently dominate the culture. Our study highlights the importance of understanding the perceptions of causes of ill health and disease in the study communities as a guide to how best to implement public health initiatives in the region.

Furthermore the *woreda* is classified in to three climatic zone: highland (`Dega`=16%); Temperate, cool sub-humid, highlands (`*Woyna dega*`=64%) and Lowland (`*Kola*`=20%).Five of these rural farming communities (one from each of the total five sub-districts) was included in the study.

As the largest portion of the *Woreda* is rural, most of inhabitants of the *Woreda* relay on farming. As many as 91.25% of the total population, relay on farming. Though well overwhelmed the second major income source is daily labor, 3.6% of the total population. The third major economic activity is livestock production accounting 3.5% of the total population. Petty trade (1.8%) and craftsmanship (0.15%) are also sources of livelihood in the *Woreda* (TWIO, 2014).

The education coverage of the *Woreda* is 83%. The *Woreda* has 7 alternative schools for children who can't walk long distance. The alternative schools teach students from grade 1 to 3. There are 5 kindergarten, 6 first cycle school (1 to 4th grade), 20 second cycle (5 to 8th grade), and one high school that includes preparatory school (11 to 12th grade). All are government schools with the exception of two kindergartens that are owned privately (TWIO, 2014).

The *Woreda* currently has 4 health centers and 17 health posts that give healthcare services to its inhabitants. According to the data gathered in April form *Tehuledere* Woreda Health Office (TWHO), 2014 the *Woreda's* family planning coverage was 72.5% and the antenatal coverage was 35.9%. The post-natal coverage was 13%. Of the total inhabitants of the *Woreda* 10.8% of them receive safe delivery coverage. As of June, 2014 the overall health coverage of the *Woreda* was 63.8%. Table 1 below shows the ten top diseases that exist in the area.

Table 1. Ten top diseases of the *Tehuledere Woreda, Haiq*, North-eastern Ethiopia, June, 2014

No	Woreda Level (N=152,107)		Haiq Health Center (N=95,000)	
	Type of disease	Number Affected	Type of disease	Number Affected
1	Malaria	6310	Malaria	3409
2	Other lung diseases	4590	Acute Respiratory Infection	2465
3	Diarrheal disease	1983	Intestinal parasites	1958
4	Intestinal parasites	1791	Gastric	1501
5	Skin disease	1355	Rheumatism	1194
6	Eye disease	1227	Urinary Tract infection	1082
7	Gastric	943	Eye disease	1042
8	Rheumatism	927	Acute Febrile Infection	981
9	Accidents	608	Diarrhea	935
10	Fever	356	Skin Disease	743

Source: TWHO and Haik Health Center, June, 2014

3.2.3. Sampling Procedures and Accessing a Field: Getting In

Health Extension Workers(HEWs), often, young secondary-school graduates and six months training on health issues, are government functionaries who act as intermediaries between the various *kebelies* and the district authorities, in this case, the *Tehuledere* District Health Office – located in Haiq town. The investigators consulted the district's HEWs for selection of study communities. The accessibility and even geographic distribution (agro-ecological zones) of the five *Tehuledere* sub-districts (`*ketene*`) around the urban center provided the primary basis for selecting the study communities (i.e., one from each sub-district). The other criterion was, essentially, the interest by the HEWs to collaborate in the study, as well as the advice they provide regarding the physical accessibility of the various communities and the feasibility of carrying out the fieldwork planned within the given timeframe.

The principal investigator had many reasons for selecting *Tehuledere* as his study area. First, access to these research sites can easily be attained due to his previous experience with the local authorities as research investigator to a thematic research project of *Wollo* University. Second, *Tehuledere* is the centre of unique environmental, medicinal and architectural indigenous knowledge system. It is culturally rich in indigenous medicinal plants. There is the availability of medicinal plants such as *Munichiro* (Rubia cordifolia L.) and *Tembelel(* Jasminum grandiflorum L.*)*, which are used as medicines. Besides, *Tehuledere* is located in diversified ecological zones such as lowland, highland and hill side geographical set-ups, which, in turn, might help the investigators to understand the availabilities of indigenous medicinal healing and the influence of ecology on indigenous medicinal practices.

Therefore, conducting an ethnographic research is of paramount importance in this area because it has favourable conditions of cultural, environmental landscape, and diversified plant species that might affect the nature of indigenous medicine. Specific selected villages are consisting of both highland and lowland features of landscape. For example *Gobeya* and *Bededo* have lowland and highland features, respectively. This is mainly because studies indicate that having diversified landscape including mountain, hillside, plain, lowland, grasslands, forests, evergreen scrubs and rocky areas might

contain more medicinal plants with higher concentrations in the woodlands (Watson, 1998).

Fourth, *Tehuledere's* ecology is a source of the indigenous knowledge and livelihood systems such as agriculture and indigenous medicine. As the *Tehuledere* people are known for their technical and artistic expertise, and social organization such as management of peace and security, unique traditional rites and symbolism, studying their indigenous medicine could help to better understand how indigenous medicine is practiced and preserved.

From those accessible *kebeles* five study *kebeles* were selected purposively, based on criteria's including: agro-ecological condition, *kebeles* with population of reach indigenous health knowledge, and availability of diversified indigenous medicine. Hence, the selected five study *kebeles* were: *Gobeya* from "*kola*" (Population: 5184), *Godguadit* from "*woyna dega*" (Population: 5911), *Bededo* from "*dega*" (Population: 6078), *Jari* from "*woyna dega*" (Population: 1323) and *Muti Belg* from "*woyna dega*" (Population: 4548).

The main phase of the fieldwork for this study was carried out over a period of twelve months (May 2013 – April 2014). An earlier field trip in May 2013 served as the preliminary 'feasibility study' phase. During this preparatory stage, a series of site visits was made to farming communities within five sub-districts of *Tehuledere Woreda*. Informal discussions with community members during this period had made the basis for refining the question included in the various research instruments. The questions was further refined through a brief trial period before the main phase of the fieldwork.

One of the bimonthly district-wide working meetings of all the health extension workers which occurred during this preliminary phase provided a good opportunity for meeting most of the local health extension workers (HEWs) individually. Therefore the investigators had briefed about the study's general objectives and approach and consulted and verified about the selection of communities for the study.

3.2.3.1. Research Assistance and Logistical Arrangements

Before beginning the fieldwork, research assistants were recruited with the help of various contacts in Haik town, including staff of the District Health Office. Two well experienced

public health professionals and residents of Haik town were identified and serve as research assistants at different times during the fieldwork. After an in-depth briefing of the research objectives and the research instruments, both research assistants initially practiced by carrying out interviews jointly with the researcher. Their satisfactory proficiency in carrying out the interviews was ensured through regular crosschecking of the data-collecting instruments. Effective presentation of the questions, completeness of the responses recorded and accurate documentation of additional relevant observations, served as the main criteria for assessing the research assistants' progress.

3.2.3.2. Procedures of Research Participant Selection and Fieldwork Plan

Once the five *kebeles* were selected, planning meetings were arranged with the respective HEWs to discuss the research in further detail and to obtain relevant background information on their respective communities, including data on the geographical features and natural flora, population size/composition, as well as selection of participants. After discussing with HEWs the researcher selected research participants through purposive sampling techniques. According to Silverman (2005), purposive sampling allows researchers to choose a participant, which depicts some peculiarities or processes they are interested in. The inclusion criteria for the selection were: adult of age greater than 21; have lived in the community for 15 or more years; mentally fit, who are verified by the community elders; reported to be knowledgeable about indigenous way of healing. Accordingly, 96 participant for 10 FGDs and 20 participants for In-depth interview were selected from among the participants of focus groups (Appendix 6). Another Semi-structured key informants interviews with 20 interviewees from particularly knowledgeable women and men community members identified by the participants of the women and men focus group discussions, respectively were conducted following the focus group discussions with a view to obtain more detailed understanding of the popular healing systems. Also informal conversations were conducted with seven traditional healers and three health extension workers. This informal interviews were used to identify factors that induce health seeking behaviour of the healers and examine their attitude towards indigenous health-care systems in the study area.

In appreciation of their time and compensation for time spent, small gifts of processed goods were offered to those who participate in the study following the interview and FGD sessions (e.g. sugar, soap and coffee, all well-appreciated items, for which local people would otherwise have to spend scarce cash).

3.2.4. Procedure for Data Collection

A multidisciplinary approach using qualitative ethnographic methods for data collection and analysis was adopted. This is a multi-method study using participant observation, in-depth interviews with knowledgeable participants, focus group discussions, and documents. This combination of methods was intended to give the fullest possible picture of the beliefs in illness causation and indigenous healing systems in the study area. The multi-method research design combines "an umbrella of techniques" typical of field research (Berg 1995).

The investigator was combined his own experience portion with a review of relevant documents that helped define administrative structures and the relationship of such structures to traditional practices, interviews, and focus groups with purposively selected sample. This multitude of methods allowed for triangulation of data collected via different techniques.

The study began as participatory that includes ethnographic observations drawn from the researcher experience (as volunteer HEWs). As a volunteer HEWs, the investigator worked in the selected district regularly on Monday from 9 AM to 5PM from June 2013 until November, 2013. He was also occasionally worked an extra day per week and observed some events that did not take place during his regular volunteer hours. The observations were carried out at the places of the research participants and the health institutions. Particularly, the researcher had the task of observing different activities of the local people such as rituals, festivities, and different public gatherings in related to health practices. For categories like health posts and market place, the investigator did not need to obtain permission since observations took place in public spaces. For category like household, private and governmental professionals and traditional healer, he was worked with them for 1 month after receiving signed consent forms. The investigator wrote field notes to record his observations. Moreover, observations in each setting were carried out by the

researcher over the period of 3 months, conducted at different times of the day and over the weekend. Moreover, we conducted informal interview with some members of the communities during the observation schedules. The participant observation was guided by the checklist (See appendix 8).

Observation of healing practices helped to contextualize indigenous medicinal knowledge, practices, and traditional medicine uses in the indigenous healer and household settings. The investigator also examined the relationship between biomedical and indigenous health practitioners and their patients to understand healer-patient interactions during the healing process. Moreover, it enabled to look at the suffering of the patients and how they perceived and conceptualized their illness, the traditional treatment system or the patterns health-care options of the society. The participant observations of the day-to-day activities of both indigenous healers and the patients were useful to understand the untold accounts of individuals and the patterns of everyday life in the community.

Following introductory discussions with community leaders/representatives (i.e., the village/group village headman and/or deputy), the main phase of the fieldwork in each community was started with two focus group discussion (FGD) sessions: FGD with women and FGD with men. With the assistance of the HEWs and local community representatives (and the approval of community leaders), a diverse group of 8-12 ordinary women community members (of varying age, marital status/household-headship; formal education/literacy levels) was convened in each community. The women's focus group discussion was envisaged as a means of allowing women to freely and informally discuss matters of health amongst themselves, without any socio-cultural inhibitions(for example religious prohibitions) they might otherwise feel if men were to be included in the group. Moreover, a diverse group of 8-12 male community members (of varying age, marital status/household-headship; formal education/literacy levels) were convened in each community. The same discussions questions used in the women's FGD were raised to facilitate discussions, noting in particular, any significant differences/contradictions in the types of responses obtained from the men's group from those obtained through the women's FGD. The discussion schedule was included semi-structured open-ended questions (See appendix 9): what do they understand the major health problems commonly

experienced by their families? What are the main causes of illnesses in the study community? Where do they go for help with these illnesses? What particular illnesses are believed to be treated effectively only through modern medicine, traditional healers and home-based traditional treatments ,and requested to give specific example? If so, what are the main perceived differences? What do they do to try to prevent illnesses? How are decisions regarding health care choices made at the household level? The FGDs were held while sitting in public spaces in the villages and lasted between 1.5 and 2 hours.

Semi-structured in-depth interviews were also conducted following the FGDs from September to November, 2013. The aim of this component was to obtain more detailed information on the indigenous healing systems from particularly knowledgeable women and men community members, a total of 20 participants two from each FGDs, were identified from among the participants of the women and men focus group discussions. The interviews were held at the interviewees' homes and the average interview time devoted solely to the interview protocol was approximately 1-1.25 hours. Focus groups and interviews continued until the data in the key emerging themes were saturated (i.e., key points were repeated and no significant new information was emerging). Also we conducted informal conversations with seven healers and three health extension workers about the beliefs and practices of traditional healers

National health statistics reports and various local government documents were also gathered to provide supportive background data. These include information on population and demographics, general health indices, data on local government health facilities and services, as well as general information on the local ecology and natural resources. Such secondary sources, served to support the background on the study area provided earlier.

3.2.5. Data Analysis and Interpretation

All focus group discussions and interviews were conducted, audio-recorded and transcribed verbatim in Amharic. The audiotaped interviews were transcribed verbatim, then key relevant issues were translated from Amharic to English to facilitate analytic discussions with the full research team. Having grown up speaking Amharic and English, the first author did the transcription and translation to ensure accuracy. Text derived from

interview transcripts was subject to thematic analysis (Berg 1995; Morse & Field 1995; Creswell 1998). This process involves an "immersion" into the data through multiple readings of the transcripts and of field notes. Initially, transcript data and data from field notes were organized around major themes that emerged during the interviews and also in reference to research questions. This immersion and organization of data was undertaken as part of an ongoing process which helped the investigator to generate a complete list of themes and issues reflecting experiences that local ill-health perception and indigenous healing practices in the study areas. These themes and issues then informed a general analysis of all text data (Endacott 2005). Once all data had been collected, subsequent readings of the text resulted in a more detailed coding scheme, including around the broad issues or themes, and application of codes and sub-codes related to the broader themes. Furthermore, this process was continued until codes became saturated or repetitious. All qualitative text derived from participant observations, in-depth interviews, fieldwork, personal memos and informal conversations was managed using NVivo 10 computer software. For verification of the analysis, the investigator adopted several strategies including: verification with participants, comparing interview data to other resources, prolonged engagement, and consultation with other researchers.

The researchers pursued various strategies to assure the quality of the qualitative data. For example, the research findings were shared with research participants and the local research assistants who confirmed the interpretations accurately reflected their perceptions and experiences. The validity of our findings was enhanced by employing different types of triangulation: methodological triangulation (the data collected in the focus groups and the individual interviews were compared and contrasted); and investigator triangulation (multiple members of the research team both in and outside the field participated in data analysis including coding and identification of themes).

3.2.6. Ethical Considerations

Approval of the study was obtained from Addis Ababa University, Collage of Health sciences Ethical Review Committee (#037/13/PSP, see appendix 11). Discussion was also held with the *woredas* health offices and heads /delegate/ of health facilities and concerned bodies.

The purpose of the study, procedures, time commitment, and confidentiality was explained to all those who participated in focus groups or interviews with information sheets and consent forms. Prospective participants were informed that they may terminate participation at any time during the research. They were also given an indication of what would happen to the data, including its potential use in any reports and publications. Then, potential participants were asked if they want to be interviewed and observed for this study and was also asked to give informed consent either in writing or verbally (for those who were illiterate) (see appendix 10).

Information sheets and consent forms were translated into Amharic with consideration for the level of participants' literacy. In addition, in translating from the English, the investigator carefully chose Amharic terms for the consent forms that would be clear and understandable for those with a low literacy level.

Field notes written after observation sessions and transcriptions of interview data were shown to and heard by only the thesis supervisor and two committee members for this study, and to an Ethiopian researcher who was invited to verify the coding of Amharic data during the analysis process. The participants was not personally identified in any publications or presentations of this study. Pseudonyms were used to identify participants, and identifying features were also be altered in the transcripts. These documents were kept in a locked filing cabinet in the investigator's home. All computer data are kept on the hard drive of a computer in the investigator's home to which the investigator alone has access through a password. The tapes recorded were erased when the study was fully completed. Hard copies of the data will be kept at the principal investigator home after the dissertation is successfully defended and all papers are published.

CHAPTER 4: KEY FINDINGS AND DISCUSSIONS

The study is about indigenous medicine and its socio-cultural value among the *Tehuledere* communities, north-eastern Ethiopia. This chapter will provide discussion of key findings which includes: brief introduction, demographic characteristics of the participants, the beliefs and perceptions of illnesses causation, health-care options and factors affecting patterns of the use and socio-cultural value of indigenous medicine. Also strength and limitation of the study will be articulated.

4.1. Background information

The Alma Ata Assertion stressed the requirement for redistribution of capacities and duties of key partners in health care administration to reduce the expense and expand proficiency and efficiency in the delivery of primary health care (WHO, 1978). However, the role of socio-cultural assets and belief structures was not obviously expressed. More focus was placed on adoption of traditional healing practices such as herbal medicine and employment of Traditional health practitioners' services to meet primary health care. Numerous nations around the globe are beginning to explore the utilization of traditional medicine to supplement primary health care services. Some Nations, for example, China, India and Indonesia; are investigating potential outcomes for building up their well-known and tested herbal remedies for use in primary health care(WHO, 2011). Traditional health practitioners are undergoing training in primary health care for provision of health care that is promptly accessible and moderate to all individuals (Von Wolputte & Devisch, 2002; WHO, 2000).

Given the existing Ethiopian health policy issue, the National Policy of Indigenous Medicine reported in 1993, gives due attention to the development of the beneficial aspects of indigenous medicine including related research and technical support. However, its ability to implement and provide increased resources for the sustainable use of indigenous medicine is limited. Issues related to service delivery and bureaucratic systems do not fit well with the way indigenous medicine works.

Moreover, in Ethiopia little is explored on the role of societal and culture values in health care. This gap in knowledge and practices of indigenous health care persuaded the investigator to design a study to collect empirical data on the use of indigenous knowledge and practices to meet primary health care needs.

The *Tehuledere* indigenous knowledge systems used to meet primary health care can be interpreted and understood by comparing the findings to the Murdock illness causation model, Klainman cultural system explanatory Model and the Padela God-centeric healing model (Kleinman, 1980; Murdoc, 1980; Padela et al., 2012) . The key findings also provide evidence that the *Tehuledere* indigenous systems of primary health care have elements which are similar to the elements of primary health care stated by Keleher (2001). Regarding this Keleher articulated that an appreciation by all members of interdisciplinary partnerships of different fields of practice and the capabilities of different practitioners, can only enhance visions for health so that within the health system, practitioners may know what each of them can bring to the shared work of creating health for all people.

The Kleinman cultural system explanatory model suggests that indigenous knowledge systems used for primary health care are embedded in cultural belief systems, practices, institutions, relationships and rituals developed by a group of people through generations of living in close contact with their natural environment (Sargent and Johnson, 1996; Pender and Nola, 2005). Locally available resources and skills are employed for remedial and preventive aspects of primary health care. Indigenous knowledge of health care is therefore, the basis for self-sufficiency and self-determination. Critiques of the importance of indigenous knowledge systems in primary health care maintain that every human culture has folk or indigenous health care knowledge systems and practices which vary across cultures (Kreuteretal and McClure, 2004; Helman, 2007). Therefore, the indigenous knowledge systems of primary health care are embedded in peoples' cosmologies, kinship, social, political and economic aspects of culture (Huff and Kline, 2008; Mikhailovich et al., 2007).

The key findings that will be covered and discussed have include: beliefs and perceptions of ill-health causation; religion, spirit, human agents and healing; traditional healers and

primary health care; popular healing and primary health care from the perspective of the *Tehuledere* community.

4.2. Demographic Characteristics of Participants

In total, 96 people participated in the focus groups. Number of participants in each focus group ranged from 8 to 12, with a mode of 9. Participants ranged in age from 35 to 79 years, with a mean of 42 years. Most participants identified themselves as Muslims (n = 92) and others belong to the Ethiopian Orthodox Christian. Most of the participants were married and a few described themselves as widows/widowers. More than half reported that they cannot read or write (n = 53). Twenty individuals, selected from among focus group participants participated in in-depth interviews (Male=11 and Female=9). They were very similar to the focus group participants in their demographic characteristics. Those who were observed and also conversed with us has age range from 37-75 years while age of the 3 health extension workers ranges from 30-35 years.

4.3. Beliefs and perceptions of ill-health causation

The Murdock illness causation model provides the basis for the argument that the *Tehuledere* have developed models for illness and health (Murdock, 1980). Understanding of the human existential conditions and perceptions of illness and health enable people to prescribe therapy suitable for the disease. Patients and other community members' understanding of phenomena and conditions that are responsible for illness, enable them to seek the correct therapy for the ailments and symptoms they experience and observe. Such perceptions fall within the framework of medical anthropology (Sargent and Johnson, 1996). The framework concerns culturally determined concepts about illness, and the cultural significance of health practices offered through self-medication or consultation with traditional practitioners.

The first objective of this thesis was to explore beliefs and perceptions of illness causation of the *Tehuledere* community. Accordingly, the study found those conceptualizations and expressions of 'health problems' or 'causes of illnesses, were culturally coined and closely associated with their cosmology- to the knowledge of their societal environment. Indeed,

people in *Tehuledere* attached multiple meanings to their 'health'. Health is perceived to be related to peace, happiness, social connections and social support. They also denote 'health' as living with their nature spirit and supernatural power and/or nature and among themselves in harmony.

The major health problems of the *Tehuledere* people were both naturalistic (such as malaria, tuberculosis, *Mich*, flu etc.) and super-naturalistic related illness (like mental illness, jinn, and so on). The people have associated these health problems with local beliefs and customs, ecological and cultural values, and roles of nature spirits. For instance, it is believed that if the community neglects the expected ritual ceremony of the nature spirit *qolle*, it might cause misfortunes including illness and death. Furthermore, violation of local customs and social prohibitions such as disappointing *Abegar* and nature spirits were mentioned as main factors for health problems among the *Tehuledere* people. In line with this, the study also explored people's beliefs and perceptions about causes of illness. Many people in rural *Tehuledere* associated illness and disease with the natural and supernatural powers. They attribute illness to the wrath of God and/gods, nature spirits, and witchcraft. Some members of the community, on the other hand, believed that some of the illnesses or diseases can be traced to natural or environmental causes like by the intrusion of germs, bacteria, and other natural factors.

This study contributes an extra component to Murdock's illness theoretical model. Notwithstanding supernatural and natural components, the findings from this study suggest that social causes for illnesses should be added to completely clarify the view of the study communities (Elizabeth & Douglas, 2006). Information acquired from our study showed that the part of social forbiddances, for example, lying and the outcomes of their infringement were believed to be a key element bringing about illnesses in *Tehuledere*.

Therefore the ill-health causation model, with this addition, provides a helpful explanation of the *Tehuledere* cultural values and belief systems as good determinants of good health and wellbeing. The study results show that the *Tehuledere* have developed functioning models of describing illness, and therefore, adopted lifestyles and patterns of behavior which are aimed at the attainment of higher levels of wellness and positive health states. Preventive care is accomplished through observance of a set of cultural values, practices

and activities. Examples include social and religious customs, moral behaviour, hygiene, nutrition, waste management, clean water supply and proper storage systems observed to lessen the chances of attack by ailments.

Literature suggests that all societies have beliefs and practices having to do with avoidance of illness. The positive acts and the avoidance that constitute preventive medicine are often quite different from those of scientific medicine, but they are equally rational in that they are functions of what it is believed about the cause of illness (Helman, 2007; Huff and Kline, 2008; Sindiga and Nyaigotti-Chacha, 1996; Hahn, 1999).

4.4. Health-Care Options and Factors Affecting Patterns of Use

This study found that the major factors for determining the choice of indigenous medicine include perceived illness causation, accessibility, culturally appropriate indigenous treatments, dissatisfaction with the treatment outcomes at bio-medical health-care institutions, as well as demographic and economic factors. For example, the high cost of bio-medical treatment was mentioned as an influencing factor for their decisions of seeking treatment from indigenous medicine. The study also revealed that social relations and social networking play a great role in shaping people's preferences for their health-care options. This is because individuals largely opted to go for either indigenous healers or bio-medical health practitioners directly or indirectly based on their access to information and social communications.

Likewise, socio-economic factors and health-care accessibility and availability would also impact the choice of treatment-seeking behaviour among the *Tehuledere* community. Given the relative shortcomings and imbalances of the bio-medical health-care services many individuals in *Tehuledere* were skewed to utilize indigenous recuperating practices. The study is, therefore, in line with the socio-economical factor for using indigenous medicine. In other word, there is disparities in health-care services accessibility and provision between different social statuses, power relations, and income level in the study area. The power of this group of people extends far beyond the assessment of symptoms and influences the decision as to where the sick person ought to look for treatment.

The other factor that affects people's choice to look for indigenous restorative treatment was apparently the widespread conviction among *Tehuledere* individuals that herbalists, bone setters and Traditional Birth Attendants were being more effective, faster, culturally acceptable and less costly than hospital treatment of mental illness, fractures and birth attending practices, respectively. Similar studies in central Ethiopia (*Butajira*), seven towns in northwestern Ethiopia and Berta ethnic group in western Ethiopia showed that indigenous healing using local remedies is a major part of health care options (Bishaw, 1990; Gedif & Hahn, 2003; Flatie et al., 2009). Numerous indigenous healers in *Tehuledere* were likewise seen as proficient in indigenous pharmacopeia. Indigenous health-care practitioners also consulted for a wide range of physical, social and emotional problems. In this way, it ought to be obvious that the role of the indigenous healers involve more than curing ailment and/or sickness. They likewise keep and deal with the traditional customs and cultural practices and they considered to be guardians of social morality among the *Tehuledere* community.

The present study found that pluralistic health-care resources were used by the communities either independently or concurrently among the *Tehuledere* people. The study identified that religious and spiritual healing, bio-medicine, indigenous healing systems (such as faith and herbal healing, bone setting, midwifery), and popular or home-based medicine, were the major types of health-care options in the study area (see appendix 5).

The results of the present study concur with God-centric recuperating model developed by Padela et al's. (2012). All things considered God/Allah was seen to play an immediate role in facilitating recuperating. The vast majority of the discussants in this study engaged with an assortment of religious customs to directly facilitate mending from God, for example, asking *Allah* through prayer or *du'a*, reciting the Qur'an, praising the feast of *Tsadiku*, utilizing sacred *Kitabs* (magical amulets) and *Tsebel* (holy water). The study participants additionally recognized God for his circuitous recuperating through the activities of different human agents, such as, *Woliy* and offering respect to the nature spirits, for example, *Wodaja* and religious figures.

Observations about the role played by *Qallicha* in the life of the *Tehuledere* are similar to the finding in Botswana about *ngaka* in *Tswana* culture. A *Tswana ngaka*, is a religious

consultant, a legal and political advisor, marriage counselor and social worker who is described as a necessary precondition for the maintenance of social justice and harmony (Stuagard, 1995).

As stated above, the findings of the study indicated that the *Tehuledere* people's options of health-care patterns have been influenced by the socio-cultural and economic conditions. The cultural beliefs and illness etiology were one of the factors that affect the treatment-seeking patterns among the *Tehuledere* people. For example, the people's preference for resolving *Jinn* (evil spirit or devil possession) and *Sibirat* (bone fracture) was through the use of indigenous healers, home-made herbal remedies and assistance from spiritual healers. On the other hand, diseases/illnesses such as HIV/AIDs and tuberculosis cases were believed to be effectively cured by bio-medical treatment for their first choice. The study also found that among the *Tehuledere* people, for every kind of episode, the use of home remedies was the first choice before consulting indigenous healers and bio-medical health-care practitioners. Home-based treatment was used particularly for most ailments and symptoms such as *Nedad* (malaria), *Mich* (acute febrile illness) and *Gunfan* (flu) and other relatively common health problems. Nonetheless, their treatment-seeking patterns were influenced by their perceived illness etiology and severity of the illness.

Thus popular healing or the lay sector represents an important part of everyday health care system. Adults possess knowledge of popular healing and part of this knowledge is shared with other family members, relatives and friends. This lay sector of healing is generally the first therapeutic intervention resorted to by most people across cultural groups before other alternative medical systems are sought for medical assistance (Helman, 2000). Popular healing is at the basis of what is referred to as the 'hierarchy of resort in curative practice' (Klainman, 1980; Gilbert et al., 1996). The various layers of this hierarchy interact with each other since patients pass freely from one to the other. Since the 1974 Alma Ata Declaration on Primary Health Care, self-health care, including using home remedies, has gained more recognition, and recent health policies stress the importance of individual responsibility for their own health, as well as community participation in health care (WHO, 2004).

Additionally, we argue that the findings from this investigation regarding the popular primary health care model are fundamentally the same as the Kleinman culture system model (Kleinman, 1980). The participants in this study described a few courses of action in which the social group impacted their perspectives of what to do in the recuperating procedure. In the first place, popular agents (families, friends, and neighbors) were seen to play an immediate role in facilitating recuperating of those apparent ailments. Otherwise the popular agents refer to the biomedical experts if no progress was seen subsequent to treating with home remedies (Appendix 4).

In many parts of the world, especially in developing countries, primary health care devolves on traditional health practitioners, another arena of health care options. Traditional health practitioners are health care workers who offer services to people who depend on traditional health practices for their health care. They are true community health care workers in their communities. They invariably have the confidence of the community, and whatever their level of skills, it is essential that they should understand the real health care needs of their community. Their main function is in the curative aspects of health care, but they also prepare and dispense preventive and protective medicine such as herbs (for prevention of some epidemic communicable diseases) and magical amulets (for prevention of evil-eye attack) (Sindiga and Nyaigotti-Chacha, 1996; Helman, 2000; WHO, 2002).

Populations of developing countries rely on traditional medicine to cope with their health care problems. For this reason, there are traditional health practitioners readily available to offer health care in almost every community. Traditional health practitioners are respected by the community, partly because of their acquired knowledge, their ability to provide answers and treatments that are meaningful to the community, and their position as the moral core of the community. Their moral influence is strong among the adults and the elderly (Torri and Laplante, 2009; Courtright, 2015).

In Ethiopia, traditional health practitioners play a crucial role in providing health care to the majority of the population. They are the first health care providers to be consulted in most cases after popular healing has failed (Zweigenthal, 2009). They are deeply interwoven into the fabric of cultural and spiritual life of their communities. It is for this

reason that there has been people's recognition of traditional medicine practices in Ethiopia (Kaba, 1998).

The *Tehuledere* traditional health practitioners are consulted by members of their communities and patients from other communities seeking remedial care. The healers are trusted health providers who understand their cultural values, and have extensive knowledgeable about the most common diseases that attack their community members.

Moreover, our findings revealed that decision-making on treatment seeking for ailments is complex and influenced by cultural and personal beliefs, individual experiences, and socio-economic features. This is the basis for a functioning primary health care model that is currently in operation in the study community as well as similar settings elsewhere. A bridge of caring was built between traditional healers and the primary health service (i.e. the health posts) in the management of perceived common ailments, such as *Yewof Beshita* (jaundice) and Yelig Tilat (Herpes Zoster) in the village. Another bridge of care was between the health posts and the health centre for the management of the other health problems, such as HIV/ AIDS and Tuberculosis, which the study communities experience as critical. The role of health extension workers was very important for this integration.

We observed that this cooperation of health extension workers, traditional healers and modern health care practitioners was working well in *Tehuledere* communities (see appendix 3).

It was evident that *awalaj* provides health services to mothers and health extension workers provide important materials to the *awalaj* so that they may provide safe healthcare services to the community and protect against infections. The health extension workers use the traditional healers as intermediaries to facilitate interactions with community members since they are more accepted and respected. The health extension workers provide education and some community based activities in collaboration with the traditional healers. For example traditional healers are often responsible to disseminate any information and socio-cultural issues to the community during the bimonthly meetings held in the villages.

Finding from this study indicate the functioning primary health care model is best with all health care options working together. Moreover, this study showed that the *Tehuledere* communities have developed models of explaining health management, and therefore, adopted lifestyles and patterns of behavior which are aimed at the attainment of higher levels of wellness and positive health states. Thus optimal primary health care could be achieved using locally available resources and skills. Indigenous knowledge of health care is therefore, the basis for self-sufficiency and self-determination (Sargent and Johnson, 1996).

Ethiopia is currently implementing primary health care under the first phase of the 5 years health sector transformation plan. Comparing the management of the illnesses identified by this study with the contents of the essential elements of primary care, it appears that some aspects, such as managements of common health problems at home, religious clergy and healers are contained in both biomedical and indigenous interpretations (Magnussen, 2004). It is hoped that this category of health problems that was managed within the indigenous situation, common physical and spiritual ailments, and the paradigm of their managements be included to enhance the rural health plan for the 5 villages of *Tehuledere Woreda* and beyond.

Similar primary health care models in countries like China, Republic of Korea and Vietnam accommodate their well-known traditional medicinal practices in the full implementation of primary health care (WHO, 2002). In an 'integrated system', like this, Traditional medicine/Complementary and Alternative Medicine (TCAM) is officially recognized and incorporated into all areas of health care provision which means that it is included in country's national drug policy; providers and products are registered and regulated; therapies are available at hospitals and clinics (both private and public); treatment with TCAM is reimbursed under health insurance; relevant research is undertaken; and education in TCAM is available. Moreover, the Chinese health care system used to be held as a model by WHO for the rest of the world because China has made great progress in improving the health status of its population since 1949. The broadly acclaimed achievements partly owes to the traditional health care system reform: central planning,

emphasis on primary care, community organization and cooperative financing (Hsiao 1995).

However, in an 'inclusive system', TCAM is not fully integrated into all aspects as in countries such as Equatorial Guinea, Nigeria, Mali, Canada and India. In a 'tolerant system', the national health care is based entirely on allopathy, but some TCAM practices are allowed under law (WHO 2002).

Various ethnomedical studies in Ethiopia show that medicinal plants are a normative basis for the maintenance of good health (Giday et al., 2010; Tadesse et al., 2005; Flatie et al., 2009; Guji et al., 2011; Hareya, 2005). Indigenous plants have become more popular in the treatment of mild and simple ailments where the medicines are applied at household level for self-medication. The use of medicinal plants in traditional medicine finds its natural expression and further development in primary health care. Current assumptions state that in many developing countries a large proportion of the population relies heavily on traditional health practice and herbal medicine for their primary health care. Although allopathic medicine may be available, traditional herbal medicine has often maintained popularity for historical, holistic approaches and cultural reasons (Endashaw, 2007; Iwu, 1993; World Bank, 2003).

Herbal medicines are gaining popularity worldwide as alternative and complementary therapies. The current estimates suggest that, in many developing countries, a large proportion of the population relies heavily on indigenous healing and medicinal plants to meet primary health care needs. Although modern medicine may be available in these countries, herbal medicines have often maintained popularity for societal and cultural reasons. Traditional herbal medicine continued to play a significant role in the treatment and management of life threatening ailments such as malaria, flue, cough, diarrhea, and rheumatism in developing countries, though no adequate scientific evidence has been documented about the safety, quality and efficacy of the medicines (Getachew et al, 2002).

The study also found that the *Tehuledere* people have a diversity of medicinal plants which have significant socio-cultural roles including for cultural performance among the

Tehuledere community. They also used medicinal plants for ritual performance for different socio-cultural activities.

The indigenous medicinal knowledge system of the *Tehuledere*, like other communities', stems from knowledge about the properties of plant species known and administered for maintenance of health care. As described by scholars this medical knowledge is an innovation (Torri and Laplante, 2009). The *Tehuledere* played an active role in producing their medicinal plant knowledge in order to enhance local health practices.

Traditional health practitioners and elderly respondents among the *Tehuledere* have extensive knowledge of health care maintenance and medicinal plant application. The participants in this study demonstrated knowledge of medicinal plant application by identification of several plant species which are exploited for their medical properties.

The study showed that blessing from God/Allah/ and casual observation from parents were the main source of knowledge for the popular healing agents, which were similar to the findings among the *Bertha* ethnic group, in south west Ethiopia (Flatie et al., 2009). In various other studies conducted in Ethiopia, it was shown that family members are the major sources of knowledge of popular healing (Gedif, and Hahn, 2003, Guji et al., 2011). Since most of the study participants were Muslims, either home remedies was practiced as part of religious teaching among the community or most believe that the healing power of home remedies was more acceptable and effective when associated with supernatural power/ Allah/ (Flatie et al., 2009).

The study identified that socio-cultural and lack of proper documentation mechanisms play a great role for affecting the indigenous medicinal knowledge transfer systems among the *Tehuledere* people. The first challenge was that indigenous healers in *Tehuledere* unable to transfer and document their indigenous medicinal knowledge and practices in written form as most of them could not read and write (Dawit & Ahadu, 1993; Zelealem, 2011). In addition, the fact that the indigenous healers do not want to transmit the knowledge to any individual, other than the selected son of healer, believing that it is a gift from their ancestors and/or *Allah* which they perfected through years of apprenticeship and training.

Hence, as an alleged reason some healers said that telling the secret would cause their medicines to lose their power (Bishaw, 1988; Jansen, 1981).

This study also explore lack of interest from the youths as a challenge in the transfer of popular healing knowledge. As per the way of life, youths were by and large not seen as carriers of validated knowledge, as such an ability comes with age, due to the amount of space and the length of time that is required for gaining experience. Since knowledge was conveyed by word-of-mouth among the older people, to question them was seen as being disrespectful (Zonke, 2005). As the youths were exposed to biomedical health care and modern education they gradually losing their popular healing knowledge. Similar to this study other studies indicated that younger generation are less knowledgeable and underestimate popular healing values (Belayneh & Bussa, 2014).

4.5. Strength and Limitations of the Study

This section highlights some of the possible shortcomings of the methods used and also different practical constraints encountered in their implementation. The measures taken to compensate for some of these limitations are also discussed.

To start with, a review of the broad assumptions and possible biases in the general research approach and the fieldwork's mode of operation are critical. Perhaps, the most fundamental among these, is the general perceptions about the study itself among the participating communities. Our main collaborators in the study communities were the health extension workers (i.e. government functionaries, by whom we were often accompanied and introduced to various community representatives and members) and this may have impacted local perceptions about the study. Notwithstanding our explanations in regards to the study's academic nature and specific objectives, some community members could perceive the study as a government supported activity. It is not far-fetched, consequently, that the general behavior of informants could be impacted by such perceptions. It would seem that any apprehensiveness is likely to have been eased, by the generally friendly and mutually respectful rapport most people have with their respective HEWs.

It is worth to mention that the findings from this study are derived from a purposive sample of knowledgeable adult members of the *Tehuledere* community.

The results of this study were based on a sample of participants who identified as individual from *Tehuledere* community. The sample was diverse in terms of age and sex and agro-ecological condition of the setting. However the outcomes from this study may not be representative of the encounters of perception of illness causation and treatment options of other ethnic backgrounds. The literature suggests that notwithstanding ethnic differences it is possible that the finding that participants used culture to help manage their identity and influence individuals whom they felt would judge them may likewise be relevant to other ethnic groups, however this should be tested in additional studies.

Given the time frame and resources, the study had a set of delimitations inherent in the topic to be investigated. Indeed, not all of the rural settings in *Tehuledere* area were included in the research. Furthermore, the study cannot investigate each kind of medicinal plants and means of preparations from the herbalists' perspective as it was difficult to anticipate to what extent indigenous healers would be open to explain the secrets of their wisdom on medicinal plants.

Triangulation of different data collection techniques including focus group, semi-structured interview, observations and informal interview with study participants was done. Multiple theoretical approaches were likewise used to initially frame and subsequently interpret the data from this study. Using these approaches has allowed for a more thorough explanation of beliefs and perceptions of illness causation and health care practices.

The general limitations posed by the interview ethnography method as a whole also deserve consideration. Interviews inevitably involve communicating with individuals under fairly restrictive conditions. Moreover, it is well-recognized that the very act of questioning itself can influence the interviewee's responses (Marsh, 1979). The potential disadvantages of this, including any apprehension and unease experienced by the interviewee can, however, to some extent be mitigated by the manner and approach of the interviewer in presenting the questions, as well as the particular characteristics of the interview setting. Such concerns was given due attention in designing the interview formats for this study. The use of open-ended questions, as well as efforts made to engage informants in informal conversations on others topics they themselves raised, were among some of the measures

taken to mitigate these limitations. Furthermore, the casual and personal atmosphere provided by the familiar surroundings of the informant's own home is deemed a conducive setting, as well as being particularly well-suited to the study's specific concern with 'home-based' health practices.

As it is well known, one obstacle to conducting ethnographic research is the very presence of the ethnographer in the field. Early in the history of field research, Roethlisberger and Dickenson (1939) identified a phenomenon now commonly called the *Hawthorne effect.* But the persistent presence of ethnographers in a social setting might certainly reactivate the Hawthorne effect in varying degrees every time someone new is introduced to the researchers. Ethnographic accounts, therefore, understandably offer readers explanations of how the ethnographers' presence was made *invisible* to the subjects. The status as an *invisible researcher*, as Stoddart describes it, is the ability to be present in the setting, to see what's going on without being observed, and consequently, to capture the essence of the setting and participants without influencing them (Stoddart, 1986). There were some strategies for becoming invisible: *Erosion of visibility by time (since the researcher was a long time in the field the visibility was eroded), Erosion of visibility by display of no symbolic detachment(earlier the principal investigator tried to describe his status as an auto ethnographer, so that it was not hard for him to fit to the study community in every aspect of beliefs so that normalization of activities), Erosion of visibility by display of symbolic attachment(in this case he tried to participating with local community in their everyday routine, like farming, social support in health, information's, accompanying etc….), Erosion of visibility by personalizing the ethnographer informant relationship (being a member of the indigenous community it was not hard to personalize the beliefs and cultures of the community and the community suspend concern over the research aspect of their identity in favor of liking him as a person).* Therefore, from the researcher perspective, it was real decision to obtain invisible status, but several ethical dangers existed which he managed by giving timely solutions to be ethical as far as possible. For example the question of revealing information on illegal activities uncovered during the course of ethnographic research, such as female circumcision, was an ethical and legal problem in which the researcher was faced and decided by him, giving advice about the danger ,according to ethical and legal provision of the land (Polsky, 1969).

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1. Conclusions

Participants in this study revealed that perceived causes of ill-health can be grouped into three main categories: supernatural, natural and social elements. The Almighty God Allah, nature spirits, individual such as the family, as well as the *Abegar*, are intimately linked to one's health beliefs for the causes of health problem and/or illness among the participants. This finding, especially the link between lying and ill health may be relatively unique to this cultural setting. An important conclusion is that the relationships of supernatural, natural and social elements to ill-health causation may provide useful input for the drafting and implementation of primary health care strategies at both local and global levels.

The present study also documented that health, illnesses and healing were inseparably linked to religious and spiritual beliefs. Healing is thought to be mitigated by divine assistance obtained through supplication and rituals and through the healing interventions of nature spirit actors. Participants also suggested that religious and spiritual elements should be considered when drafting and implementing primary health care strategies for the study communities and similar environments and populations around the globe.

Participants in this study articulated that pluralistic health-care resources were used either independently or concurrently with biomedicine. Major reasons for the use of traditional healers included: perceived etiology of illnesses; the availability and acceptability of health-care services; the relationship between the health-care practitioners and the patients; socio-economic factors (cost of health care service); and the influence of social network and/or social relationships. Members of the study community considers traditional healing by *Kitel Betash* or Herbalists, *Awalaj* or traditional birth attendant and *Wogesha* or local bonesetter as a health care option among multiple health-care resources. In view of this a successful rural primary health care strategy would integrated these into the strategies of rural health care.

Minor health problems such as *Nedad* (malaria), *Mich* (acute febrile illness) that the community managed within the home. Nonetheless, in cases where home home-based treatment did not cure a patient, participants decided to look for other alternatives, such as visiting a bio-medical care. Since people in the study communities believe that popular healing is a health care option among multiple health-care resources, a successful integrated rural primary health care strategy must include strategies for supporting patients' needs in all of these domains. This will help to ensure the optimal utilization of Ethiopia's limited resources.

The study found that most of the communities in the study area lack consistent patterns of health-care decision making. When a patient gets ill, home remedy might be the first preferred treatment but indigenous healers and bio-medical doctors were also consulted either independently or concurrently when the popular medicine fails and vice versa. In general, much change has been evident in the use of indigenous medicine among the *Tehuledere* people. Along with these changes, one would trace the preference of indigenous medicine to bio-medicine has been increased regardless of residential pattern and socio-economic factors. This, in turn, implies that there is no an absolute boundary between people's health-care patterns either on the bio-medical or indigenous health-care systems. The decision to use bio-medical or indigenous treatment is influenced by a combination of socio-demographic, economic and cultural factors (such as etiological beliefs, the role of the family, and worldviews).

The main conclusion from this study is that the socio-cultural values of the *Tehuledere* consist of indigenous health care mechanisms developed by communities for preventive, protective and remedial purposes of primary health care. The *Tehuledere* indigenous mechanisms of health care address basic elements of primary health care such as fostering self-care and self-reliance, community participation and the use of traditional medical practices in health care. Despite the influence of western knowledge systems, availability and accessibility of primary health care facilities in the communities, observance of cultural traditions such as pay attention to a taboo, good morals, hygiene, sanitation, the application of herbal medicine, and consultation with religious clergy, traditional health practitioners; are still valued for maintenance of good health.

Moreover, the treatment offered by indigenous healing embraces some important aspects of health care as outlined in the scope of primary health care. The healing services incorporate the main principles of primary health care, explicitly; health care services are acceptable and accessible to the people, identify the medical needs of the community which can be preventable, make maximum use of available manpower and resources to meet the medical needs of communities. The research findings highlight the value in the World Health Assembly, the World Health Organization, and the Alma Ata Declaration on the use of indigenous medicine, indigenous medical practices and giving priority to utilization of traditional medicine in drug policies and regulation with the purpose of providing holistic care. The use of indigenous knowledge to maintain health care fulfills the objectives of primary health care as outlined in the scope of primary health care in the Alma Ata Declaration and World Health Organization Policies.

5.2. Recommendations

Based on the findings of this exploration, the following are recommended:

Re-examining legal Frameworks on the use of indigenous medicine for primary health-care

In order to maximize the benefits of indigenous medicine, the legal frameworks on the use of indigenous medicine for primary health-care service should be re-examined in light of implementing and addressing the needs and interests of the local people.

The use of indigenous knowledge in primary health care programs

The indigenous way of healing, preventive, protective and remedial care ought to be fused into Primary Health Care Programs to advance the WHO principle that communities should arrange and execute their own health care services.

Promotion of observance of socio-cultural causes of ill-health

Regarding the socio-cultural beliefs of illness causation, Government should advance recognition of the socio-cultural causes of health for the upkeep of good wellbeing. The socio-cultural convictions and practices relating to ill health ought to be thought about in the improvement and execution of primary health care programs. Such conviction frameworks and practices incorporate a set of beliefs about wellbeing maintenance,

guidelines about correct behaviour for prevention of ailments in oneself and others and the use of charms and amulets to ward off misfortune, defilement and disease.

Self-care and self-medication

In perspective of the broad knowledge of self-care for preventive and curative health care among communities of *Tehuledere* Government should promote and develop this knowledge of health care provision to supplement primary health care services and to promote the spirit of self-reliance and self-determination. In addition, promotion of self-care could increase the level of community participation in the provision of primary health care.

Collaboration between traditional health practitioners and the bio-medical health practitioners

Indigenous health-care practitioners could also need to get technical co-operation and support from bio-medical health practitioners in order for them to manage their services effectively and safely. Training will raise awareness among the indigenous healers in terms of hygiene and sanitation so that they use gloves to examine clients, make single use of razors and needles, and other extended roles. It is also, recommended that Government makes sure that when implementing health promotion programs to educate both young and old community members so they have an understanding about healthy living by emphasizing hygiene, proper nutrition, supply of clean water, basic sanitation, education about common health problems and preventive measures, immunization against major infectious diseases and prevention and control of locally endemic disease, should also consider incorporating traditional ways of promoting good health.

Closer co-operation between indigenous and bio-medical health systems and eventual integration have been promoted by the World Health Organization and this should be feasible in *Tehuledere* and other Ethiopian societies if the characteristics, including resources, expectations, and capacities of both systems are well understood and respected. Furthermore, the *Tehuledere* indigenous knowledge on the socio-cultural values of indigenous medicine and their local traditions, norms and practices used as adaptive strategies to socio-cultural and environmental problems need to be promoted and recognized by the local government. Education programs highlighting the religious,

spirituality and other benefits of indigenous healing practices rules about the use of natural resources may ensure the sustainability of indigenous medicine.

Use of popular or home remedial knowledge

The study community has extensive medical knowledge on herbal medicines. Home remedies, especially herbal medicine, is the first approach to health care for the respondents when they require preventive, protective and curative health care. It is therefore, recommended that Government should take initiatives to promote the use of traditional plant medicines for provision of primary health care. Government should let institutions and NGOs explore the medicinal properties of the indigenous plants that are applied for primary health care by means of inventorying and documenting the medicinal plants which are used to treat common diseases.

5.3. Directions for further research

Finally, based on the findings, we call upon researchers for further studies on the following issues:

- Qualitative studies on social determinants of ill-health causation, such as lying, to promote the use and incorporation of communities' social values into primary health care programs.
- Qualitative exploration in the management of social health problems such as lack of peace and security and substance abuse.
- Development of monographs for the indigenous plant species identified as sources of medicines for primary health care during the study.
- Inform health workers about the indigenous systems of primary health care to develop ways to respond to the health care needs of local communities through databases.
- Quantitative studies to make an inventory and documentation of medicinal plant that are used for primary health care.
- Identify the scientific pharmaceutical properties of medicinal plants which could contribute to the preparation of bio-medical medicine in the country. Therefore, further laboratory-based research is extremely important to identify their activity

and bioactive molecules which could pave the way to formulate the novel affordable as well as accessible potent medicines in the near future.

- Scientific validation of the health benefits derived from the consumption or utilization of these plants should be encouraged.

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PAPER I

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RESEARCH ARTICLE Open Access

Beliefs and perception of ill-health causation: a socio-cultural qualitative study in rural North-Eastern Ethiopia

Mesfin H. Kahissay[1*], Teferi G. Fenta[1] and Heather Boon[2]

Abstract

Background: Understanding perceptions of the causes of ill-health common in indigenous communities may help policy makers to design effective integrated primary health care strategies to serve these communities. This study explored the indigenous beliefs of ill-health causation among those living in the *Tehuledere* Woreda /district/ in North East Ethiopia from a socio-cultural perspective.

Methods: The study employed a qualitative ethnographic method informed by Murdock's Theory of Illness. Participatory observation, over a total of 5 months during the span of one year, was supplemented by focus group discussions ($n = 96$ participants in 10 groups) and in-depth interviews ($n = 20$) conducted with key informants. Data were analyzed thematically using narrative strategies.

Results: In these communities, illness is perceived to have supernatural (e.g., almighty God/ Allah, nature spirits, and human agents of the supernatural), natural (e.g., environmental sanitation and personal hygiene, poverty, biological and psychological factors) and societal causes (e.g., social trust, experiences of family support and harmony; and violation of social taboos). Therefore, the explanatory model of illness causation in this community was very similar to that of the Murdock model with one key difference: social elements need to be added to the model.

Conclusion: Members of the study community believes that supernatural, natural and social elements are linked to ill-health causation. A successful integrated primary health care strategy should include strategies for supporting patients' needs in all three of these domains.

Keywords: Health, Illness, Beliefs, Indigenous, Spirit, Ethiopia, Qualitative

Background

Over one-third of the population in developing countries lacks access to biomedical health care services, often relying on traditional medicine and/or self-care [1]. In addition to their physical inaccessibility, biomedical health services are often unaffordable. Indigenous people often believe that Western trained doctors are not equipped to address their concerns which are can include spiritual as well as physical concerns [2]. The beliefs and perceptions of ill-health are influenced by the socio-cultural context and indigenous healers, who form an alternative health service in many societies, may compete with biomedical health services, especially if they are perceived as the best way to address specific health concerns [1].

Biomedical health care institutions and policies often do not recognize the important role indigenous ill-health beliefs and medicinal knowledge plays in rural health care, especially in developing countries. Too often, indigenous medicine is criticized as "harmful traditions" as if it was a threat to human health. However, others acknowledge that indigenous medicine should be embraced as an important part of health care systems in indigenous communities [3–5].

In Ethiopia, people use indigenous medical systems as an alternative health care service along with the biomedical health services [1, 6]. Despite its existence and continued use, indigenous medicinal knowledge as well as

* Correspondence: yeabdrug@gmail.com
[1]Department of Pharmaceutics and Social Pharmacy, School of Pharmacy, College of Health Sciences, Addis Ababa University, P.O. Box 1176, Addis Ababa, Ethiopia
Full list of author information is available at the end of the article

education, training and research in the area, have lacked official recognition and support [3]. This study aimed to explore the socio-cultural context of indigenous beliefs regarding ill-health among five *Tehuledere* communities found in the Amhara Regional State of Ethiopia. *Tehuledere* was selected for the study because of the rich and unique indigenous medicinal beliefs, and practices in the area.

The context: *Tehuledere* region

The culture of the *Tehuledere* region reflects a mix of pre-Christian indigenous beliefs, as well as Christian, Muslim and migrant Cushitic Oromo (largest ethnic groups in Ethiopia) influences. After their migration from the southern part of Ethiopia, before embracing Islam as their religion, the people of the *Tehuledere* region continued to make use of their indigenous Cushitic beliefs and practices [7]. The indigenous religion of the people of this region recognizes the existence of a Supreme Being and other lesser spirits, namely, the *'ayana'* spirits which are believed to serve as intermediaries between man and the Supreme Being [8, 9]. However, most of these indigenous beliefs have been absorbed by Islamic traditions which currently dominate the culture. Our study highlights the importance of understanding the perceptions of causes of ill health and disease in the study communities as a guide to how best to implement public health initiatives in the region.

Theoretical framework

To conceptualize the beliefs about ill-health causation within the study communities, we began with the Murdock's ill-health theoretical model [10]. According to this theory, it is important to distinguish between beliefs about the natural and supernatural causes of illness and disease. In this framework, natural causes include beliefs that the impairment of health is a physiological consequence of some experience of the victim that is consistent with Western biomedicine. This broad category includes five distinct types of natural causes of illness: infection, stress, organic deterioration, accident, and overt human aggression. According to Murdock, supernatural causes include: theories of mystical causation (i.e., fate, ominous sensation, contagion, and mystical retribution); theories of animistic causation (i.e., soul loss, and spirit aggression); and theories of magical causation (i.e., sorcery and witchcraft) [10]. Other studies suggest that different societies give varying degrees of importance to theories of natural compared to supernatural causes of illness [11–13]. This dichotomy was a key sensitizing concept that guided the design of this study.

Methods

Design and setting

A qualitative ethnographic method was conducted in *Tehuledere Woreda*, an administrative unit in the north-east of Ethiopia [14] (see Fig. 1). The capital of the *Woreda*, Haik, is situated 430 kms away from Addis Ababa, the capital of Ethiopia. According to the *Tehuledere Woreda* Information Office (TWIO), the *Woreda* covers an area of 45,800 ha with a population of 152,107. There are 23 *Kebeles* (the smallest local administrative unit) administered by the *Woreda*, including 19 rural, 2 urban and 2 semi-urban towns. Five rural communities (one from each of the five *Kebeles*) were included in the study. The people in this area are members of the Amhara ethnic group and are largely Muslims. They speak Amharic, Ethiopia's official language. As predominantly rural *Woreda,* most inhabitants rely on farming. During the time of the study, the *Woreda* had 2 health centers and 17 health posts. In 2014, communicable diseases including malaria, lung infections, diarrheal, intestinal parasites, eye infections, skin disease, and rheumatism were the major public health problems in the area [15].

Sampling procedures and accessing the field: getting in

Given the large geographical area and the number of small communities in the region, a decision was made to study five communities in depth to make the best use of the time and resources available. The investigators consulted the *Woreda* health extension workers (primary health care practitioners) on the selection of study communities. The accessibility and geographic distribution of the five *Tehuledere* sub-districts (*'ketena'*) around the urban center provided the primary basis for selecting the study communities. The other criterion was the interest shown by the health extension workers to collaborate in the study. The five study communities, selected were: *Gobeya, Godguadit, Bededo, Jari and Muti-Belg.* The health extension workers also helped to select 96 participants for 10 focus group discussions and 20 individuals (two from each focus groups) were selected purposively for follow-up individual interviews based on their demonstrated knowledge and ability to describe their experiences in the focus groups. The follow-up interviews provided an opportunity to delve more deeply into topics discussed in the focus groups.

Data collection and analysis

This ethnographic study was grounded in participant observations made by the principal investigator (MHK) working as a volunteer heath extension worker in the study area for five months between June and November, 2013. This volunteer participatory observation helped him to access research participants and health extension

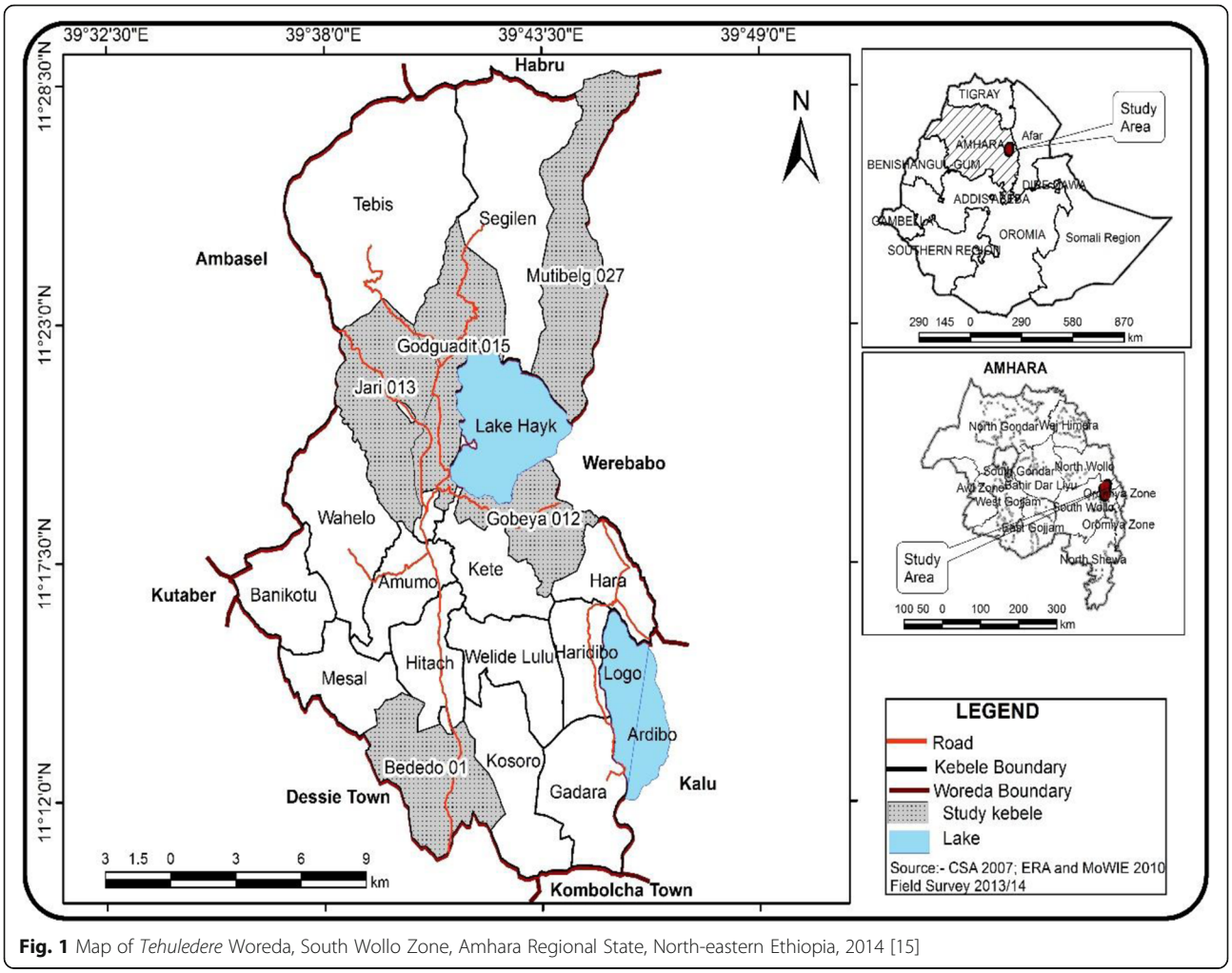

Fig. 1 Map of *Tehuledere* Woreda, South Wollo Zone, Amhara Regional State, North-eastern Ethiopia, 2014 [15]

workers working in health institutions. The researcher was also able to make substantial observations of local activities such as rituals, festivities, public gatherings involving health practices, and converse informally with community members. Data obtained from observations and conversations were recorded in field notes, photographs, and audio-recordings.

Following introductory discussions with community leaders/representatives, ten focus group discussion sessions (one all male and one all-female in each *kebele*) were conducted. Study participants were adults over 30 years of age identified by health extension workers in the area to be knowledgeable about local health traditions who were willing to participate in a conversation about their health. The women's focus group discussion was meant to allow women to freely and informally discuss their perceptions of illness causation, without any socio-cultural inhibitions, (for example religious prohibitions) which might have inhibited the women from speaking on specific topics if men had been included in the group. The focus groups lasted 1.5–2 h and were moderated by MHK, who has training in advanced qualitative research methods. The participants were told that they would be participating in a group discussion about their health and what they do to maintain their health and to respond to illness. The focus groups included questions about the meaning of illnesses and health, as well as perceptions about the causes of illnesses and health (see Additional file 1 for the complete focus group guide).

Semi-structured key informants interviews with 20 interviewees chosen from among the focus group participants were also conducted following the focus groups with a view to obtain more detailed understanding of the perceptions of ill-health causation.. Interviews lasted 1–1.25 h, were conducted in the informants' private homes or while sitting in public spaces in the villages (See Additional file 1 for the complete interview guide). Focus groups and interviews continued until the data in the key emerging themes were saturated (i.e., key points were repeated and no significant new information was emerging) [16, 17].

All focus group discussions and interviews were conducted, audio-recorded and transcribed verbatim in Amharic. Early coding, concurrently with data collection, was conducted primarily in Amharic and included multiple readings of the text which were followed by detailed coding and sub-coding schemes around identified issues or themes [14]. Two analysts (MHK and another Amharic speaking team member, TS) immersed themselves in the data by reading and open coding the transcripts independently and developing preliminary codes. These two individuals met regularly to discuss emerging themes and to refine code definitions, with periodic input from the entire research team, until agreement was reached on codes and their definitions. . Each transcript was coded line by line and these codes were organized into higher-order conceptual themes. Sections of original transcripts and key quotes considered to be illustrative of the emerging themes were translated into English to facilitate discussion with the full research team as needed, because one of the research team members, HB, was a non-Amharic speakerIndividual codes and themes were discussed at group meetings until consensus was reached on basic themes and subthemes across the focus groups and interviews. Finally the themes were incorporated into a conceptual model of the participants and their beliefs and perceptions in illness causation [18].

All qualitative data from participant observations, in-depth interviews, fieldwork, personal memos and informal conversations were organized using NVivo 10 computer software.

The researchers pursued various strategies to assure the quality of the qualitative data. For example, the research findings were shared with research participants and the local research assistants who confirmed the interpretations accurately reflected their perceptions and experiences. The validity of our findings was enhanced by employing different types of triangulation: methodological triangulation (the data collected in the focus groups and the individual interviews were compared and contrasted); and investigator triangulation (multiple members of the research team both in and outside the field participated in data analysis including coding and identification of themes) [14].

Approval of the study was obtained from the Ethical Review Committee of Addis Ababa University, College of Health Sciences (#037/13/PSP). Permission to conduct the participant observation in the communities was provided by the heads of the health facilities. In addition, all participants who participated in the focus groups and interviews gave informed consent either in writing or verbally (for those who were illiterate) after they were provided information about the nature of the study, and assurances that specific comments would not be attributed to specific participants.

Issues of reflexivity: MHK status as an indigenous ethnographer

The first author's (MHK) "native" status offered both opportunities and limitations for the study [19]. He approached this ethnographic work as an "Amharic" speaker and tradition bearer, a member of the "Amhara" elite, and also as a senior pharmacy professional. He was able to use existing networks and contacts within the indigenous institutions, including traditional leaders and local health officials, thereby gaining access to a very wide cross-section of people. He carefully reflected on how the data collection process influenced his own perceptions, and how other people respond to him. He was also faced with the challenge of being perceived as a powerful individual due to his position as a member of the elite and a senior university lecturer. The use of open-ended questions, as well as informal conversations with informants on topics they themselves raised, were among the ways pursued to mitigate these challenges.

Results

Demographic characteristics of participants

In total, 96 people participated in focus groups. The number of participants in each focus group ranged from 8 to 12. Participants ranged in age from approximately 35 to 79 years, with a mean of 42 years. Most participants were Muslims ($n = 92$) and the rest were Ethiopian Orthodox Christians. Most of the participants were married. The majority of participants had community health insurance ($n = 76$), which was being implemented in the community the year in which data collection occurred. More than half ($n = 53$) reported that they were illiterate, i.e., didn't read and write Amharic. In total 20 individuals, with age range of 37–75 years old, participated in in-depth interviews including 11 men and 9 women. They were very similar to the focus group participants in their demographic characteristics.

Beliefs and perception of ill-health causation: a conceptual understanding

We found that the "causes" of ill-health were constructed and negotiated within the socio-cultural context of the study communities. The narratives of health among *Tehuledere* communities include three major themes that explained causes of ill-health: (i) supernatural (ii) natural elements or physical causes: (iii) social elements such as mistrust, social support/family dynamics as well as violation of taboos and moral injunctions. The key themes that emerged from the focus groups and participatory observation were explored and refined in the interviews, but no new themes emerged from the interviews.

Supernatural causes of ill-health

Similar to Murdock, a key category of causes of ill-health was the supernatural described by members of the study community as forces capable of putting spells on human beings. These forces also have the ability to heal one from these spells. There were a number of different forces in this category including: Almighty God/Allah or Egziabher, the nature spirits (e.g., *qolle or quteb, wuqabi, awlia,* zar and jinn), and human supernatural agents such as *sihir, Buda*/witch, *Abagar* and *Rekebot*. Each of these sub-categories will be described briefly below.

God/Allah

Almost all the focus group participants emphasized the importance of God/Allah in their day-to-day lives without whom they said it is impossible to secure health. Health was attributed by study participants to the will of God/Allah Who sends '*Melayka*' (the guardian angel) into people's homes:

> *Many thanks to Allah! … If Allah wants you to stay healthy, you stay healthy. I have never gone to modern health centers. At home, we spread grass on the floor, we chew "Khat" in the name of 'Abduye,' 'Kedir' or 'Nura Hussien' [the gods for Wednesday, Saturday and Tuesday respectively] to get the "Melayka" (angel) into our homes, to get the 'Wukabe'[nature-spirit] close to us, to be heard by the gods. Then we stay* healthy *[Female, Study Community # 4].*

> *Being healthy means "alemelekef" [not having a spell]. Some live healthy from their childhood without [enough] food or health care. If God wants you to live healthy, then you live healthy [Female, Study Community # 1].*

Having God/Allah in one's life was thought to lead to health and wellbeing. Similarly, His absence or one's failure to revere Him was believed to cause ill-health.

Nature spirits

The study participants attribute many ailments to withdrawal of nature spirits'[1] (e.g., *qolle or quteb, wuqabi, awlia,* zar and jinn) protection and wrath. These forces are believed to have unlimited power. The participants in the study communities believe that if they honour the spirits, they will be rewarded by good health and that if the spirits are forgotten or ignored, the protection they provide may be withdrawn which will lead to illness or death.

For example, *Wadaja*, a communal prayer ceremony, is a common rite practiced in *Tehuluedere*. It involves praising and glorifying the sky-god and seeking his spiritual assistance to ward off evil. A male participant discussed the relevance of *Wadaja* for health:

> *Wadaja is held particularly when some potential or actual problem which would affect the whole community, some village members, a family or an individual is imminent. Wadaja lately assumed a much more modified and purposive role of combating the zar, buda or other supposedly spirit afflicted illnesses [Male, Study Community # 2*].

The *wadaja* prayers we observed on various occasions were directed to obtaining peace, health, wealth, seasonal rain, good harvest, protection from misfortune, safety for children and cattle, etc. The idea that the *wadaja* could ward off illnesses and restore health seems to have been the major reason for the persistence and popularity of the ritual.

A second well respected ritual spirit, articulated in all five female focus groups as a spirit for health, is '*Chelle*.' Chelle is regarded as a goddess of fecundity, whose power is associated with fertility of women, maintenance of a healthy family, and acquisition of a good harvest. Chelle is represented by colorful small beads.

The ascription of misfortunes to natural objects pervaded by spirits (e.g., *qolle* or *quteb*) was observed to be common in the study population. Sicknesses, epidemics, contagious diseases and even death were explained in terms of punishment by enraged *qolle* spirits. Qolle spirits were also described as guardians who exact tributes in return for physical and emotional security (including health) and who deal out punishments for failure to recognize the spirits:

> *I believe in qolle spirits or 'adbars'. …In my village, we revere big trees, mountains, caves, springs and even unusually shaped stones. Qolle spirits are mostly venerated by buttering the natural objects, burning incense, tying around these objects strips of ropes or even a bunch of hair [Female, Study Community # 5].*

> *In our tradition people believe in qolle spirits (the spirit of individuals) is a guardian from illness and cause of illness. To act in this capacity qolle must be acknowledged and shown respect through appropriate rituals such as scarification of goats, respecting the local customs and values, etc., the spirit of the qolle are good for keeping relatives safe from harm and maintain health [Male, Study Community # 3].*

Human supernatural agents causing ill-health

Human supernatural agents, such as *Sihir or Woliy, Qallicha, Abagar and Debtera*, are believed by the *Tehuledere* people to be an embodiment of higher spirits

capable of casting a spell resulting in ill health. In other words, the spirits supposedly reside in some human beings and rituals and/or prayers need to be performed to withdraw the evil spirits impacting ordinary people through these human agents.

For example, the *qallicha*[2] witches are believed to cast spells on people causing them to experience ill health:

> *The sheikhs and qallichas apply magical knowledge to affect cure or induce illness..... Muslim sheikhs consult medical texts, produce magically charged protective amulets (Kitab) and talismans (talsam) of various kinds believed to endow the bearer with some beneficial effect [Male, Study Community # 4].*

Another example is the initiation of men by the *Abegar,* a name given to male community opinion leaders who are regarded as human agents who invoke the cult as the instigator of ill-health. Study participants explained that they believe that if a person violates the required norms, his/her health will be in danger:

> *If a person makes an oath in front of the Abegar with his hands on the Rekebot /an indigenous spot made of mud soil in which isen is served or place of truth/,and then tell lies, he will face problems. Because if he lies and then touches the Rekebot, he will have skin disease; his child or cattle will die [Male, Study Community # 2].*

Natural causes of ill-health

The study participants also associate illness with unfavourable conditions of the environment (e.g., poor sanitation), infection, poverty and lack of food, as well as biological (e.g., aging, genetics) and psychological causes such as stress and worry. Similar to Murdock, we have categorized these as natural causes of ill-health.

Environmental sanitation, personal hygiene and prevention of infection

Environmental sanitation is one key cause of illnesses that was recognized by all participants:

> *The water around the lake has altered its nature. Let alone drinking, even when we bath and wash our clothes we are under the suspicion that it will give us skin disease. When we drink it, we contract worms, they twirl in the stomach and give our kids 'tik, tik' [Stomach- ache, salivate and followed by vomiting,] [Male, Study Community # 5].*

Infections were also identified as a common cause of illnesses:

> *The use of non-sterilized sharp things for removing a child's milk teeth and female circumcision is consequential. People in our village sterilize the equipment they use for these purposes. Many become sick from the filth on the sharp equipment [Male, Study Community # 4].*

Poverty and lack of food as causes of ill-health

Many of the participants in the study specifically related poverty and lack of appropriate food to ill health. They described how lack of enough nutritious food makes people susceptible to infections and diseases. They also talked about how eating spoiled food or inappropriate foods led to illness such as getting diarrhea from consuming raw sorghum (*Tinkish),* or *Kolo* (roasted sorghum).

Almost all the focus group participants identified better food production as a contributor to health:

> *We keep healthy when we produce enough food and have work to do. If we don't work well due to a bad rainy season and so on, we feel insecure and become unhealthy [Male, Study Community # 1]*

Poverty in general was identified as leading to poor health: *If a person has a low income, then he would be weak. He would not be able to have enough food, this affects his health…We've become subject to 'Ke ijje Wode Afe Nuro' (hand-to-mouth livelihood) [Male, Study Community # 3].*

Biological and psychological factors

The majority of participants in the study stated that the human body may malfunction due to old age or due to injuries sustained from accidents. Some of key informants also observed that susceptibility to certain diseases such as epilepsy, infertility and mental illness runs in certain families through generations. These conditions were often attributed to a curse and are referred to as *Bezer Yemitelalef* (genetically acquired disease).

Descriptions of psychological causes of disease were also quite common in these communities:

> *Well, if there are no hustles at one's home and it's peaceful, the person becomes healthy. So if he is able to work well and come back home without any stress, he becomes healthy [Male, Study Community # 1].*

Presence of worry was also seen as part of being cause of illnesses, as one female participant explained:

> *If he is angry, then he won't do his work, he would just be distracted by worrying too much, I think that might*

lead to other diseases….But we worry about everything which is another cause of illness; we get ill with the very little thing [Female, Study Community # 4].

Social causes of ill-health

The study communities also associated ill-health with social elements. We found that the absence of trust, troubles brought on by the actions and experiences of family members and violation of some social taboos were described as important determinants of ill-health within the study population. This theme does not appear in Murdock's model.

Trust/Lying

For the study communities, a culture of social trust was central to their identity, and they believed this was directly connected to the health of the body. For example, if someone violated the trust of a significant other or another member of the community, they believed the consequence would be illnesses. Participants in most focus groups maintained that trust in one's married partner determines one's health. For example, if a man cheats on his wife, this could cause illnesses:

A person will be healthy when he settles at home, and is not cheating on his wife. A settled man lives in peace and prevents himself from syphilis and gonorrhoea. [Female, Study Community # 2]

Many respondents identified lying as a cause of ill-health. For example, there are beliefs that health problems and/or an illness or death will occur if one gives false witness in front of *Jamea* (a group of community opinion leaders, usually Muslim clergy).

… If you don't tell the truth, you and your family will fall ill. The disease is said to pass onto seven generations. [Female, Study Community # 5]

Social support/Family dynamics

Stress from family dynamics or lack of social support from families were also identified as being potential causes of illness:

…if I don't discuss good things with my husband and kids, if we're unhappy, there will be neither peace nor health in the family [Female, Study Community # 1].

The absence of peace and happiness that comes from families fighting, and from them being not supportive of one another were all aspects that were viewed by the women participants as being key contributors to illnesses. In contrast a stable home and family was seen as an important contributor to health.

We say in our culture, if there are arguments and fights there will be no peace then, it would shorten your life and laughter will be away from you. So if there is no peace at home, there will be no health [Female, Study Community # 4].

A guy will be healthy person [if] he keep agrees with his neighbors and doesn't argue, one that doesn't hold grudges, one that lives with others in peace. [Female, Study Community # 3].

Violation of social taboos

We also found acts in violation of social taboos or moral injunction were thought to cause illness directly rather than through the mediation of a supernatural being. An example cited in most of the focus groups was that of disrespecting elders, *Abegar* or Sheikh and a link to how that causes illnesses:

If people anger the Abegar or sheik, they get hurt by the ones they offended. I saw it happen as a child. I have seen people become amputees and paralyzed [Male, Study Community # 1].

Disobeying elders causes ailment. Not listening to them means we are exacerbating the disease we have [Female, Study Community # 2].

Violation of time ban taboos were also said to contribute to illness:

Leaving, travelling in the wrong time will cause disease from attack by the devil (lekeft). We consider people who travel at this wrong time bad, harmful, killers and thieves or people into something tricky. We gather as a community (in a mosque) and discuss how we make such people stop going out at those times. If we see someone leave home at the wrong time, we say "he is going to bring affliction" [Male, Study Community # 4].

Discussion

This study found that among the *Tehuledere* there are a wide range of perceptions regarding the causation of illness. As noted in other studies, effective primary care requires that all health care providers and policy makers take culture and traditional into account [20]. Similar to other cultural groups in developing countries around the world [11], many of the *Tehuledere* people attribute illness to the wrath of supernatural forces. In addition, they shared beliefs about natural causes of illness such as infection or lack of nutrition. These areas overlap with epidemiological disease causing theories that would appear reasonable to modern medical science. In epidemiology the accepted model of disease causation

requires the precise interaction of factors, mostly natural and behavioral, and conditions before a disease will occur [21]. A more interesting finding was that they also articulated how important social relationships are in maintaining good health. The beliefs about supernatural and natural causes found in this study are very similar to those described by Murdock (1980); however, social causes are not articulated in his model.

The importance of the supernatural

Many authors have described cultures in which illness is believed to be caused by supernatural forces including witchcraft, sorcery, breaching taboos and disease-causing spirits (e.g., [22–25]). Supernatural explanations also dominated the discourse of ill-health causation in our study. Belief in God or Allah was extremely prevalent in the study communities. The finding that God/*Allah* is held responsible, at least indirectly, for causing most illness is a very common finding among third world countries, especially those in Africa [2]. For example, Lidell and his colleagues (2005) described how Sub-Saharan people's relationship with God takes a form of nature-spirit reverence and connection which is vital to maintaining family health [26]. Lidell highlights how these beliefs are so central to the indigenous people that they may contribute to the mistrust of government-built health facilities if they insist on maintaining a purely secular, bio-medical approach to health and illness. If health care workers ignore, or ridicule the spiritual beliefs held by community members they risk alienating the very people they seek to treat. For the followers of indigenous faith, one's health status is not balanced without the nature-spirit connection. Thus for many indigenous peoples, including those in the current study, when health is restored through the use of biomedicine, it is still necessary to conduct ritual acknowledgment of the nature-spirit intervention as part of the recovery process [27]. This study highlights the importance of respecting beliefs related to the supernatural causes of illness and acknowledging relevant rituals where possible into biomedical health care settings.

Social relations as a cause of ill health

Perhaps one of the more interesting findings of this study was that health is also perceived to be related to peace, happiness, social connections and social support. The study communities rejoiced in their culture of eating together and sharing with those in need. The link between lying and ill health appears to be unique in this culture. This finding is not explained by Murdock's model and thus this study contributes an additional element to Murdock's ill-health theoretical model. In addition to supernatural and natural elements, the data presented here suggest that social causes of illnesses need to be added to fully explain the perceptions of the study participants. Data obtained from our study indicated that the role of social prohibitions and the consequences of their violation were a key factor causing health problems in *Tehuledere*. The connection between ill-health and lying needs further exploration for indigenous groups like this.

Implications

Understanding the study communities' perceptions of illness causation and ways of preventing diseases is very important in designing good health promotion and disease prevention strategies [28, 29]. The respondents in the present study perceived that supernatural forces were the most important cause of ill health. They also articulated the role of natural causes and social relationships in maintaining good health. Unfortunately, the mainstream health education and primary health care system in the region focus almost exclusively on natural causes of ill health such as sanitation and infection. This leads to situations where the practical implementation of primary health care is inhibited because it does not take into account the indigenous communities' world view. When Western biomedical practitioners overlook, or scorn the supernatural convictions held by group individuals they risk distancing the very individuals they look to treat. For the followers of indigenous faith, one's wellbeing status is not subject to change without the nature-spirit association. Consequently for many indigenous people, attempts to restore wellbeing through the utilization of biomedicine must include customary affirmation of the nature-spirit intercession as a feature of the recuperation process. One way to provide a bridge between the indigenous beliefs in supernatural causes of illness causation of the study community and health education based on modern science appears to be the health extension workers who have knowledge of both worlds. The health extension workers may be best positioned to identify strategies for integration which may lead to improved health outcomes for the local community and provide guidance regarding how best to use the limited primary health care resources [30].

The current Ethiopian indigenous health strategy (the National health strategies with regard to Indigenous Solution reported in March 2015) acknowledges the need to support components of indigenous medication including recommendations to explore potential beneficial aspects [31]. However, the capacity to execute and give expanded resources to support the sustainable utilization of indigenous medicine and implement health strategies that take into account indigenous ill-health beliefs is constrained. Issues identified with administration and bureaucratic frameworks don't fit well with indigenous ill-health beliefs. A deeper understanding of the

community's ill-health beliefs is needed to inform the design and implementation of primary health-care services.

Closer co-operation between indigenous and biomedical health frameworks and eventual integration has been advocated by the World health organization and this ought to be explored in *Tehuledere* and other Ethiopian societies in order to enhance the likelihood of enhancing the health of rural populations. Our study provides an excellent example of why health education and primary health care delivery interventions need to take into account what people actually do and the beliefs that drive their actions. Health education and care solutions found to be effective in one system may not work as well in other settings [32]; however, some of the lessons learned from this study may be applicable to other cultural contexts with similar beliefs. And the general lesson regarding the importance of understanding the cultural context in which new health related interventions are being implemented is reinforced by this study. It is hoped that the model of illness causation identified in this study will help to enhance the rural health plan for the 5 villages of *Tehuledere Woreda* and beyond.

Strength and limitations of the study

Like all research, out study has both strengths and limitations. Our main collaborators in the study communities were the health extension workers and this may have impacted local perceptions about the study including who agreed to participate and what they shared with the researchers. Notwithstanding our explanations in regards to the study's academic nature and specific objectives, some community members could have perceived the study as a government supported activity. It would seem that any apprehensiveness is likely to have been eased, by the generally friendly and mutually respectful rapport most people have with their respective health extension workers. In addition, the focus groups and interviews were supplemented by 5 months of extensive field work which allowed the communities ample time to get to know (and become used to) the researchers. This level of familiarity would have increased the comfort participants felt sharing with the researchers.

The results of this study were based on a sample of purposively selected participants who identified as individual from *Tehuledere* community. The sample was diverse in terms of age and sex and agro-ecological condition of the setting. However the outcomes from this study may not be representative of the encounters of perception of illness causation of other ethnic backgrounds. Triangulation of different data collection techniques including focus group, semi-structured interview data, observations and informal interviews with study participants was a strength of the study. Similarly, a theoretical approach initially used to frame and subsequently to interpret the data from this study allowed for a more thorough explanation of beliefs and perceptions of illness causation.

Conclusions

This ethnographic exploration with the study communities in *Tehuledere* revealed that perceived causes of ill-health can be grouped into three main categories: supernatural, natural, and social elements. Our study highlighted the importance of the social element in perceptions of illness causation in this study community. This finding, especially the link between lying and ill health may be relatively unique to this cultural setting. Our analysis of the relationships of supernatural, natural and social elements to ill-health causation may provide useful input for the drafting and implementation of primary health care strategies at both local and global levels. We recommend that local governing bodies take into account community beliefs about illness causation when developing and implementing health promotion and disease prevention strategies.

Endnotes

[1]Nature spirit- in *Tehuledere*, is the belief in *qolle* or *quteb, wodaja*, *mewokel* and *chele* spirits that is, venerating certain natural objects as sacred and the abode of spirits. Many natural objects were believed to be capable of mediating between the "supreme deity and the ordinary humans". The ascription of misfortunes to natural objects pervaded by spirits seems to have been prevalent where by sicknesses, epidemic or contagious diseases and even death were explained in terms of punishment by enraged spirits.

[2]*Qallicha: A person known, among traditional Muslim Ethiopians, to have special spiritual power and knowledge; he is believed to be capable of forecasting the future as well as revealing hidden facts, causing illnesses and resolving individuals' problems.*

Additional file

Additional file 1: Focus Group Discussions and In-depth Interviews Guide. (DOCX 17 kb)

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Availability of data and materials
Due to restrictions set by the Addis Ababa University, College of Health Science Institutional Review Board, data are available upon request by contacting the corresponding author.

Authors' contributions
MHK directed the focus groups, key informant interviews and participatory observation, performed the coding, categorized the emerged themes and drafted the original manuscript. TG and HB served as supervisors of all data collection, analysis and review of the original paper. MHK, TG, and HB all participated in the study design and data analysis. All authors read and affirmed the final version of the manuscript.

Competing interests
The authors declare that they have no competing interests.

Consent for publication
Not applicable.

Ethics approval and consent to participate
The study was approved by the Ethical Review Committee in the College of Health Sciences Addis Ababa University, with either in writing or verbally (for those who were illiterate) consent to participate in the study being obtained from all study participants.

Author details
[1]Department of Pharmaceutics and Social Pharmacy, School of Pharmacy, College of Health Sciences, Addis Ababa University, P.O. Box 1176, Addis Ababa, Ethiopia. [2]Leslie Dan Faculty of Pharmacy, University of Toronto, 144 College Street, Toronto, ON M5S 3M2, Canada.

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PAPER II

Religion, Spirits, Human Agents and Healing: A Conceptual Understanding from a Socio-Cultural Study of *Tehuledere* Community, North-Eastern Ethiopia

Mesfin Haile Kahissay[1*], Teferi Gedif Fenta[1], Heather Boon[2]

[1]Department of Pharmaceutics and Social Pharmacy, School of Pharmacy, College of Health Sciences, Addis Ababa University, Addis Ababa, Ethiopia

[2] Leslie Dan Faculty of Pharmacy, University of Toronto, Ontario, Canada.

*Corresponding Author Email: yeabdrug@gmail.com (MHK)

Abstract

Introduction: This paper explores the relationship among religion, spirits and healing in the *Tehuledere* community in the north-eastern part of Ethiopia, and focuses on how this knowledge can inform primary health care reform.

Methodology: The study employed qualitative ethnographic methods. Participatory observation, over a total of 5 months during the span of one year, was supplemented by focus group discussions (96 participants in 10 groups) and in-depth interviews (n=20) conducted with key informants. Data were analyzed thematically using narrative strategies.

Findings: The present study revealed that members of the study community perceive health, illness and healing as being given by God. Many of the *Tehuledere* people attribute illness to the wrath of supernatural forces. Healing is thought to be mitigated by divine assistance obtained through supplication and rituals and through the healing interventions of nature spirit actors.

Conclusion: We found that the health, illnesses and healing were inextricably linked to religious and spiritual beliefs. Our findings suggest that religious and spiritual elements should be considered when drafting and implementing primary health care strategies for the study communities and similar environments and populations around the globe.

Key words: Religion, Spirit, Healing, Illnesses, Beliefs, Indigenous, Ethiopia

Introduction

Although many countries, including Ethiopia, support the principle of a right to health care for all, translating that principle into action is a daunting task for most developing nations. The WHO estimates that more than one-third of the population in developing countries

lacks access to biomedical health care (WHO, 2011). Focus on biomedical health care as the goal presents a number of challenges for developing nations including: lack of human resources, accessibility, affordability, and perceived lack of cultural relevance. This leads to situations where people in developing nations around the globe continue to rely on indigenous health care practices along with the biomedical health care services (Kassaye et al., 2006).

Hammond-Tooke (Hammond, 1987) argues that maintenance and support of indigenous medicine may have a number of advantages. For example, it may be more congruent with the world view of the indigenous people and is likely to be more holistic (i.e., inclusive of prevention and health promotion) than the Western biomedicine which is often focused on treatment of disease, especially in countries with limited health care resources. One way to increase the total health care resources available within a country is to support the provision of safe and effective indigenous medicine (WHO, 2011).

Many scholars have described the important role that religion plays in all cultures, but especially in developing countries. Understanding perceptions of how to prevent or treat illness would not be complete without exploring the role of religion. Particularly for indigenous communities, religion informs individuals' understanding of what ill-health is and what health choices are available to them. It provides a broad perspective, beyond the biomedical paradigm, by which to explore a wide range of ways of explaining why one becomes ill, and strategies for re-gaining health (Holt & McClure, 2006; Traphagan, 2005). Understanding the role of religion and spirituality is the key to providing patient-centered care and promoting culturally appropriate health programs to indigenous communities. .

Currently the government of Ethiopia, through health extension workers, is attempting to provide culturally targeted health messages and interventions that are sensitive to indigenous explanatory models of health, illness, and disease. Acknowledging the supernatural and nature spirit agents as well as the social support mechanisms that the indigenous communities associate with healing can help to design community health programs that are more likely to be effective (Healy-Ogden & Austin, 2011; Maier & Straub, 2011; Malat & van Ryn,2005).

This study focuses on the religious and spiritual contexts of indigenous medicinal practices in *Tehuledere*, a community found in the Amhara regional state of north-eastern Ethiopia, and makes recommendations regarding the use of indigenous healing practices as a component of primary health care. By appreciating the "healing" views of the people in these communities, health care providers may be able to enhance positive health behaviors. Our findings also have clear implications for improving community health such as helping to identify partners in healing and collaborators for targeted interventions.

Methods

The God-centric healing model described by Padela et al.'s exploration of agents and their roles in healing in the Muslim community was a key sensitizing concept that guided the design of this study (Padela et al., 2012; Kleinman, 2009; Helman, 2007). The study utilized ethnographic methods (Creswell, 1998).

The setting

The study was conducted in *Tehuledere Woreda* (district) of south Wollo, north-east of Ethiopia which covers an area of 45,800 hectares with a population of 152,107 (*Tehuledere Woreda* Information Office (TWIO).The capital of the *Woreda*, Haik, is situated 430Kms

away from Addis Ababa (the capital of Ethiopia). Five rural communities were included in the study. The people in this area are members of the Amhara ethnic group and speak Amharic, Ethiopia's official language. As a predominantly rural *Woreda*, most inhabitants rely on farming. During the study period the *Woreda* had 2 health centers and 17 health posts. Communicable diseases including malaria, lung infections, diarrheal, intestinal parasites, eye infections, skin disease, and rheumatism were the major public health problems in the area (TWIO, 2014).

The current religious and spiritual healing beliefs of the community in the study area reflect a mix of pre-Christian Indigenous beliefs, as well as Christian, Muslim and migrant Cushitic Oromo (the largest ethnic group in Ethiopia) influences. The indigenous religion of the Oromo recognized the existence of a Supreme Being and other lesser spirits, namely, the `*ayana*` spirits which were believed to serve as intermediaries between man and the Supreme Being (Krapf, 1968 and Trimingham, 1971; Hussein, 2001). After they migrated from the southern part of Ethiopia, the Oromo people continued to practice their indigenous Cushitic beliefs as well as some pre-Christian animist traditions. Over time, most of these indigenous beliefs were absorbed into Islamic traditions. Our study highlights the importance of understanding the perceptions of spirit/supernatural healing and disease in this community.

Getting in and generating evidence

Given uniformity of the community in terms of socio-economic, religion and cultural characteristics, decision was made to choose five *kebeles, the smallest local administrative unit,* for the study. The researchers also consulted with the local *Woreda* health extension workers (primary health care practitioners),*)* and local elders to select study communities

that were accessibility and geographically diverse within the five *kebeles.* The other criterion was the interest demonstrated by the different health extension workers to participate in the study. The five study communities chosen were: *Gobeya, Godguadit, Bededo, Jari and Muti Belg* (see figure 1). Once the five *kebeles* were selected, study participants of focus group discussions and individual interviews were selected in collaboration with local elders. The inclusion criteria for the selection of these participants were: adult of age greater than 30; have lived in the community for 15 or more years; mentally fit; reported to be knowledgeable about indigenous way of healing. Accordingly 96 participant for 10 FGDs and 20 key informants were selected from particularly knowledgeable women and men community members.

Data Collection and Analysis

This ethnographic study was grounded in a participatory observations made by the principal investigator (MHK) functioning as a volunteer heath extension worker in the study area for five months between June and November, 2013. The investigator was able to observe and participate in local events (for example, ritual ceremonies, merriments, open social events including healing practices) and interact informally with community members. Information acquired from observations and conversations was recorded in field notes, captured in photographs, and when possible voice-recorded for reviewing after leaving the social setting.

In addition, ten focus group discussion sessions (one all male and one all-female in each *kebele)* were conducted. The women's focus group discussion was meant to allow women to freely and informally discuss their perceptions of religion and healing, without any socio-cultural inhibitions (for example religious prohibitions) which might have inhibited

the women from speaking on specific topics if men had been included in the group. Semi-structured in-depth interviews (n=20) were also conducted focusing on exploring the perceptions of religion, spirits and healing of those recognized as especially knowledgeable by focus group participants. Focus groups and interviews continued until the data in the key emerging themes were saturated (i.e., key points were repeated and no significant new information was emerging) (Weiss, 1994)

The quality of the data was assured by triangulating the numerous sources of information to review its credibility and trustworthiness. In addition, in an attempt to ensure the conformability of the data, the preliminary findings were shared with participants and the local research assistants. A group consensus coding process that included reflexive discussions of the data among the research team members was also done (Creswell, 1998).

All focus groups and interviews were conducted, tape-recorded and transcribed verbatim in Amharic. Early coding was carried out primarily in Amharic and incorporated multiple readings of the content which were followed by detailed coding and sub-coding plans around emerging issues or themes. Areas of original transcripts and key quotes thought to be illustrative of the developing themes were translated into English to facilitate discussion with the full research team as required. Analysis continued until key codes were saturated. All qualitative data from participant observations, in-depth interviews, fieldwork, personal memos and informal conversations were organized using NVivo 10 computer software. Approval of the study was obtained from the Ethical Review Committee of Addis Ababa University, College of Health Sciences. All participants who consented to be included in this study were guaranteed of complete confidentiality, privacy, and protection with respect to their character.

Findings and Discussion

Demographic Characteristics of Participants

In total, 96 people participated in focus groups. The number of participants in each focus group ranged from eight to 12, with a mode of nine. Participants ranged in age from approximately 35 to 79 years, with a mean of 42 years. Most participants self-identified as Muslims (n = 92) and the rest as Ethiopian Orthodox Christians. Most of the participants were married. The majority of participants had health insurance (n = 76), started the same year of this study. Just over half reported that they were illiterate (n = 53, 53%). In total 20 individuals, 37-75 years old, participated in in-depth interviews (Male=11 and Female=9). They were very similar to the focus group participants in their demographic characteristics. All names attributed to the quotes below are pseudonyms.

Religion, Nature Spirits, Human Agents and Healing

The importance of religion, reverence of nature-spirits and human agents in health and healing were articulated by all study participants. Most ailments were conceived as spirit caused and recommended treatments were likewise enveloped in superstitions, even when they were rooted in biomedicine. We begin by presenting the role that God or Allah is believed to play in health and healing, followed by human agents that respondents believe channel supernatural forces that impact their health and finally the participants' belief on the biomedicine provided at the local health centres in dealing with some types of illness that are closely linked with spiritual causes.

The Role of God/Allah

All the participants articulated that their health and wellbeing is under the direct control of the will of the almighty God/Allah. Many rituals appealed directly to the power of God/Allah, and interestingly were celebrated by the entire community regardless of their religious affiliations (Christian or Muslim). Use of amulets, *tsebel*/holy water and other religious symbols was widespread by participants and use of symbols commonly had little to do with stated religious affinity and more to do with honouring God/Allah in a general sense.

Almost all of the interviewees made a specific point of thanking God/Allah for their health and well-being throughout the interviews. For example, Fatima, a 56-year-old participant, said:

> *Many thanks to Allah! I believe in "Allah" and I would pray to Him all day and all night to make our country peaceful and rich, and me and my family healthy … It's according to Allah, you might be Christian and may not be the same as my beliefs but there is only one Allah, so if He wants you to stay healthy, you stay healthy. So far I have not gone to modern medicine, with the help of Allah I'm healthy, He is my police, my Law, my justice and my court He is everything for me and I can't say this heals and this doesn't because everything is in His hands.*

This faith was articulated even in situations where it was evident from the physical appearance of the discussants that they were not doing very well (Abu-Ras, 2008).

People within the study communities widely believe that by observing the laws recommended by God/Allah, every individual could protect himself/herself from possible

misfortune. Irreverence to God or Allah is believed across religions and belief systems to cause illnesses, absence of peace and lack of food.

An interesting feature of the study community was that most people celebrated religious ceremonies and followed traditions designed to honour God/Allah that were not based in their stated religions. When the issue of ill-health is raised, there were no religious barriers to seeking healing and prevention from a wide range of religious sources. For example, during our field visit on March, 20, 2014, we observed the *`Tsadiku`* / lit. The saint/ festivities. We were invited to one of the villagers' homes and the head of the household, 59-year-old Mohammed, explained: "*there are beliefs shared by both Christians and Muslims. For example, 'tsadiku' is celebrated by both the Christians and Muslims although this saint is actually a Christian saint. There are people that get cured by the 'tsadiku'. That is their belief. We don't work on that day."*

Many other participants confirmed this widespread example of "borrowing" beliefs, traditions and rituals from a wide range of religions:

> *We are Muslims, but my husband doesn't work on St. George's day (he doesn't even cut grass for cattle) [Worke, Female, 60)*

> *In our village, there are Muslims who celebrate tsadeku (on March 20th) and teklehaimanot (on the 24th) every year. We make tela and bukre [local drinks], we bake injera [flat bread] and bread. Thus we have these kinds of traditions that are not just for Christians or Muslims, but for both [Mufti, Male, 65).*

Alvarez, the writer in the early sixteenth century, indicated that there was a good relationship between the Christian and Islamic communities in *Wollo*. He was likely referring to the area near present day *Tehuledere*, in the region previously known as *Ambassel*. His writings describe how those living in the area celebrated all Muslim and Orthodox Christianity religion rituals thought to enhance health, regardless from which religion they belong (Alvarez, 1961). This cross-religious relationship appears to have been maintained in the contemporary *Tehuledere* community.

During our observation, it was noted that amulets and other symbols (bottle of holy water, religious or prayer books or a cross) from a wide range of religious influences were used for protection from a very diverse range of illnesses. They were believed to ward off illnesses ranging from those supposedly caused by spirits to physical ailments including infections. The belief in the prophylactic and curative power of amulets was very strong. One such example was the cross (traditionally a Christian symbol) which was found widely used within the study population for the healing and prevention of ailments and social health problems, despite the fact that most did not identify as Christians. For instance, we observed Muslim women in *Tehuledere* who adorned themselves with cross-shaped necklaces or tattoos which seem to have no religious connotation to them. Similarly Budge in 1930 reported that the Cross was generally considered as an "amulet and talisman par excellence in Ethiopia" (Budge, 1930).

Tsebel or holy water is also found to be one of the most popular healing systems in the study area. Again, although technically based in a Christian belief system, use of holy water was widespread among the entire community.

> ….. *So the holy water heals everyone who uses it. In the eyes of God everyone is equal. Because of our differences in our beliefs, language, and so on, we call ourselves Muslims or Christians. But God did not create us separately. We conspired to bring too many religions. … Because the holy water is given from God, it heals Muslims and the Christians alike. God sees every one with one eye, he does not say black, white, red, bent, straight, tall, short [Priest Admasu, Male, 69]*.

In our field visit, we observed two, very different, holy water sites: *Bededo* and *St. Stephan*. The *Bededo* holy water healing site is situated at the extreme southwest part of *Haiq* Town. It encompasses two separate springs. The first spring is slightly modified whereby a wall was constructed with two hollow tubes for the holy water to pour down. There is a small wall dividing the space for males and females. Here, the females are more protected by the wall while washing their bodies with the holy water, whereas the males are exposed to the sight of any passer-by or observer. People, with different health problems, take off their clothes and sit under the flush of water coming down from the pipes channelling water from the spring.

Ahmed, 59, who brought his sickly wife to *Bededo* holy water site, said that such health problems as itching, swelling of legs and other body parts, headache and *Jinn* attack are resolved through the application of this holy water. Similarly, Kedir, 45-year-old who lives in *Haiq*, said: "Washing with this holy water means securing health." According to Ahmed, both Muslims and Christians come from the various regions of Ethiopia and use *Bededo* holy water, and they claim that they are cured from their illnesses. As the water hits the holy water users, one can hear a lot of screaming. According to Ahmed, this is an indication of the fact that the evil spirits or any other disease causing agents are going away, and the

individuals are getting relief and refreshment. There is no specific or group to supervise or control the holy water site or to explain the healing procedures. People use the holy water turn-by turn based on mutual understanding and respect for others.

The healing practices of *St. Stephan* were quite different from that of *Bededo.* The holy water is in the compound of St. Stephan church which is located at the island of Lake Haiq. We observed two categories of clients who needed the holy water healing service at St. Stephan Church: the first category consisted of those people who had minor health problems and who entered the 'healing room' by themselves; and the second category comprised of those people who had serious or major illnesses, and were carried in by relatives and/or friends into the room, and then held by force under the flush of the holy water. In both cases the holy water healer utters words both in Amharic and *Ge'ez* languages (language has also been referred to as the 'language of prophecy,' the 'tongue of the Angels' and the 'first language of Adam and Eve), while repeatedly touching the head of the sick with a wooden cross. In the case of the very sick clients, the healer applies both the holy water and the symbolic blow with the holy cross more intensively, and he shouts a lot so that the Satan, *Jinn, or Buda* possessing the sick would be gone. The holy water healer asked the disease-causing agent whether it was a Satan, *Jinn, or Buda*, and 'it replies to his question'. Increasing the intensity, the blow with holy water and the cross, the priest warned the disease-causing agent to dispossess the sick person and disappear. Finally, 'the spirit declares that the sick person is free'.

According to one informant, both Christians and Muslims come to the St. Stephen holy water ritual despite the fact that this is technically Christian-based holy water and it is a Christian priest who serves a lead role in the healing practice. Last year, more than 600

patients (Christians and Muslims) were registered in the archive of the church; their religions, places of residence, and their illnesses had been recorded. But according to the deacon, about 10,000 people received the St. Stephan holy water healing services (within a two-year period i.e. 2012 and 2013), and they were able to resolve their health problems.

Human and nature spirit Agents: `Woliy`, Wadaja`and Healing

In addition to participating in religious rituals from a range of religions, deeply entrenched beliefs in the supernatural world impacted participants' beliefs about health and illness, regardless of their professed religion. The "evil-eye" of the Buda person was a very powerful and widespread example of this. Another example was the *Wadaja*, which is a group ritual ceremony carried out in many houses of Muslim and Christian community members, whereby a person or group with health or any other problems is helped through prayers and songs.

According to many focus groups participants, belief in the *Buda* person, someone who has the power of the 'evil-eye' and cause illnesses was very common. Buda-caused illnesses were thought to be diagnosed and cured both by indigenous methods often led by *Woliy* (human agents in Islam that are believed to have the power bestowed upon them by Allah to heal the sickly). Christianity and Islam could not disentangle themselves from these highly entrenched ancient beliefs, and thus rituals spanning both religious traditions, and beyond, have evolved within the study communities to protect against and treat illnesses caused by these forces.

Human agents, such as the *Woliy* managed some ailments in the study community, perhaps most commonly the *Buda or Ede Tibebat or* Evil eye attack**.** Regarding Buda management one male participant stated:

The people that mostly do this are the ones that know 'kitab' (Islamic Holy scriptures). They break the egg on the head of patient and read the Asma'aa (Islamic scripture magic). Let alone a child, even an adult with an evil spirit (buda yebelaw) gets cured with this [Ali, male, 62].

Despite the fact that the *Woliy* are not recognized as part of any specific religious in the doctrine, the *Woliy* incorporate reciting Islamic Holy Scriptures in front of people as part of their traditional approach to effect healing.

Many *qolle* or *quteb*, nature spirits *(spirits seems to have been prevalent where by sicknesses, epidemic or contagious diseases and even death were explained in terms of punishment by enraged these spirits),* acknowledged in the study community were believed to exact tributes in return for physical and emotional security and to deal out punishments for failure to recognize them. Similar to the evil eye, venerating *qolle or quteb, wuqabi, awlia,* zar and, *jinn* spirits was not considered part of either Christian or Islamic religious practices. According to the teachings of the Christian and Muslim all the supposedly spirit afflicted illnesses should belong to the family of the Devil. But the Christians and Muslims in the study communities turned to these ancient animistic beliefs without being concerned that it did not appear to fit with their dominant faith.

The idea that the *''Wadaja'* could ward off illnesses and restore health seems to have been the major reason for the persistence and popularity of the ritual amongst the local population. The *Wadaja* seemed compulsory when a community was affected with communicable diseases (human or animal) and natural calamities such as drought, heavy rain, and locust invasion. The ritual was also used for healing purposes when, for example, the family of the sick would summon *Wadaja* experts to conduct a healing session to free

the sick from physical or socio-psychological illness and help the patient regain his/her health.

Ahmed a 55-year-old male participant had to say:

> *They [wadajas] say "let's pray **(**du'a**)** with this color of sheep, with this color of goat [to be sacrificed], with this tree, at a particular place"…. if a disease comes, a lot of its bela (bad things) would vanish due to these prayers. God through nature spirit like qolle and qutib would come for us and give us rahemet (economical blessing). Through these prayers [wadaja or dua]**)** on the said place, with the sacrifices of the said sheep or goat, and the rains come…*

In all but one of the focus group, participants noted that the health centers had difficulty assisting with spirit-related ailments like: *qolle or quteb, wuqabi, mewokel, zar,buda and jinn*, and that people preferred to visit the cleric healers for this. A participant explained:

> *If it is jinn /mafatet', it is believed that the doctor can not cure it thus we take him to the holy water or wadaja will be called. Then the jinn will 'shout' and say "I am out" [Kemal, Male, 55]*

Another participant added:

> *There are times when 'modern' medicine cannot cure the disease properly. Injections and surgery do not take out the root of the problem. For example, in case a person gets 'Ebidet' (madness or Emotional problem) [Kedir, Male, 52]*

At times modern medicine is undermined by the participants' beliefs. For example, some participants described how they believed some symptoms were wrongly associated with organ failure by the biomedical health workers in the health centers. A male participant

said:

> *What is common in our area is Jinn; but when we go to health centers, they call the condition kidney failure looking at the swell of the victim's body. We, however, believe that the devil caused the swelling* [Kedir, male, 59].

Continuing the description of Jinn attack and its management strategies, Kedir noted,

> *The major symptom for Jinn attack is swelling. Another thing is that it could lead to a mental illness, making the patient speak out loud. The indigenous treatment is 'Wadaja'. When you do Wadaja there are things you call out for. The leader of the ritual, usually a sheik, says words from holly Islamic scriptures and calls for the spirit to leave the victim. After that there will be applause …If it is Jinn, the victim sees it in a dream as a human and a monster. At that time, you can see the victim's body shake. In our culture, there are things you should say in these situations; you say 'Be' Muslim' (In the name of Islam) and sing 'yaheya keyo'/ritual sing/. Then it will leave the body through the door and scream outside the house. But if it's not Jinn, the patient won't be able to see anything so he will be taken to the hospital.*

These spiritual beliefs may also contribute to reasons why a patient might avoid using bio-medical interventions. For example, some believed that diseases caused by the action of certain spirits like Jinn might be made worse by medication injection. This was because the needle could hurt the disease-causing spirit, causing it to endanger the life of the patient by making him or her unresponsive to other therapeutic or exorcizing procedures. Similar to our findings, Dein and colleagues (2008) found that the belief in *Jinn* possession was associated with symptoms of mental illness among East London Bangladeshi community particularly when encountering unexplained physical side effects (Dein et al., 2008).

The widespread nature of these beliefs and the impact they may have on health seeking behaviour and adherence to biomedical treatments suggests that primary health care health service interventions need to incorporate a full understanding of the indigenous beliefs of the community. Biomedical clinicians may need to work closely with religious figures and other indigenous healers, especially when working to support patients with mental illness. Religious clergy may be the first-line emotional health care suppliers especially in areas with active and rich indigenous cures for mental health conditions exist. Rather than ignore or denigrate these traditions, it may be much more effective to identify ways these clergy healers can work with mental health workers to help fulfill the health and spiritual needs of the patient (Osman et al., 2005; Al-Habeeb, 2004 and Cinnirella & Loewenthal, 1999). Further research should explore the prevalence of mental health issues in individuals who ascribe mental health challenges to suffering by *Jinn, qolle or quteb, wuqabi, mewokel, zar* and *buda* specifically among the individuals who look for treatment from faith healers. Creating ways to work synergistically with religious figures and other nature spirit reverence merits further consideration, specifically in connection to distinguishing models of good primary care practice.

The Emerging Model of Religion, Spirits and Healing

In many ways, the findings from this study are similar to those described in the study that led to the development of Padela et al.'s (2012) God-centric healing model. By and large God/Allah was seen to play a *direct* role in facilitating healing (Padela et al., 2012). Most of the discussants in this study engaged in a variety of religious rituals to directly seek healing from God such as begging *Allah* through prayer or *du'a,* and reciting from the Qur'an, celebrating the feast of *Tsadiku, using* holy *Kitabs* (magical amulets) and *Tsebel*

(holy water). The participants in this study also acknowledged God for his *indirect* healing through the actions of various human agents such as *Woliy* and nature spirits reverence such as *Wodaja* and religious figures. Each agent is viewed as God's instrument, and has various roles within the healing process (Appendix 2). In addition we also found extensive use of indigenous prevention mechanisms for various health related conditions. What was particularly interesting was how the *Tehuledere* communities had an all-encompassing vision of healing, and often did not distinguish whether a tradition or ritual came from a Christian, Muslim or animistic source. Although the formal religious doctrines attempted to dissuade participants from turning to other forms of spiritual aid, the individuals in this study very commonly participated in rituals from varied sources and did not see any contradiction in doing so.

Practical Implications

Biomedical service providers in the *Tehuledere* communities will only be effective if they can earn the trust of the community which involves developing strong relationships with both the patients and the traditional healers within the community. Some study participants bemoaned that biomedical providers sometimes did not meet their religious and cultural needs, and voiced worries about their distant interaction style. Such inadequacies in the patient–provider relationship have important ramifications for health care utilization and medical services quality. Patient–provider interaction challenges resulting from lack of understanding of patients' beliefs and values have been found to lead to a poorer quality of care in general including delays in seeking biomedical care, lack of full disclosure of symptoms and concurrent therapies and decreased adherence to treatments (Lee & Lin, 2008 and Williams & Mohammed, 2009). Basic understanding of the culture traditions of

the indigenous people, and where possible accommodating and/or integrating care by including indigenous clergy healers in care plans appears necessary to implementing successful primary care services in the study communities (Chao et al., 2008).

Our findings suggest that there is a need to improve cultural sensitivity within the biomedical health care providers serving the study communities. By understanding the significant actors in health care in these communities for example, God/Allah, *Tsadiqu, Tsebel* clergy, *Woliy, Qallicha,,* we distinguish points of indigenous medicinal services that can be harnessed to improve the wellbeing of people in the study communities. Given the God-driven perspective of health and healing within this cultural setting, working together with these caregivers can help to spread positive health care services messages in ways that are congruent with the religious and spiritual system. Other studies propose that imams and mosques can enhance wellbeing in a range of different way. For instance, training of imams about tuberculosis brought about mosque sermons prompting expanded location and treatment in Bangladesh (Rifat, 2008). In Afghanistan, similar interventions with imams helped to decrease maternal death rates (Mason, 2010).

The current Ethiopian indigenous health strategy (the National health strategies with regard to Indigenous Solution reported in March 2015) recognizes the importance of advancing of the useful parts of indigenous medicine including related enquiry and specialized backing. The end goal is to amplify the advantages of indigenous medicine, build new biomedical practices on the foundation of religious and spiritual healing practices. In order for this to be successful, the plans for implementing new essential medicinal services need to be re-evaluated to ensure they fit with the beliefs, needs and interests of the local people (FMOH, 2015).

Conclusion

The participants in this study clearly articulated that healing as well as illness and health are God given. The healing process takes place by seeking the assistance of the Divine through supplication and scripture-based cures and through nature spirit actors including '*woliy', 'wodaja', and 'tsebel'*/holy water. Each nature spirit agent plays several key roles in this process affecting spiritual, psychological, and physical health. Exploring ways to incorporate these actors as partners in improving health has the potential to improve study community's health.

Biomedical health care practitioners need to be mindful that beliefs about spiritual entities (like *Jinn*) and resorting to supernatural explanations at time of distress are an easily identifiable part of the study communities' culture. Communication and cooperation between religious leaders and spiritual agents and biomedical service providers should therefore be strengthened for optimal primary health care provision.

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PAPER III

Original article

Traditional healing and primary care: A socio-cultural study in a rural *Tehuledere* community, North-Eastern Ethiopia

Mesfin Haile Kahissay[1], Teferi Gedif Fenta[1], Heather Boon[2]

Abstract

***Introduction*:** This study explored the traditional healing practices among *Tehuledere* communities of North-eastern Ethiopia with an objective to construct a rural primary health care model.

***Methodology*:** A qualitative ethnographic method was used for this study. Using Kleinman's Cultural Systems Model, we conducted participatory observation (5 months over a one year period) supplemented by ten focus group discussions (n=96) and 20 in-depth interviews with purposefully selected knowledgeable community members. The focus group and in-depth interviews included questions about the traditional healing as a health care option, relationship and referral patterns between traditional healers and biomedical care and factor influencing the decision to seek health care options. In addition, the PI observed 7 traditional healers (2 female and 5 male) and 3 health extension workers while in action and interviewed informally. The notes were expanded, read and re-read to develop themes and interpretation and narration of findings followed.

Findings: It was found that in *Tehuledere* pluralistic health-care resources were used either independently or concurrently with biomedicine. Three categories of traditional healers in the study communities were identified: *Kitel Betash* or Herbalists, *'Awalaj'* or traditional birth attendant and *'Wogesha'* or local bonesetter. Major reasons for the use of traditional healers included: perceived etiology of illnesses; the availability and acceptability of health-care services; the relationship between the health-care practitioners and the patients; socio-economic factors (cost of health care service); and the influence of social network and/or social relationships. It was also found that traditional healers have interest to collaborate with bio-medical health-care practitioners.

Conclusion: Members of the study community considers traditional healing by *Kitel Betash*, *Awalaj* and *Wogesha* as a health care option in a multiple health-care resources. In view of this a successful rural primary health care strategy would have integrated these into the strategies of rural health care. [*Ethiop. J. Health Dev.* 2015;29(2):127-136]

Introduction

In Ethiopia, people use traditional medical systems as an alternative primary health care service along with the biomedical health service for centuries (1). Despite its persistence and continued use in Ethiopia, traditional healing practices were not officially recognized or regulated in the country. Though previous studies have provided useful insights into the understanding of traditional healing in terms of the therapeutic value of medicinal plants, the numerous socio-cultural and symbolic aspects of traditional medicine have not been explored in-depth (2,3). The contribution of traditional medical beliefs and practices to primary health-care is fundamental serving as a "safety-valve' for many Ethiopians who do not have access to biomedical health-care facilities, or cannot afford the costs involved (1, 4, 5)

Integrated into biomedical health services, indigenous knowledge and skill could contribute to primary care services. The primary purpose of this study was to explore and describe indigenous traditional practices in the management of health problems. Besides, it intends to propose a rural primary health care model that considers integration of traditional health resources to enhance primary health care services. Kleinman's Cultural Systems Model which recognizes the existence of more than one type of medical tradition in a society was adopted (6).

Methods

Design and setting: A qualitative ethnographic method was conducted in *Tehuledere Woreda*, an administrative unit in northeast of Ethiopia (7) (see figure 1). The capital of the *Woreda*, Haik, is situated 430 kms away from Addis Ababa, the capital of Ethiopia. According to the *Tehuledere Woreda* Information Office (TWIO), the *Woreda* covers an area of 45,800 hectares with a population of 152,107. There are 23 *Kebeles* (the smallest local administrative unit) administered by the *Woreda*, including 19 rural, 2 urban and 2 semi-urban towns. Residents here are members of the Amhara ethnic group and are largely Muslims. They speak Amharic, Ethiopia's official language. As predominantly rural *Woreda*, most inhabitants rely on farming. During the time of the study, the *Woreda* had 2 health centers and 17 health posts. In 2014, communicable diseases including malaria, lung infections, diarrheal, intestinal parasites, eye infections, skin disease, and rheumatism were the major public health problems in the area (8).

[1]Department of Pharmaceutics and Social Pharmacy, School of Pharmacy, College of Health Sciences, Addis Ababa University, Mesfin Email: yeabdrug@gmail.com, P.O. Box 1176, Addis Ababa, Ethiopia;
[2]Leslie Dan Faculty of Pharmacy, University of Toronto, 144 College Street, Toronto, ON M5S 3M2

Getting into the field: Given the large geographical area, the number of small communities in the region and uniformity in socio-economic and geographic characteristics, decision was made to focus on five communities for in depth study. The investigators consulted the *Woreda* health extension workers on selection of study communities. The accessibility and geographic distribution of the five *Tehuledere* sub-districts (`*ketena*`) were primary basis for selecting the study communities. Besides, the interest shown by the health extension workers to collaborate in the study was considered as an added value to select study communities. Accordingly; *Gobeya, Godguadit, Bededo, Jari and Muti-Belg* were selected as the study setting. Study participants of focus group discussions and individual interviews were selected in collaboration with HEWs and local opinion leaders.

Data Collection and Analysis: This ethnographic study was grounded in a participant observation by the principal investigator for five months between June and November 2013. This participatory observation helped to access research participants and health extension workers. The researcher was also able to participate in local activities such as rituals, festivities, public gatherings involving health practices, and converse informally with community members. Data obtained from observations and conversations were captured in the form of field notes, photographs and audio-records.

Following introductory discussions with community leaders/representatives, ten focus group discussion sessions: all male and all-female were conducted in each *kebele*. Study participants were adults over 30 years of age identified in consultation with health extension workers based on their knowledge about local health traditions and willing to participate in a conversation. The women's focus group discussion was meant to allow women to freely discuss– with no inhibitions. The focus groups lasted 1.5-2 hours and were moderated by the PI. The focus group included questions about the traditional healing as a health care option, relationship and referral patterns between traditional healers and biomedical care and perceived factor influencing the decision to seek different health care options.

Semi-structured interviews were conducted with 20 participants following the focus groups to obtain more detailed understanding of the traditional healing systems. Interviews lasted 1–1.25 hours at the participants' home or in public spaces in the villages. We also conducted informal conversations with healers (n=7) and 3 health extension workers on beliefs and roles played by traditional healers in the healing process. The number of focus group discussions and interviews was informed by data saturated (7, 10).

All focus group discussions and interviews were audio-recorded and transcribed verbatim in Amharic. Texts were read independently by the PI and another professional who speaks the local language and codes were developed in reference to the research questions. Each of the codes were organized into higher-order conceptual themes. These individual codes and themes were discussed at group meetings until consensus was reached on basic themes and subthemes across the focus groups and interviews. Finally the themes were incorporated into a conceptual model of the participants and their beliefs in traditional healing system and rural primary health care (10).Sections of original transcripts and key quotes considered to be illustrative of the emerging themes were translated into English to facilitate discussion with the full research team.Data analysis was supported by the use of NVivo 10 computer software.

The researchers shared findings with research participants and the local research assistants to confirm interpretations are accurate and reflect evidences believed to reflect the community. The findings from different methods were triangulated (7).

The key findings are organized into three major themes. First, an attempt was made to describe cultural beliefs and perceptions surrounding traditional healing as a health care option among multiple health-care resources. Second, relationship and referral patterns between the traditional healers and biomedical practitioners are presented. Third, the perceptions of the *Tehuledere* people about factors related with decisions to seek different health care options, with particular emphasis on traditional healing are described. Finally, the emerging model of the traditional healing system and practical implications for primary health care are articulated.

Ethical clearance: Approval of the study was obtained from the Ethical Review Committee of Addis Ababa University, College of Health Sciences (#037/13/PSP). All participants who participated in the focus groups and interviews gave informed consent and their anonymity was maintained.

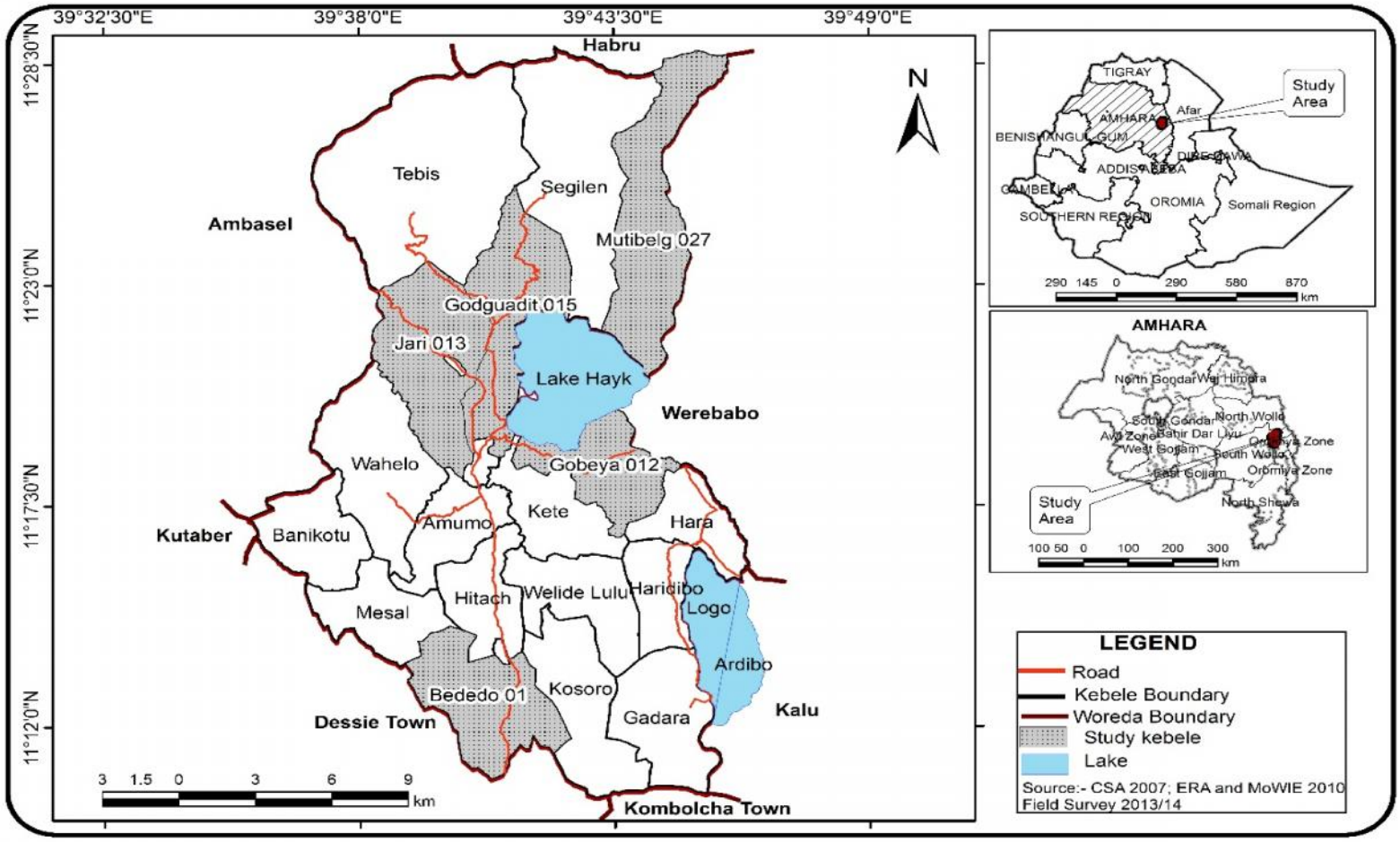
The first author's "native" status offered both opportunities and limitations for the study (11). He approached this ethnographic work as an "Amharic" speaker, member of the "Amhara" elite and senior pharmacy professional. He was able to use his networks and contacts within the indigenous institutions, including traditional leaders and local health officials, thereby gaining access to cross-section of population. He carefully reflected on how the data collection process influenced his own perceptions, and how other people respond to him. He faced with the challenge of being perceived as a powerful individual due to his position as a member of the elite and a senior university lecturer. All of these issues concerning competing roles and social perceptions relate to the concept of insider bias. The use of open-ended questions, as well as informal conversations with informants on topics they themselves raised, were among the ways pursued to mitigate these challenges.

Table 1: **The health problems that the respondent from focus groups and in-depth interview managed by herbalists, Tehuledere, North-eastern Ethiopia, May 2013- April 2014**

S.N.	***Health Problem (Local Name)***	***Biomedical equivalent***	***Perceived Causes***	***Management steps/strategies***	***Rationale for referral***	***Referral source***
1	*Yewef beshita*	Jaundice	Caused when the bird */an owl/* that sees a woman's blood from the menstrual cycle, goes around a person 3 times; *Caused by an owl* ***(yelelit wef).*** *There might be something that this bird infected/touched.*	a) Give the patient mixtures of water and peelings of leaves or macerate this mixture and give as drunk. Then when the patient sees the water, the disease comes out in the form of vomit and diarrhea b) Prepare one can of red teff and grinded it; baked grinded *teff* after mixing with the medicine prepared from the leaves of *sensal, panoalal (Dasminum abyssinicus),digita (Calpurnia aurea), atuch (Verbena offcinalis)* and the leaves, barks or resin of zigba (Podocarpus falcatus). Contraindications: 'don't eat cattle's meat and milk and sexual intercourse	Dealt with healers	Unnecessary
2	*Kintarot*	hemorrhoids	Strong heat; for instance, if a person sits on heated soil or stone, or if a person uses heated stones as toilet paper	a) rubbing with the leaves of hulagab or chifreg b) poulticing with the stem of embacho and rubbing with its leaves. c) applying the sap of antarfa (Euphorbia longi-petlata), or qinchib (Euphorbia triucale) d) Cut the *Kintarot* using a razor and wash the blood with water; put an ant's egg on the wounded part and wrap with a scarf (cloth). Contraindications: avoid eating beef and drinking alcohol for about one year; moreover, refrain from sexual intercourse for about five months.	If get worsen	Health center
3	Yelij-t'ilat[literally means enemy of the child]	herpes zoster	The perceived cause was said to be a lizard-like animal which is found mainly in the study areas.	a) The medicine is a leaf, it's squeezed and mixed with water or butter and applied on to the affected area. It will stop burning immediately after application. It could be applied on the mother or the child first. Once he/she gets a relief from the first medicine another medicine will be dried and powdered. Then it will be applied on the affected area. It's given for three days and before application you have to wash the area with soap and water. It will heal after three days. b) There's a leaf that will cure it. They mix it proportionally and drink it in a sufficient amount. It will totally cure the disease	Dealt with healers	Unnecessary
4	*Sireyet* or '*ije-seb'* (lit. 'The hand of [another] human')	[Digestive disorders associated with food intake]	Causes: 'evil-eye' inflictions; poisoning once food intentionally by enemies and if a snake's licks a stirrer and if its saliva gets into the wot/sauce	a) The chicken preparation, has a medicine as well, is made as a soup/sauce and taken by the patient to take out the creature on the abdomen through vomit and diarrhea; It is a one day treatment. *b)* The herbal medicine mixed with Tela, local alcoholic beverage, will be drunk and then a jar is also kept there. After they finish drinking, they throw up and you can see what comes out. Something like the head of lizards or frogs comes out while vomiting. There are people that took it up to 7 -14 days	Dealt with healers	Unnecessary

Table 1: cont.

S.N.	***Health Problem (local Name)***	***Biomedical equivalent***	***Perceived Causes***	***Management steps/strategies***	***Rationale for referral***	***Referral source***
5	*Chief*	Eczema	Washing the body on polluted water or pond/ also perceived as caused by washing the body with water infected with Jinn or Satan.	a) Washing the sore with the crushed leaves of *astenagirt* (Datura stramonium). b) Applying the pounded leves of waginos c) Rubbing the sore with the pounded root of *samma* (urtica simensis) or yameder embway. d) Smearing the affected part with *dinne* (Yellow sulphur)	Dealt with healers	Unnecessary
6	*Sinfete wosib/ I*	Importancy		a) Drinking a potion of the pounded rot of busqe with milk or honey. b) Taking an infusion of the pounded root or marenz (Acokanthera schimperi) c) Chewing the root of chifreg (side ovate) and sucking the juice D0 Drinking a concoction of the pounded root of labit (Tragia pungens) and zrch embway (Solaum sp.) with milk	If get worsen	Health center
7	*Neqersa*	Scrofula	Washing the body with water in which the jinn/Satan/ used to wash	a) Applying a paste of the sap of qulqwal, the pounded leaves of ese menahi and tult. b) Plastering the sore with the bruised leves of embacho, or ese seol. c) applying the sap of qulqwal d) applying sumanfar (?) kebra seamy or some gunpwder	Symptoms growing Worse	Health center
8	Ebab sinedif	Snake-Bite	Caused by bite with snake	a) Lngesting the pulverized root of ese amera or ese lebuna (Stureja biflora) with honey. b) Chewing the root or digita (Calpurnia aurea) and sucking the juice c) ingesting the pounded root of kafato (?) with honey d) chewing the root of chifreg e) Making an incision and sucking out the poison by mouth.	Dealt with healers	Unnecessary
9	*Rih*	Gout	Caused by contamination of the blood due to environmental pollution	a)Drinking a cold infusion of the boiled leaves of ese amera (Plumbago zeylanica?) with milk or honey. b) Taking the jice of the leves of semanak with fat. c) Hydrotherapy or repeated immersions in hot springs	Not improving	Health center
10	Lemt	Vitiligo	Caused by curse by elders or religious clergy	Rubbing the affected part with the leaves of *tenjut* and *waginos*	Dealt with healers	Unnecessary



Source: TWIO, 2014

Figure 1: **Map of *Tehuledere* Woreda, South Wollo Zone, Amhara Regional State, North-eastern Ethiopia, 2014.**

Findings and Discussions

Demographic Characteristics of Participants: In total, 96 people participated in the focus groups. Number of participants in each focus group ranged from 8 to 12, with a mode of 9. Participants ranged in age from 35 to 79 years, with a mean of 42 years. Most participants identified themselves as Muslims (n = 92) and others belong to the Ethiopian Orthodox Christian. Most of the participants were married and a few described themselves as widows/widowers. More than half reported that they cannot read or write (n = 53). Twenty individuals, selected from among focus group participants participated in in-depth interviews (Male=11 and Female=9). They were very similar to the focus group participants in their demographic characteristics. Those who were observed and also conversed with us has age range from 37-75 years while age of the 3 health extension workers ranges from 30-35 years.

Traditional Healing as a Health-Care Option: Medical pluralism as described in Kleinman's Cultural Systems Model was found to prevail among the *Tehuledere* community. The community was found to use multiple health-care resources either side by side or simultaneously. Most of focus group participants (n=9) stated that they are consulting traditional practitioners such as herbal healing, bone setting and traditional birth attendant as the first entry for perceived ailments or seeking bio-medical care.

Traditional practitioners are believed to be helpful in the prevention and treatment of variety of illnesses that cannot be cured with modern medicine:
If you go to a doctor seeking treatment for Yelij Tilat [Herpes Zoster] and Yewof Beshita [Jaundice], he will only take you to death….rather we use Kitel Betash, herbalist, in our village [Male ,59].

Similarly, there is a widespread belief among the *Tehuledere* people that Traditional healers are more effective, faster and less expensive than the biomedical professionals for fractures and attending births.

We found three categories of traditional healers in the study communities: *Kitel Betash* (Herbalists), *'Awalaji'* (traditional birth attendants) and *'Wegesha' (*bone setters). Details of these healers are further elaborated below.

***KitelBetash (Herbalists*)**: In this paper, the term herbalist refers to all practitioners who use only herbs or combine herbs with 'invocation or an act of supplication in Muslims' remedies such as herbal remedies and *"Dua"* (a prayer ceremony).

We observed that *Kitel Betash* play important roles in tackling some of the key health problems of the community. A list of ailments commonly treated by herbalists is provided in Table 1.The prescriptions, which constitute the concrete relationship between a specific ailment and the plant together with incantations are considered to be essential and the most valuable part of the healing tradition.

Acquisition of knowledge about medicinal herbs and healing skills were thought to be God (*Allah*) given. This knowledge was often passed down from generation to generation through families. Apprenticeships and verbal transmission of knowledge were commonly described.

***Awalaj (Traditional Birth Attendant*)**: *Awalaj* had a very important role in practices related to child birth and post-partum care. *Awalaj* attend expectant mother during labor and child birth.

Most of the focus group discussions (n=7) identified important roles for the *Awalaj* in delivering health care messages, providing spiritual support and healing, counseling female patients, and pregnant women. The counseling and prenatal and postnatal care by *Awalaj* sometimes is a substitute for midwifery nurse professionals. According to study respondents most women preferred home deliveries rather than delivering in a nearby health center. It was believed that they will not get the psychological treatments or comforting in the health center that *Awalaj* provide. *Awalaj* were found to be women and the new mothers would feel more at ease with their peers than with the largely male obstetricians in health center.

Respondents described the *Awalaj* as a counselor for moral supports of pregnant women and as someone "in whom everybody confides," because "sometimes pregnant women do not want to go to the health professional," and they "go to *Awalaj* who are knowledgeable." The knowledge of *Awalaji* was handed down from generation to generation within families or through informal apprenticeships.

***The 'Wegesha' (Bone setter)*:** The word *Wegesha* literally means 'to relieve' or 'to effect cure' (9). Their activity focuses on curing largely through physical examination and manipulation of the human body in the management of bone fractures and dislocations. Even though their knowledge of the anatomy of human body appears crude, the *'wegesha'* have some knowledge on the movement of blood vessels, bones, tissues, and arrangements of muscles, joints and ligaments. According to focus group participants, *Wegesha* intervened in cases of compounded, closed simple or complicated fractures, violently rotated limbs and broken skulls. They also handle cases like dislocated jaws and used catgut as a suture for sewing wounds.

Skills of *Wegesha* were usually acquired through very long practical experience, which serve as a source of respect and pride for many practitioners. Those families with long history of service were respected in their communities.

Relationship and Referral patterns between traditional healers and modern health care providers: Our findings show that community members use multiple health-care resources independently and concurrently. Both traditional and bio-medical health-care professionals expressed concern about patients using both systems simultaneously. Both groups agreed on the use of the other health care option under specific circumstances. However, the finding didn't show specific referrals or collaborative experiences despite evidences of interest for collaboration by traditional healers. A traditional healer reported that she is interested to collaborate with modern health care practitioners:
I am great at healing 'sire yet' [Lit. illness caused by poisoning once food intentionally by enemies*]. At times, however, my medicine may not help for this health problem. Likewise, above all, I am not experienced on how to treat tuberculosis, HIV/AIDs, diabetes and some other health problems. I would have then refered such clients to modern health centres [Female Herbalist, 80]*.

Another male participant stated that in his opinion modern health care practitioners could not understand the causes of "Jinn" and do not always "give the patient enough care and attention". Thus, he further pointed out that "*….it would be decent to refer such clients to us. This is because it is not necessary to compete with one another. We...together need to impart our insight to each other for an improved health service delivery..." [Male Wegesha, 65]*.

It is worthy to emphasize the fact that throughout the course of the discussion, tensions and contradictions were evident between indigenous healers and modern health care practitioners. The contradictions were based on differences beliefs about causes of illness/disease and diagnosis and management of such problems. Modern health practitioners do not endorse traditional healers and are skeptical about the efficacy of indigenous medicine (11).

Contrary to this, four of the traditional healers reported that they have been referring patients to modern health facilities for ailments which are perceived to have natural causation, such as HIV/AIDs and tuberculosis. Similarly, modern health-care practitioners refer clients to indigenous healers for cases of snake bites, *yewof beshita* (Jaundice) and *kintarot* (haemorrhoids). In line with this one of the health extension workers has pointed out that:
We should consider using both health care options by differentiating ailments that can be cured by traditional and modern health care. Local government should create awareness on indigenous health care practices and the traditional healers should work together with doctors who work in modern facilities. If traditional and modern health care are integrated, our community would get good service. When the government recognizes the traditional practice, knowledge associated to it can be passed on to the next generation easily [Female HEW, 37]

During our field observations, we learnt that health extension workers recognize traditional healers as helpful in healing *kintarot* (hemorrhoid), *sireyet* and *sibirat* (bone fracture). In view of such recognition, health extension workers provided traditional healers with training and medical supplies such as examination glove, cotton, jugs, gauze bandage, adhesive plaster, forceps, and scissors. They train particularly the *Awalaj, herbalists, and Wogesha* on how to use what they are supplied with. Traditional healers on the other hand assist health extension workers to mobilize community members on various community based health activities including campaigns for personal and environmental hygiene. A female traditional healer, who used to receive many clients in her home for herbal treatment indicated that:
When a patient has HIV/AIDs, tuberculosis, or malaria, for example, I send him/her to the modern health-care center, but there are problems because the modern doctors don't understand us. For ailments like yewof beshita/jaundice/, sireyet/Digestive disorders associated with food intake and jinn/evil attack, we are better prepared to treat such diseases with herbs [Female Herbalist, 74,].

Traditional Healing and Factors influencing decisions to seek Health-Care Options: Preference for the use of health care resource is found to be influenced by beliefs on etiology of ailments, availability and acceptability of health-care services, relationship between service practitioner and patients and the influence of social network or social relationships. This is similar to previous studies in Africa (13), which have described treatment-seeking behavior as determined by a range of factors including what was generated in this study.

The study has found that in *Tehuledere* belief about causes of ill-health was one of the most important factor in the preference of health-care options. Participants argued that traditional healers were sought for ailments that are caused by supernatural causes.

Availability of health-care service was another factor related to choice of health-care options. The absence of drugs in the local health post, government health centres and cost of such drugs when/if available were identified as an important reason for seeking care from traditional healers. In addition, modern health care was often not accessible due to distances which make traditional the best choice in many cases. One of the participants argued that:
There is lack of transport to go to the health centers that we mostly rely on traditional medicine as it is the only option we have[male, 63]

The cost of treatment was another factor, which determines the choice for traditional healing among those

in the study community. The cost of traditional medicine was reported to be much less than the cost of modern health care. Some of the participants shared their concerns over limited discussion with the biomedical provider about their problem that they don't understand what was wrong with them or why and how to use the medicine that has been prescribed:

Traditional healers are regularly giving extraordinary time to discuss with us and they are much closer in and treating us like their relative. They are talking and amusing us. Be that as it may, the bio medical specialists are not talking and drawing closer well. Contrasting with the traditional healer, they don't have great open conduct [Female, 64].

This story portrays that traditional healers are good in communicating with their clients as compared to modern health care providers.

We likewise found that social relations and social networking play an important role in shaping individuals' preference of health care options. Participants have also pointed out that they chose traditional healing based on advices from the elders within the family or the community. In the study community, advice and guidance from the elderly is respected and observed. It was found that individuals prefer traditional health-care institutions in respect for guidance from the elderly no matter what the person believes is the right choice.

… Once in a while, our parents and elderly individuals even from neighborhood may advice and guide you to take treatment from the traditional healers. Bridging their advice may bring bad omen and condemnation that may bring about another ailment [Male, 45,].

Functioning Model of Traditional Healing System

Despite the established power differences and marginalization by biomedicine, traditional and modern health care systems coexist in the study community as would be predicted by Kleinman's Cultural Systems Model .People may use treatment provisions exclusively from one option or use medicines from both options concurrently. It is important to address some of the ways in which traditional healing and modern health care can benefit each other resulting in a more balanced exchange between the two (13).

One way to provide a bridge between the traditional healers and modern health care providers appears to be the health extension workers. Among the roles of health extension workers facilitating integration of the beneficial aspects of traditional and modern health care resources is critical for improved health of the local community and optimal use of limited resources in the primary care. We observed that this cooperation of health extension workers, traditional healers and modern health care practitioners was working well in *Tehuledere* communities.

It was evident that *awalaj* provides health services to mothers and health extension workers provide important materials to the *awalaj* so that they may provide safe healthcare services to the community and protect against infections. The health extension workers use the traditional healers as intermediaries to facilitate interactions with community members since they are more accepted and respected. So, the health extension workers provide education and some community based activities in collaboration with the traditional healers. For example traditional healers are often responsible to disseminate any information and socio-cultural issues to the community during the bimonthly meetings held in the villages.

Finding from this study indicate the functioning rural primary health care model is best with all health care options working together.

Practical Implications for a Rural Primary Health Care ModelIB: Based on findings from this study, this section describes an integrated rural primary healthcare model. More advocacy and community mobilization on the need for cooperation between the two medical systems is recommended. The proposed model recognizes that both resources are equally important. Some herbs used by herbalists are effective, although others may not be and much research is needed to build an evidence base in this area. Much of the bone setting work of the *wegeshas* is clearly helpful, although conventional medicine may be needed in more complex cases. Similarly, the activity of the traditional birth attendant (or *awalaj*) also fulfills a very important need within the community especially for uncomplicated labor and delivery.

Currently the Government of Ethiopia is developing primary health care through its Health Extension Program and Primary Health Care Units as the principal strategy to achieve service coverage. It is investing to reduce disparities and improve equity and access through new strategy for community-based services focused on teamwork (14).It is in this part of the plan that the findings from this study are most applicable.

Buhrmann explains the importance of not only linking health to an individual but to the whole community, especially in preliterate communities where health information is shared by word of mouth from generations to generation (15).A situation analysis by Federal Ministry of Health of Ethiopia pointed out a number of challenges to implementing primary care including: inadequate capacity to implement a decentralized health system, weak referral network, low effective coverage of high impact interventions, inadequate biomedical drug supplies at health facilities, and lack of human resources (16).

Many scholars who conduct research on the area of community participation and primary health care in developing countries pointed out that health

improvement depends on more than just one health care resources and centrally imposed public health solutions may be counterproductive (17-21).The essence of Alma Ata declaration was a shift in power from the providers of health services to the consumers of the health services (22).The community approach to health care sees home and traditional healers as the first entry point to primary health care, and the indigenous healers from rural villages like *Tehuledere* as first-line healthcare practitioners for perceived ailments.

Our findings revealed that decision-making on treatment seeking for ailments is complex and influenced by cultural and personal beliefs, individual experiences, and socio-economic features. Besides, the rising cost of modern health care, the shortage of health professionals in the rural areas, poverty and personal and spiritual beliefs on the cause of illnesses, social relations and social networking tended to increase the utilization of traditional medicine among the *Tehuledere* community. This is the basis for a functioning rural primary health care model that is currently in operation in the study community as well as similar settings elsewhere. A bridge of caring was built between traditional healers and the primary health service (i.e. the health posts) in the management of perceived common ailments, such as *Yew of Beshita* (jaundice) and *Yelig Tilat* (Herpes Zoster) in the village. Another bridge of care was between the health posts and the health center for the management of the other health problems, such as HIV/ AIDS and Tuberculosis, which the study communities experience as critical. The role of health extension workers was very important for this integration.

Conclusion:

This study found that community of *Tehuledere* enjoys pluralistic health-care resources that they use either independently or concurrently. The study identified that, people turn to traditional healing systems (such as herbal healing, bone setting, traditional birth attendant), and modern heath care options when they encounter health problems.

The findings of the study indicated that the *Tehuledere* community's choice of health-care options have been influenced by the socio-cultural and economic conditions such as: beliefs of illness causation; accessibility; perceptions regarding culturally appropriate indigenous treatments and dissatisfaction with the treatment outcomes at modern health care facilities; and the relatively high cost of modern health care. The study also revealed that social relations and networks play important role in the choice people make regarding health-care options.

The finding suggests that integrating the best features of traditional medicine into the primary health care services, may enhance the reach and cultural acceptability of healthcare. The fact that extension of modern protective and curative services do not yet reach the predominantly rural population to level with which they are satisfied, traditional medicine is considered necessary to complement health care demands at least in the foreseeable future. Considering their role in the community and relative understanding of the role traditional medicine plays, health extension workers were considered to function as bridges between the traditional healing and modern health care system. The study investigators hope public and policy dialogue on the need for integration of health care resources at least at primary health care level continues.

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PAPER IV

Original article

Popular Healing and Primary Health Care: A Socio-Cultural Study in Rural North-Eastern Ethiopia

Mesfin Haile Kahissay[1], Teferi Gedif Fenta[1], Heather Boon[2]

Abstract

Introduction: Studies have shown that popular healing practices at home could play a major role in solving the problem of overcrowding in primary care services. This study explored the indigenous popular healing practices used by communities in North Eastern Ethiopia.

Methodology: A qualitative ethnographic method was used for this study. Using Kleinman's Cultural Systems Model, we conducted participatory observation (5 months during the span of one year) supplemented by ten focus group discussions (n=96) and 20 key informant interviews with purposefully selected knowledgeable community members. The focus group and key informant interviews included questions about the popular healing as a health care option and popular modes of healing practices. The process of analysis and interpretation was informed by thematically and the analysis of narratives strategies.

Findings: The study found that home remedies are applied for both prevention and remedial purposes. Common ailments that are managed at home include *Nedad* (malaria) and *Mich* (acute febrile illness). Home remedies are prepared in the household by the patient, his/her parent or a family member. However, in cases where home remedies and/or home-based treatment did not cure a patient, other alternatives are looked for such as visiting a bio-medical care facility following a similar model developed by Kleinman in early 1980's.

Conclusion: Since people in the study communities believe that popular healing is a health care option among multiple health-care resources, successful rural primary health care strategy would give due attention to such local resources. This will help to ensure the optimal utilization of Ethiopia's limited resources. [*Ethiop. J. Health Dev.* 2016;30(1):29-43]

Key Words: Popular healing, home remedies, ailments, primary health care, Ethiopia

Introduction

Home remedies are well-known popular healing. However, it is often over-looked as a healthcare option among all societies (1). Even when included in studies, analyses often fail to report on the use of home remedies as a separate category (2). Those studies that do report on home remedy use do not distinguish among the specific home remedies used, obscuring the range of symptoms that individuals treat with particular remedies. Multiple studies have simply asked participants whether they have used home remedies without significant prompts. Such an approach is likely to miss much of home remedy use (3).

Although relatively little is known about popular healing system in Ethiopia, there are studies on the history of popular medications in Ethiopia (4, 5) and on the public health aspects highlighting only the knowledge, attitude and practice related to home remedies (6,7). While anthropological explorations has provided in depth insight to this health care alternative (8-10), a number of ethno-botanical studies has also focused on identifying and categorizing medicinal plants in Ethiopia as well as exploring their function (11).

Though previous attempts remain very important in providing insights into the understanding of popular healing in terms of the historical and therapeutic value of home remedies, they fail to investigate the numerous socio-cultural aspects of this form of medicine. On top of these, they do not fully explore how to enhance and develop the beneficial aspects of home remedies, including pertinent research to explore possibilities for their integration into "modern" medicine. When integrated with 'modern' medicine, well developed popular healing knowledge and practices have the advantage of reducing overcrowding of primary care services. However this aspect is not well studied in the Ethiopian setting.

Despite evidences of the contribution of home remedies to primary health-care serving as "safety-valve' for many Ethiopians who do not have access to biomedical health-care facilities, such system remains generally out of the country's health-care system (12-14).

Following Kleinman's Cultural Systems Model, the popular enclosure (also known as the lay, non-professional, non-specialist area of society) healing is the level where ill-health is initially recognized and characterized, and health service starts (15). This level of health care alternative is basic to other care options and precedes seeking advice or care from traditional healers or biomedical practitioners (16). Thus, Kleinman's

[1]Department of Pharmaceutics and Social Pharmacy, School of Pharmacy, College of Health Sciences, Addis Ababa University, Mesfin E-mail yeabdrug@gmail.com P.O. Box 1176, Addis Ababa, Ethiopia;
[2]Leslie Dan Faculty of Pharmacy, University of Toronto, 144 College Street, Toronto, ON M5S 3M2

Cultural Systems Model which recognizes the existence of more than one type of medical tradition in a society was adopted (15).

This study explored the popular healing practices used by communities in North Eastern Ethiopia in the management of common health problems in their homes. Using data from this qualitative inquiry of popular healing practices in the study community, we (A) explored the level of use of home remedies among rural adults as health care option and, (B) explored the purpose for which home remedies are used for common ailments. It also provided recommendations to key stakeholders regarding how home remedies may be better used as the first resort for ailments in the home using the conceptual framework adopted from Kleinman's Cultural Systems Model (15).

Methods

Design and Study Area: A qualitative ethnographic method was conducted in *Tehuledere* Woreda, an administrative unit in northeast of Ethiopia (17) (Figure 1). The capital of the W*oreda*, Haik, is situated 430 kms northeast from Addis Ababa. According to the *Tehuledere Woreda* Information Office, the *Woreda* covers an area of 45,800 hectares with a population of 152,107 in the year 2014 (19). There were 23 *kebeles* (the smallest local administrative unit) administered by the *Woreda*, including 19 rural, 2 urban and 2 semi-urban towns. The people in this area are members of the Amhara ethnic group and are largely Muslims (95%). They speak Amharic, Ethiopia's official language. As a predominantly rural *woreda*, most inhabitants rely on subsistence farming. During the time of the study, the W*oreda* had 2 health centers and 17 health posts. In 2014, communicable diseases including malaria, lung infections, diarrhea, intestinal parasites, eye infections, skin diseases, and rheumatism were the major public health problems in the area (18).

Accessing and getting into the Field: Given uniformity of the community in terms of socio-economic, religion and cultural characteristics, decision was made to choose five *kebeles* for the study. The other criteria for the selection were the accessibility and agro-ecological distribution of the five *kebeles.* The investigators consulted the *woreda* health extension workers (primary health care practitioners) and local elders on the selection of study *kebeles*. The five selected *kebeles* were: *Gobeya*, *Godguadit*, *Bededo*, *Jari* and *Muti-Belg*. Once the five *kebeles* were selected, study participants of focus group discussions and key informant interviews were selected in collaboration with local elders. The inclusion criteria for the selection of these participants were: adult of age greater than 30; have lived in the community for 15 or more years; mentally fit and reported to be knowledgeable about indigenous way of healing. The exclusion criterion was not being a traditional healer. Accordingly, 96 participants for 10 FGDs and 20 for the key informant interviews were selected from particularly knowledgeable women and men community members.

Data Collection and Analysis: This ethnographic study was carried out by the principal investigator (MHK) who took the role of observer as participant in the study area for five months between June and November, 2013 (19). This role has helped him to access research participants and health extension workers working in health institutions. The first author was also able to participate on local activities such as rituals, festivities, public gatherings involving health practices, and informally converse with community members. Data from such observations as well as subsequent conversations were regularly recorded in field notes, were photographed, and audio-recorded.

A total of ten focus group discussion sessions (one all male and one all-female in each of the five *kebele*) were conducted. Study participants were adults over 30 years of age identified by local elders in the area to be knowledgeable about local health traditions who were willing to participate in a conversation about their health. The women's focus group discussion was meant to allow them to freely and informally discuss their perceptions of popular healing system, without any socio-cultural inhibitions, (for example religious prohibitions) which might have inhibited the women from speaking on specific topics if men had been included in the group. The focus group discussion was facilitated by the MHK and lasted 1.5-2 hours. The focus group discussion included questions about the popular healing as a health care option and referral patterns between popular healing and biomedical care.

Semi-structured key informants interviews with 20 interviewees from particularly knowledgeable women and men community members identified by the participants of the women and men focus group discussions, respectively were conducted by MHK following the focus group discussions with a view to obtain more detailed understanding of the popular healing systems. Interviews lasted 1–1.25 hours, and were conducted in the informants' private homes. The interviews included questions about common health problems, the remit and perceived value of the popular modes of healing practices for perceived ailments and their management strategies. Focus group discussions and interviews continued until the data in the key themes, popular healing system using home remedies and common health problems management strategies, were saturated (i.e., key points were repeated and no significant new information was emerging) (17, 20).

All focus group discussions and key informant interviews were audio-recorded and transcribed verbatim in Amharic. Texts were read independently by MHK and another professional who speaks the local language and codes were developed in reference to the research questions. Each of the codes was organized into higher-

order conceptual themes. These individual codes and themes were discussed at group meetings until consensus was reached on basic themes and subthemes across the focus group discussions and interviews. Finally, the themes were incorporated into a functioning popular healing system within the framework of primary health care model of the study community (21). Sections of original transcripts and key quotes considered to be illustrative of the themes were translated into English to facilitate discussion with the full research team as needed, because one of the research team members, HB, was a non-Amharic speaker. Data analysis was supported by the use of NVivo 10 computer software.

Ethical considerations: Approval of the study was obtained from the Ethical Review Committee of Addis Ababa University, College of Health Sciences (#037/13/PSP). The purpose of the study, procedures, time commitment, and confidentiality was explained to all participants with information sheets and consent forms. Prospective participants were informed that they may terminate participation at any time during the research, including withdrawal of associated data. They were also given an indication of what will happen to the data, including its potential use in any reports and publications. Then, all participants who participated in the focus groups and interviews gave written informed consent and their anonymity was maintained.

Reflexivity: MHK Status as an Indigenous Ethnographer

The first author's (MHK) "native" status offered both opportunities and limitations for the study (22). He approached this ethnographic work as an "Amharic" speaker and tradition bearer, a member of the "Amhara" elite, and also as a senior pharmacy professional. He was able to use existing networks and contacts within the indigenous institutions, including traditional leaders and local health officials, thereby gaining access to a wide cross-section of people. He carefully reflected on how the data collection process influenced his own perceptions, and how other people responded to him. He also faced the challenge of being perceived as a powerful individual due to his position as a member of the elite and a senior university lecturer. All of these issues concerning competing roles and social perceptions relate to the concept of insider bias. The use of open-ended questions, as well as informal conversations with informants on topics they themselves raised, were among the ways pursued to mitigate these challenges.

Results

Socio-demographic characteristics of study participants: In total, 116 people participated in the study. While 96 people participated in 10 FGDs and 20 people (Male=11 and Female=9) participated as key informants. Age of participants ranged from 35 to 79 years, with a mean of 42 years. Most participants were found to be followers of Islam (n = 109) while the remaining were followers of Ethiopian Orthodox Christianity. Majority of the participants were married (n=94), rely on farming (n=110) and live in house hold size of six. Just over half (n=68) reported that they were illiterate, i.e. didn't read and write Amharic.

Popular Healing as a Health-Care Option: Medical pluralism is the case than an exception among participants. Local people use multiple health care options such as popular healing, traditional healers and biomedicines, either side by side or sequentially. Many first try popular healing which may include the use of home remedies such as herbal medicine or informal care given by family members and neighbors. Otherwise the other major alternatives were consulting traditional healers or seeking bio-medical care.

A variety of reasons appear to be associated with the preference for use of popular healing using home remedies including: the perceived etiology of illnesses and accessibility (the availability at often no charges) of health care services. Participants argued that popular agents such as families, friends and neighbors were sought for ailments that are caused by natural causes.

The first option of treatment for most common ailments and symptoms, whether acute or chronic, were home remedies. During the observation, it was noted that, conditions perceived as 'common ailments were those which involve symptoms that can be easily diagnosed (e.g. fever, abdominal cramps, minor wounds and cuts, etc.), and only partially compromise the normal functioning of the ill person. It is noteworthy, in this respect, that the Amharic adjectives *qelal* (light) as opposed to *kebad* ('heavy') were routinely used by informants to distinguish between what are considered 'common' and 'serious' illnesses, respectively. Most informants (n=18) articulated, home-based treatments to be satisfactorily effective for dealing with such problems. Some, however, also noted that home remedies are especially useful in cases of emergency and the sudden onset of illnesses (which might be deemed much more serious), at times when it is not possible to avail other sources of health care for various practical reasons. In such instances, people rely on the expediency of home-based treatments, if only for alleviating pain and suffering in the interim. Given that fever is one the most common symptoms, popular healing using home remedies for *mich* (interpreted as non-specific acute febrile illness) is perhaps the most widely and frequently used in this 'first-aid' manner. As one informant put it:
It would be a untruth to claim that we go to the clinic without, at least, having first tried our ye 'mich medhanit' [home remedies for acute fever] [Male, 64, KI]

However, in cases where popular healing with home remedies did not cure a patient, they decided to look for other alternatives, such as visiting a bio-medical doctor.

One participant suggested that: "It is common to have popular healing using home remedies as my first

preference for treatment and if this failed to cure certain diseases, follows the attendance to health posts and/or health center as a second alternative" (Female, 53, KI).

Most focus group participants said they would continue to use home remedies first, for ailments such as malaria and flue, even if biomedical remedies were provided for free. A number of reasons were given for that including: there are diseases only cured by home remedies; *Allah (God)* created home remedies to manage common ailments at home; participants were not happy with the management of the illness by biomedical health care providers.

I would never stop using home remedies even if modern medicine is free; why would I stop? For one it cures the disease that can't be cured by doctors [Female, 41, FGD]

Most of the time, we are not happy with the management of ailments by doctors. You take your relative to hospital being very ill. The relative gets admitted. You continue to visit the relative to check how she/he is doing, and then you find that your relative is getting worse. You start preparing home medication, and quietly bring the medication to use while in the hospital. [Male, 49, FGD].

Explaining the pluralistic nature of the choice, this study indicated that there is a sequential and integrative form of treatment for ailments such as malaria. Participants in female focus group discussions (n=4) reveal the fact that mothers first apply home remedies for their sick children from malaria as a kind of first aid and then seek biomedical treatment not as separate courses of therapeutic alternatives but as complementary hierarchies of treatment.

I think both are very important and I would like to use them sequentially for malaria; if home remedies do not help, then I would turn to modern medicine. I want to use both. But if there were no home remedies anymore, you don't have a choice, regardless of the expense you go to the modern medicine and save your life; because there is nothing more than life. As long as there is modern medicine it's not a problem and they just go hand in hand; modern and home remedies [Female, 57, FGD].

According to participants of focus group discussions (n=8), most of them have casually learnt about home remedies from their families. One of the female participants said:

I had learned about home remedies from my mother who told me she has in turn learnt from her father. I trust my children will also learn from me. Apparently my son is active learning about home remedies. He asks me questions on home treatment for different ailments which I kept on explaining (Male, 65, FGD).

A female focus group discussion participant who dreamed of her mother-in-law directing her to the home remedies that would assist a relative suggests that such knowledge, which she had in her unconscious, was given to her by her mother-in-law.

……. you usually dream at night of either your mother or grandmother, or an important family relative guiding you on where to go and get medication for your child, even if this might be in the forest. When you wake up, you would go to the exact place and find the medication described in your dream there, and prepare it in the way in which you have been told in your dream, and this usually helps your child. [Female, 57, FGD].

Data obtained from this study revealed that there are multiple factors that influence the popular healing knowledge transfer systems over time among the *Tehuledere* people. Focus group discussion participants were asked about the sustainability of indigenous popular healing knowledge transfer systems from generation to generations. Most (n=9) of focus group participants reported that the transfer of popular healing knowledge from generation to generation was by word of mouth. It is not documented as most of the knowledgeable elders cannot read and write. One of the female participants had to say:

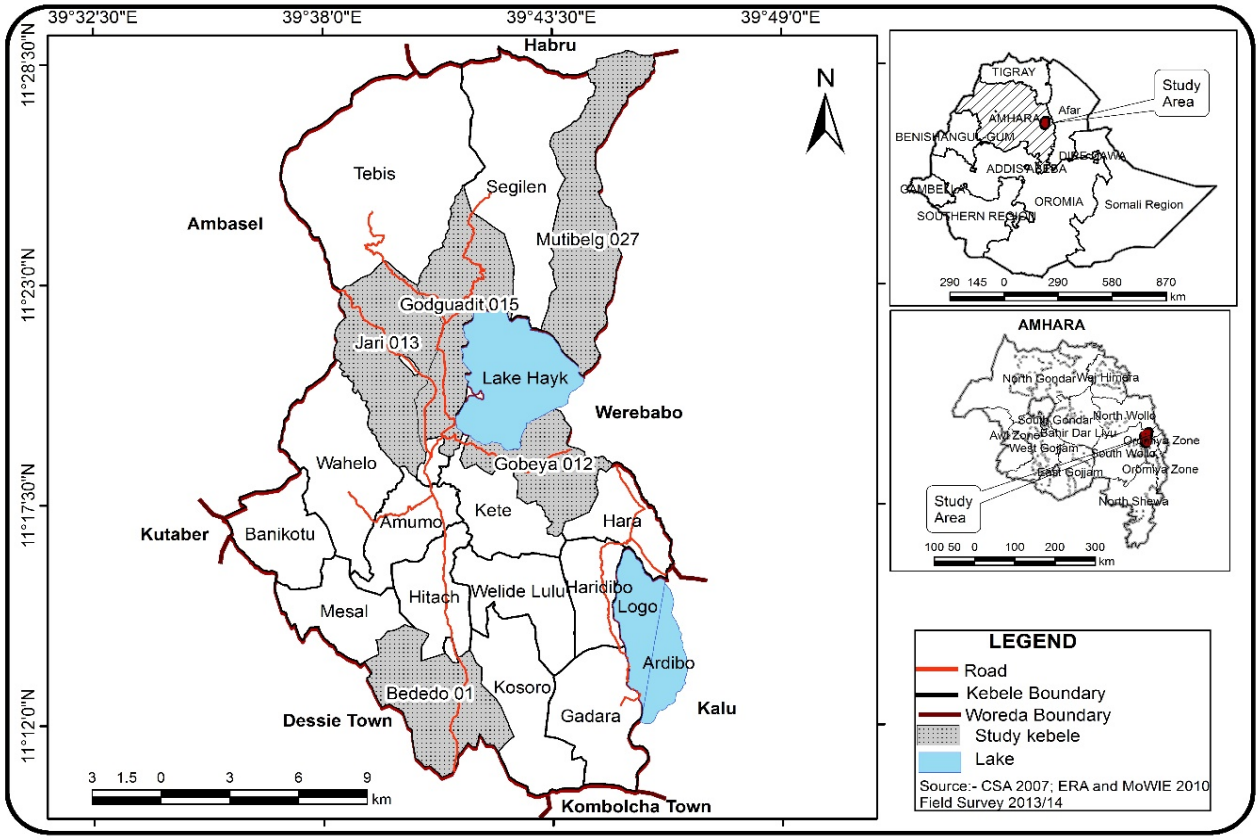
As you know, knowledge of home remedies is transferred from generation to generation by word of mouth. Most famous knowledgeable elders have passed away without transferring the tradition and the knowledge of home remedies. As a result, it is rapidly declining. The knowledge of curable medicinal plants today is known by few people in the communities [Female, 56, FGD].

The findings of the study indicated that the expansion of formal education also influences the use and preservation of home remedies. It contributed to the disrespect for popular healing system and local traditions. With regarding to this, MHK forwarded a question to one of the informants how he had handled this whole popular healing wisdom of his grandmother and he replied that:

We are a bit unconcerned about it; it is as if it is like the Tella Bet'/ local beer halls/, which will always be replenished when they are finished. We forget that one day she will not be there [Male, 35, KI].

Moreover, it was observed that most of the popular healing knowledge concerning home remedies remains in the memories of older and middle aged men and women, some of whom are still practicing it. According to informants, due to modernization influences, young people are not interested to acquire the knowledge of healing using home remedies. For example, one informant put as follows:

I have tried my best to transfer my knowledge to my sons about medicinal herbs. However, they do not seem to be very interested at times [Male, 69, KI]".



Source: TWIO, 2014

Figure 1: **Map of *Tehuledere* Woreda, South Wollo Zone, Amhara Regional State, North-eastern Ethiopia, 2014.**

Given the challenge of indigenous medicinal knowledge transfer system, MHK was interested to identify what made the youth not to be interested to acquire the popular healing knowledge from their family members. Thus it was noted, a common reason given was that popular healing was perceived to be 'backward'. In this regard, one of the young male informants explained,

I don't want to learn popular healing system using home remedies. You know, the practice of popular healing belongs to the old days; we now have 'modern' health-care institutions. If I practice indigenous healing at this civilized time, I am considered to be 'backward'. This is mainly because popular healing is not scientifically tested and its dosage is not standardized. Thus, it is irrelevant for me [Male, 36, KI].

Common health problems: the remit and perceived value of the popular modes of healing practices: This study identified common health problems that were managed within the home situation. The management of common ailments that can be treated at home is similar to the Kleinman popular model. Thus, in line with this model the study communities had well-constructed ailments management strategies, which is discussed in the following section by describing the common prevalent illnesses in the study communities.

There was considerable similarity in the range of the most pressing health problems identified by participants in the study communities which can be managed at home. Several examples are described below to illustrate when and how home remedies are used in the study community. Moreover, approximate biomedical interpretations and home remedial treatment strategies of the symptoms corresponding to the various conditions identified by local terms are detailed in Table 1.

In local medical treatises, malaria has been referred to as *'nedad'* (or fever). Malaria stands out as the single largest health problem in the study community. Although malaria is mostly treated by conventional medicine, its symptoms are also mitigated by using home remedies in these communities. In most of the focus groups (n=9), participants were familiar with the most frequent symptoms of malaria such as headache, chills, loss of appetite and fever. Most discussants associated the cause and transmission of malaria with mosquito bites. However, a substantial number of the participants related the disease to particular environments or being exposed to particular climatic conditions. The use of indigenous anti-malarial home remedies was also a widespread practice as stated by participants in focus groups:

*……but what cured me was frying butter and a sheep's tail fat **(**lat**)** and taking it in an empty stomach for 7 days… The other treatment is, macerating garlic and chick peas for a few days. If you take this, you will not catch malaria at all. For those who use garlic all the time, let alone malaria (the parasite) you won't even get a mosquito bite [male, 64, KI].*

Table 1: **The health problems that the respondent from focus groups and in-depth interview managed within the home, *Tehuledere,* north-eastern Ethiopia, May 2013- April 2014**

S.N.	**Health Problem (Local Name)**	**Biomedical equivalent**	**Management steps/strategies**	**Referral**
1	*Alisha*	Abdominal cramps and sweating but no diarrhea.	Prepare medications mixed from Alshume (Laggera tomentosa), Natra (Artemisia absinthium L.) leaves, Ginger, Ades (Myrtus communis s) leaves and clean dust powder; grind all and juice it; then drink a cup of that with an empty stomach then the Alisha will stop	No need to refer because it is dealt with successfully at healers
2	*Woreza*	Diarrhea with constipation and cramps, like amoeba	Drinking the liquid extract of Ye Woreza leaf (?) with coffee (first round of coffee) and it immediately stops	No need to refer because it is dealt with successfully at healers
3	*Berari*	*Stomach-ache, contraction around the bellybutton*	"yeberari" leaf (?), is pounded to drink with coffee	No need to refer because it is dealt with successfully at healers
4	*Tilatil* or *Muachign*	Intestinal parasites	a) Drinking a cold infusion of the crushed leaves of Keret (Osyris quadripartita Decn.) or the pounded root of yeayet arag (Staphania abyssinica). b) Ingesting the sap of qulquwal (Euphorbia abyssinica) in a little injera or bread. c) Drinking the liquid extract of the bruised leves of yafaras zang (Leonotis Africana) and girawa (Vernonia amygdalina) d)Drink the liquid extract of the leaf of Tenbelel/ Jasminum grandiflorum/ e) Drinking a cold infusion of the gound bark and root of azamir (Bersamma abyssinica)	No need to refer because it is dealt with successfully at healers
5	*Ras mitat*	severe Headache	a) Snuffing into the nose the crushed leaves of gimearag (?) or durshit (?) b) Dropping the juice or snuffing into the nose the bruised leaves of tinbaho (Nicotina tobacum) c) Inhaling the fumes of the brunt leaves of wagart (Silene macroselen), or tenjut (Otostegia integrifolia).	If condition worsens refer to Health center
6	*Neche Bela*	Cough persists, with chest pain	a)Decoction of"Galeta Ater" (beans) with water if possible add butter and drink it b)Mix root of `munchiro (Rubia cordifolia L.), the leaves of coffee and "Yehatete –Tegedera"(?), and boil it ; drink it for three days c)Macerating a mixture of Munchiro leaf, chickpea (agere ater), black cumin and garlic for the whole day, and drinking it every morning in an empty stomach	If condition worsens refer to Health center

			d)Drinking maceration of black cumin mixed with first round of coffee and freshly made butter every morning with an empty stomach, e) Boil Galeta ater, munchiro, white eucalyptus, Aregressa and inhale the steam. f) Taking an infusion of the boiled leaves of chiquenne (Artemisia afra), some nech shenkurt (Allim cepa), tena ada (Rute chalepensis) and tequr azmud (Nigella sativa) mixed with butter and/or egg.	
7	*Rahilo /Sal/*	Persistently coughing,	a)Massage the body with white chicken b)The root Muchero" will be pealed, Soak it with water, "Galeta Ater" and butter will be mixed and drink c) Taking pills prepared out of the pounded leaves of tosine (Thymus serrulatus) rolled in butter or honey. d) Taking the fresh blood of qoq (Prunus Persian) or karkaro (Phacochoerus aethiopicus)	No need to refer because it is dealt with successfully at healers
8	*Gurero sikosil*	Sore throat	a) Gargling an infusion of boiled atutch leaves. b) Gargling a potion of the bruised gesho (Rhamnus prinoides) leaves. c) Sucking a pill made of pulverized seed of let (Gosypium barbadense) coated with honey.	If condition worsens refer to Health center
9	*Tonsil*	Tonsillitis/ Uvulitis	a) Gargling a cold infusion of the crushed leaves of gesho, atutch, or ariti (Artemisia afra) b) Gargling water mixed with salt c) Inhaling the smell of the bruised leaves of azoarag (Clematis hirsuta Perro & Guill) d) Chewing some qerenfud (Eugenia caryophylla)	If condition worsens refer to Health center
10	*Juzan*	(Leprosy) lesion, itch and scratch	a)"ye azo Kitel"(a crocodiles leaf) (Clematis hirsuta Perro & Guill) eaten to heal inner body and also the leaf will be crushed and smeared all over body b) Boil "ye Jib shinkurt" (A hyenas onion) (Crinum sp.) in water then wash the infected area and tie it over your body	If condition worsens refer to Health center
11	*Katelo*	Burns	a) Applying some dough or oil; b) applying the flour of toasted buna (Coffee Arabica).	If condition worsens refer to Health center

12	*Bigung*	Boils	a) Poulticing with busqe (Kalanchoe) or endahula (Kalanchoe quartiniana) or ret (Aloe sp.). b) Plastering it with chewed raw baqela (Vicia faba).	If condition worsens refer to Health center	
13	*Kurtimat*	Rheumatism	a) Taking a cold juice extracted from the boiled root of tult and zarch embway b) Staining the feet and hands with ensosela (tiens tinctoria) or gurshit (Impatiens abyssinica) mixed with lemon juice and/ or the powdered leaves of hina (Lowsonia inermis), usually for women.	If condition worsens refer to Health center	
14	Wound (when a spike impales somebody`s feet)	when the wound gets worse and somebody`s feet hurts	a) Applying the powdered seed of gommanzar (Brassica integrifolia) with butter. b) Heat the 'Buske leaf' and step on it, if a spike is inside, it comes out when the wound heals c) Applying the burnt grass of getcha (Cyperus longus), or the crushed root of etse ramnon (Ferula communis). d) Washing the wound with one's own urine.	No need to refer because it is dealt with successfully at healers	
15	*Ye ayn himem*	Eye-sores	a) Applying into the eye the juice of the crushed leave woynagift (Pentas schimperina), Kase (Lantana viburnoides), embacho (Rumex nervosus) or woyne (Vitis vinifera). b) Drooping into the eye the liquid extract of the tips of woyra (Olea Africana), tambalal (Jasminum abyssinicum), or talenje (Achyranthes esoera) c) Applying butter after cleansing the eye with kase leaves.	If no progress	Health center
16	*Ye joro himem*	Ear-ache	a) Dropping into the ear the liquid extract of the leaves of qel (Langenaria vulgaris), meche (Guizotia achimoeri), or balas (Ficus palmate) b) Dropping the fat of fish into the ear.	If no progress	Health center
17	*Ye tirs himem*	Tooth-ache	a) Chewing and retaining in the mouth the leaves of yameder embway (Cucumis sp) or the root of gumaro (Capparis tomentosa) b) Chewing feto seed (Brassica nigra), quado barbare (Mentha piperita), or Ginger. c) Poulticing the gum with nech shenkurt (Allium sativum), or woyra (Olea europaea) stick.	If no progress	Health center
18	*Ekek*	Scabies	a) Bathing the body with a decoction of the	If no progress	Health center

			crushed leaves of waginos (Brucea antidysenterica), girawa (Vernonia schimperi) and endod (Phytolacca dodecandra). b) Smearing the body with a bruished paste of the leaves of adas (Myrtus communis), gicha (Cyperus longus), the powedered seed of egug (?) and butter.		
19	*Likift*	White sore	bandaging the sore with the crushed leaves of kitkita (Dodonea viscose)	If no progress	Health center
20	*Shinte Mat*	The signs of the disease are, bloated stomach, cramps, spit. and its local name is Alisha	Mix Alshume (Laggera tomentosa) and Ades (Myrtus communis) leaves and grind them then drink the juice twice a day	If no progress	Health center

We do have an indigenous medicinal plant for Malaria, called Gesho (Rhamnus prinoides), a plant whose leaves are used to brew a traditional drink known as Tella. The Gesho will be ground and a little amount of water is added on it. And you will filter the crude out and take the filtrate with an empty stomach, this will lower the fever and it will get the disease out of the system through the vomiting. In our tradition, we say Belese beka (meaning, it's gone once and for all, forever). But the modern medicine does not pull the malaria out of you, it just hides and waits for the time, so in September/ malaria endemic month/ it will recur and once again you will take the medicine [female, 59, KI]

Regarding his experience of malaria, a 54-year-old male informant had to say:
I know that malaria can be treated by a doctor. For me, it had been recurring for 10 years, from 1991-2002. Even though the doctor helped decrease it, it still couldn't get cured from year to year. So I treated it myself in indigenous way. I mix chickpea and garlic at night and leave it till morning. Before taking any meal (in an empty stomach), I eat that in the morning. After taking that for seven consecutive days, I'm now free from malaria since 2002, it didn't reoccur.

Despite the widespread descriptions of home remedies for malaria, most respondents also indicated that they would go to the modern biomedical center if the disease became worst as stated by one female participant:
…for malaria…… if the home remedies don't cure it we go to the clinic ……; it's only doctors that can get it- [female, 54, KI]

The other most common health problem articulated in all male and female focus groups was *Mich* (acute febrile illness followed by some wound around the mouth of the patient). All participants of focus groups were familiar with the most frequent symptoms of *Mich.*

Among the home remedies, used to manage *Mich* included; inhaling a steam from hot metal, inhaling the peelings of the leaf called *Haregesa* (*Zehneria scabra*).

Many of their medical choices for the management of this illness were limited to home remedies as described by one female participant:
Women get `Mich` in different ways. For example if we go out on the sun after baking injera, flat bread, we will catch Mich. And if we grind berbere/ red paper/ or shiro/ roasted and powdered pea seed/ and walk on the sun, we will catch `Mich`…… When this happens, we inhale a steam after boiling water. We bring very hot clay and put water in it and then we inhale the steam. Also for common cold, we mix orange, ginger, garlic, black cumin and boiled water. Then we inhale the concoction and drink it. We feel better in the end. If we don't feel better after all this, we will go to the clinic [female, 62, KI].

Also a 67-year-old male discussant went on further to state that he used home remedies to cure *Mich* and flu, but if an ailment persists he will go to modern medicine:
*When the person works a lot and smelling foul things, he /she would sweat then that person would catch Mich. Regarding the symptom the patient body would feel like it's being electrocuted, sweating and aching all over his body. The management includes different medicinal plants like, Haregesa, Ademselala (?Ocimum sp.), kur hareg (Momordica foetida Schumach), White Eucalyptus and Damakese**,** you cut the leaves of these plants and boil them in one pot, then you cover up and inhale the steam three times, after that the person will sleep and it comes out through the sweat. You apply this in the evening and shower every morning, and will be cured. If he does not feel better, he will have to go to modern medicine.*

Discussions

This section will discuss the main research findings and their implications for the popular medical knowledge possessed by the *Tehuledere* community regarding the management of health problems at home. List of the key findings include: The functioning model of the popular healing system within primary care, factors influencing decisions to seek popular healing as health-care options, how such knowledge and skill move from one generation to the other, followed up by management strategies and pluralistic approaches.

Home remedy use is a widespread self-care practice among these study participants. This study contributes to our understanding of the types of ailments and symptoms that are treated with home remedies among *Tehuledere* community. Some studies in different part of Ethiopia proved high demand of popular healing using home remedies (7, 11). Moreover, the study revealed that the elders and non-literate were observed with the preferences of popular healing. A similar finding was reported in different parts of the country where non-literates and older residents are significantly more likely to use home remedies than literate and younger people (23, 24). A study conducted in rural Tanzania also showed that age and education were the main factors that influence the choice of healthcare using home remedies (25). In contrast to the above findings other studies indicated that age and educational status were not the factors for the use of popular healing using home remedies (26).

It is contended, in any case, that even with such detailed analysis, it would still be difficult to draw broad generalizations in regards to the extensive variety of unobtrusive considerations made by local people in figuring out what specific moves to make in overseeing specific ailment at home. Indeed, the typical preface to informants' responses to this inquiry was: 'Everything relies on the type of illnesses'. Thus, the following analysis can only endeavor to provide a broad picture of

the common strategies employed by local people in light of their own depictions.

Our findings show that among the *Tehuledere* communities, like people in many regions of Ethiopia and elsewhere, management of common health problems using home remedies co-exist with the bio-medical health care systems (12, 14, and 27). People either may use medicine from popular healing system exclusively or use medicines from multiple systems concurrently for various reasons.

There are ranges of variations in medical systems of different societies for the differences of opinions in dealing with health care options. Yet, medicinal frameworks offer key components in that they have some kind of the theory of illness causation, a system of diagnosis, and techniques of appropriate therapy (28). Similar to Foster's explanation, in *Tehuledere,* the participants' use of home remedies for ailments results from failure to maintain equilibrium within the body or ailment caused by natural causes. The mending may likewise be performed by a single person with the assistance of his/her relatives in the case of popular medical practices (28).

Furthermore, pluralism in medicine rotates around the varieties of health care systems. The classification could be made from different perspectives. But the principal reference is either their conceptions about the wellbeing and ailment while the other could be the degree to which state legislation, more favour to biomedicine, perceives their exercises with regards to the standard and valuable to the maintenance of wellbeing. The utilization of home remedial therapies in economically poor societies is related to poverty or lack of access to conventional medicine (29, 30).

In this study, participants use a varied approach in accepting health concepts and popular healing services taking into account their cultural interpretation of reality and perceived effectiveness of treatment. Like this study, other ethnographic studies have demonstrated that some ailments such as *khai mak mai* (fruit fever) are recognized by the people in North East Thailand as untreatable by biomedical wellbeing providers. Subsequently, fevers associated with being *khai mak mai* are dealt with by home remedies while biomedical wellbeing services are evaded and dreaded. The same study reveals that it is not only the local conceptualizations of illness that impede patients from biomedical health service but also the disappointment of biomedical practitioners failing understand patient concerns about *khai mak mai* and discrediting them (31).

In any case, this does not imply that patients evade and reject biomedical health care services. People evaluate the course of the treatment with popular healing using home remedies and if there is no progress in the health of a patient, they may resort to biomedicine. In this connection, Pylypa also argues that culture does matter in health behavior, yet how it makes a difference is impacted by the convergences of socio -economic contexts, and cultural meanings as a function of broader contexts in which they are enacted. Thus, the contention or contrariness amongst biomedicine and popular healing practices could be negotiated.

It is important that, a small number of informants (n=4) indicated, either: (a) never having sought or received any biomedical care, relying mainly on popular healing using home-based remedies; or (b) inclination for biomedical consideration at the local health centre for all manners of illness, with very limited use of home-based remedies. One could expect that individuals who have never looked for biomedicine are likely to include older members of the community, who, given the relatively recent expansion of biomedical services into rural areas, may not be as accustomed to biomedicine as their younger counterparts. Two of the four informants in this group were, indeed, elderly women (older than 70 years), who expressed great faith in the efficacy of home-based traditional medicines. But the other two were considerably younger men (35 and 40 years).

Moreover, we understand from this exploration the functioning rural primary health care model was very similar with Kleinman (1980) culture system model. The participants described several ways in which the study communities influenced their views of actors in the healing process. First, popular agents (families, friends, and neighbors) were seen to play a direct role in facilitating healing of those perceived common ailments. Otherwise, the popular agents refer to the biomedical professionals if no progress was observed after treating with home remedies. Consequently, the pluralistic management strategy used by *Tehuledere* community is very similar to that of *Jimma* and *Harar*, Ethiopia (32, 33).

The study showed that blessing from God/Allah/ and casual observation from parents were the main source of knowledge for the popular healing agents, which were similar to the findings among the *Bertha* ethnic group (11). In various other studies conducted in Ethiopia, it was shown that family members are the major sources of knowledge of popular healing (7, 34). Since most of the study participants were Muslims, either home remedies was practiced as part of religious teaching among the community or most believe that the healing power of home remedies was more acceptable and effective when associated with supernatural power/ Allah/ (11).

The older woman participant who dreamed of her mother-in-law guiding her to the herb that would help a relative recommends that such knowledge, which the older woman had in her unconscious, was given to her by

her mother-in-law. Now that she herself was a mother-in-law, and was required to solve a similar problem in her own grandchild, the knowledge that had previously been suppressed in her unconscious surfaced once more in the dream (35).

As per the way of life, youths are by and large not seen as carriers of validated knowledge as such an ability comes with age, due to the amount of space and the length of time that is required for gaining experience. Since knowledge was conveyed by word-of-mouth among the older people, to question them was seen as being disrespectful (36). As the older focus group discussion participants that were close to the health care facilities and modern education were gradually losing their popular healing knowledge, the above increasingly became aware of a problem, because the knowledge was not replaced with a new understanding regarding the new approaches of biomedical care. The above presents an element of helplessness and passivity regarding either resorting to biomedical care, or remembering and applying popular healing knowledge when health problems emerge at home. It also means that the focus group participants' gradual integration of biomedical care into the home was occurring quite slowly, as they lacked the tools (i.e. an understanding and interpretation of the reasons for illness causation) to integrate such knowledge into their existing knowledge base (37). Similar to this study, other studies indicated that younger generation are less knowledgeable and underestimate popular healing values (23, 38).

Health care providers from the domain were classified as popular healing agents, although the indigenous peoples of the world challenged the notion, explaining that indigenous popular healing knowledge was always developing and changing (6, 7). Instead, they allowed the biomedical health care facilities to run their health needs. It was already highlighted in the literature that the promotion of indigenous popular healing knowledge was hindered by biomedical practitioners and modernization, as the need to conform to educational expectations and modern civilization norms became unavoidable (7, 8, 39). It appears that the participants of focus group discussions and key informants struggled to balance the new incoming knowledge of the modernization with their own interests in managing their health in the home.

Practical Implications for a Rural Primary Health Care Model: Understanding the study communities' practices of management strategies of health problems and ways of preventing diseases is helpful in designing good health promotion and disease prevention strategies (40, 41). Thus, popular healing or healing modalities using home remedies represents an important part of everyday health care system. Adults possess knowledge of popular healing and part of this knowledge is shared with other family members, relatives and friends. This lay sector of healing is generally the first therapeutic intervention resorted to by most people across cultural groups before other alternative medical systems are sought for medical assistance (42). Popular healing is at the basis of what is referred to as the 'hierarchy of resort in curative practice'. The various layers of this hierarchy interact with each other since patients pass freely from one to the other. Since the 1974 Alma Ata Declaration on Primary Health Care, self-health care including using home remedies, has gained more recognition, and recent health policies stress the importance of individual responsibility for their own health, as well as community participation in health care.

The study communities saw some common health problems managed using home remedies, such as malaria and *Mich* in the home , as their domain and that of the village, which could serve as an asset that could be used in revitalising primary health care.

Consequently, some of the common health problems which could be managed at home and village were articulated by participants. They also articulated popular agents such as family, friends and neighbors are important in maintaining good health. We argue that mainstreaming health education and the primary health care delivery strategies should look at what people actually do and how it is done in terms of disease control and health promotion (39). We have to bear in mind that no health education and care solution is global in nature as what is effective in one system might not be effective in another. We must favor an open and free discussion with people as health professionals. We should not reject people's perceptions of home based managements of health problems if we want to keep communication between us.

This study showed that the *Tehuledere* communities have developed models of explaining health management at home, and therefore, adopted lifestyles and patterns of behaviour which are aimed at the attainment of higher levels of wellness and positive health states. Thus optimal primary health care could be achieved using locally available resources and skills. Popular knowledge of health care is therefore, the basis for self-sufficiency and self-determination (43).

Ethiopia is currently implementing primary health care under the first phase of the 5 years health and transformation plan. Comparing the management of the illnesses identified by this study with the contents of the essential elements of primary care, it appears that some aspects, such as managements of common health problems at home are contained in both biomedical and popular interpretations (40, 44). It is hoped that this category of health problems that was managed within the home situation, common physical ailments, and the paradigm of their managements be included to enhance

the rural health plan for the 5 villages of *Tehuledere Woreda* and beyond.

Conclusion:
Home remedy is the basic source of health care and plays pivotal role in primary health care initiatives that was devised in Alma Ata in 1978. People draw upon knowledge of home remedies they have gathered throughout their lives, applying them in ways that make sense to them, given their particular social context, to treat symptoms that they have experienced at multiple points throughout their lives. The authors conceptualized health problems to include common ailments such as malaria, fever, persistent cough, flu and abdominal cramp as each ailment was linked to a socio-cultural 'context' of the community. This is because managements of these ailments at home had great impact on ill-health of the study community. This health care strategy using home remedies included an effective prevention and treatment of common ailments which was related to the strengthening of the home.

The study found that the major factors for the demand of popular healing using home remedies include perceived illness causations, accessibility and culturally appropriate indigenous treatments and dissatisfaction with the treatment outcomes at bio-medical health-care institutions, and demographic and economic factors. For example, the high cost of bio-medical treatment was mentioned as an influencing factor for their decisions of treatment seeking resort to home remedies.

Regarding the challenges for the use of popular healing, the study found that the impact of modernization process, lack of proper documentation of popular healing knowledge, and the beliefs on youth seen as 'backward' were some of the major factors mentioned.

Nonetheless, the uneven and very slow distribution of cosmopolitan medicine, curative and preventive, does not restrain the people from using home remedies. The popular and biomedical systems are perceived as acceptable and viable therapeutic options, though both of them are viewed as having their own styles and limited healing capabilities. Actually, people have retained the age-old cultural beliefs because they are conceived as important heritages "to adapt and survive" as their predecessors did in the past. Even though provisions of modern medicine are increasing in the study areas people seem to lose their confidence in biomedicine and continue to live in the indigenous popular healing way. This can be explained by the expansion of biomedical facilities which were not societal and culture centered.

This situation clearly demonstrates that the country's health coverage through government sponsored health care programmes is still very limited and the contribution of home remedies seems to be potentially important. It actually demands critical evaluation and subsequent utilization of the beneficial aspect of home remedies. Thus, there would be no polarization in the utilization of home remedies and modern medical treatment as long as people continue to use both services simultaneously or serially. In other words, medical pluralism will remain the only option for promoting the *Tehuledere* health care needs. This will help to ensure the optimal utilization of Ethiopia's limited resources.

So we argue that the full implementation of primary health care in the study communities must start with the acknowledgment and understanding of the popular healing systems of the indigenous peoples in the management of their health problems at home. So, documentation and investigating the use of home remedies that grow in the area is very important, as the local communities have an idea that, for every illness of a person born in a *Tehuledere* area, there is an existing home remedy.

This study suggests that there should be a clear plan as to how popular healing practices using home remedies can be supported within a health care systems approach.

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Competing Interests
The authors proclaim that they have no contending interests.

Authors' Contributions
MHK directed the focus groups, key informant interviews and participatory observation performed the coding, categorizing the emerged themes and drafted the original manuscript. TG and HB served as supervisor of all data collections, analysis and review of the original paper. MHK, TG, and HB all participated in the study design and data analysis. All authors read and affirmed the last original manuscript.

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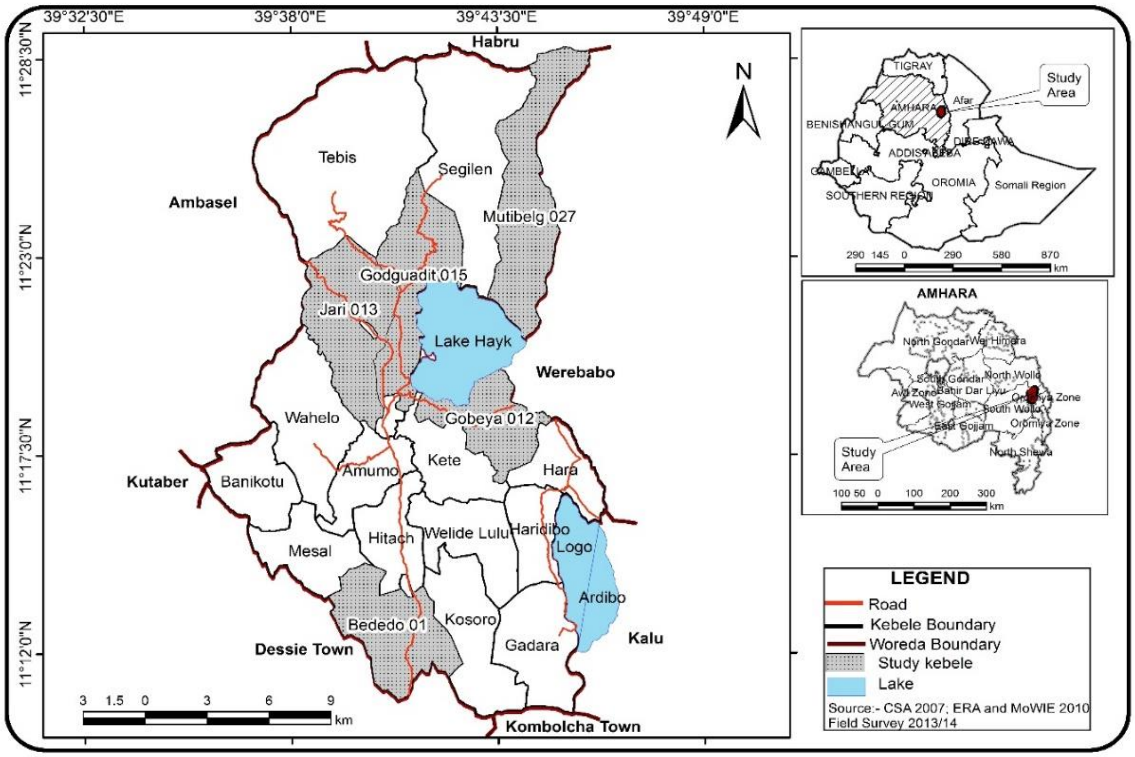
APPENDICES

Appendix 1



Source: TWIO, 2014

Figure 1: Map of *Tehuledere* Woreda, South Wollo Zone, Amhara Regional State, North-eastern Ethiopia, 2014.

Appendix 2

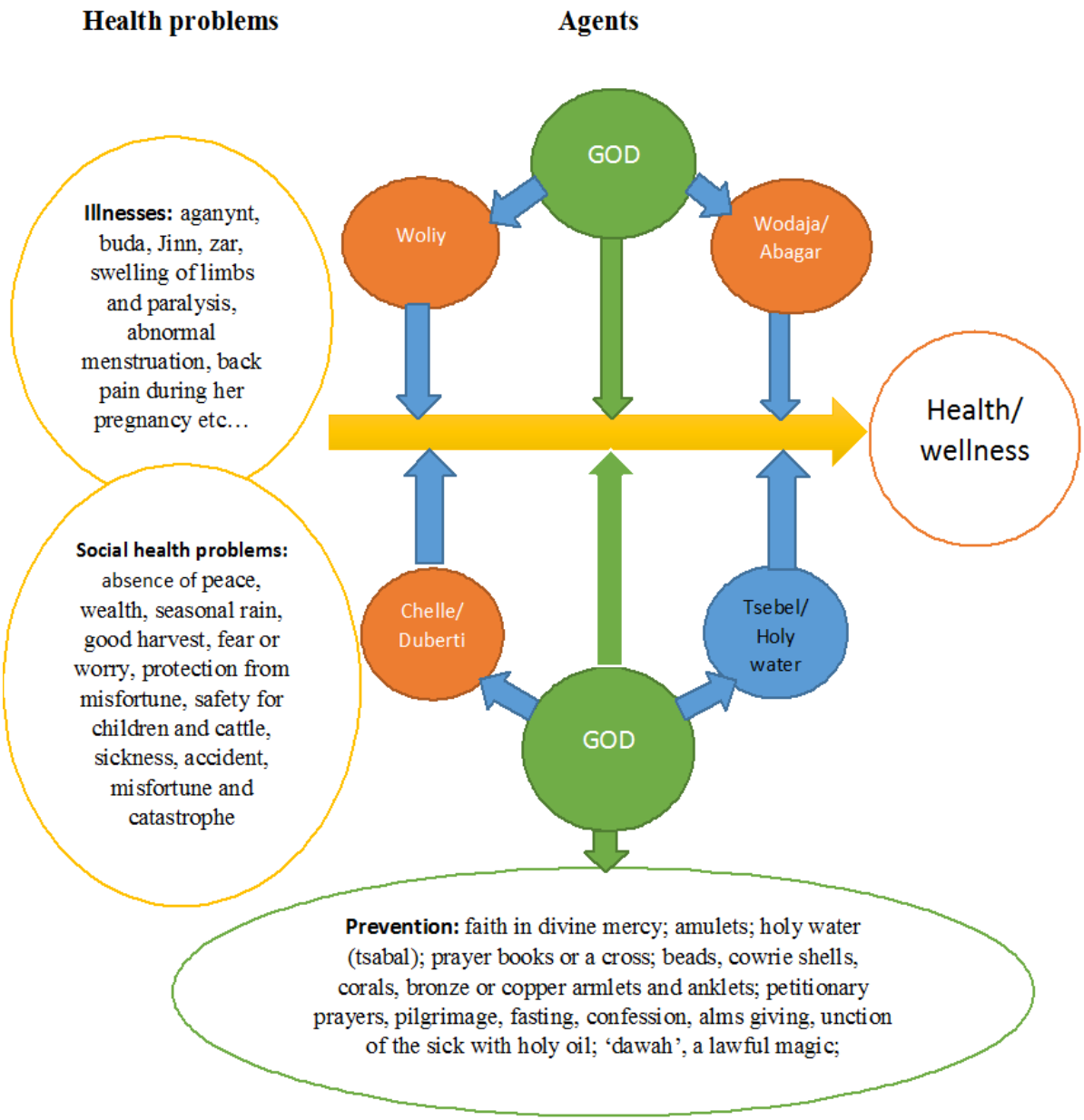


Figure 2. Agents and their roles in healing in the Tehuledere community [● = GOD; ● = nature spirit; ● = human agents and ➡ = the healing process], Tehuledere, North- eastern Ethiopia, May 2013- April 2014

Appendix 3

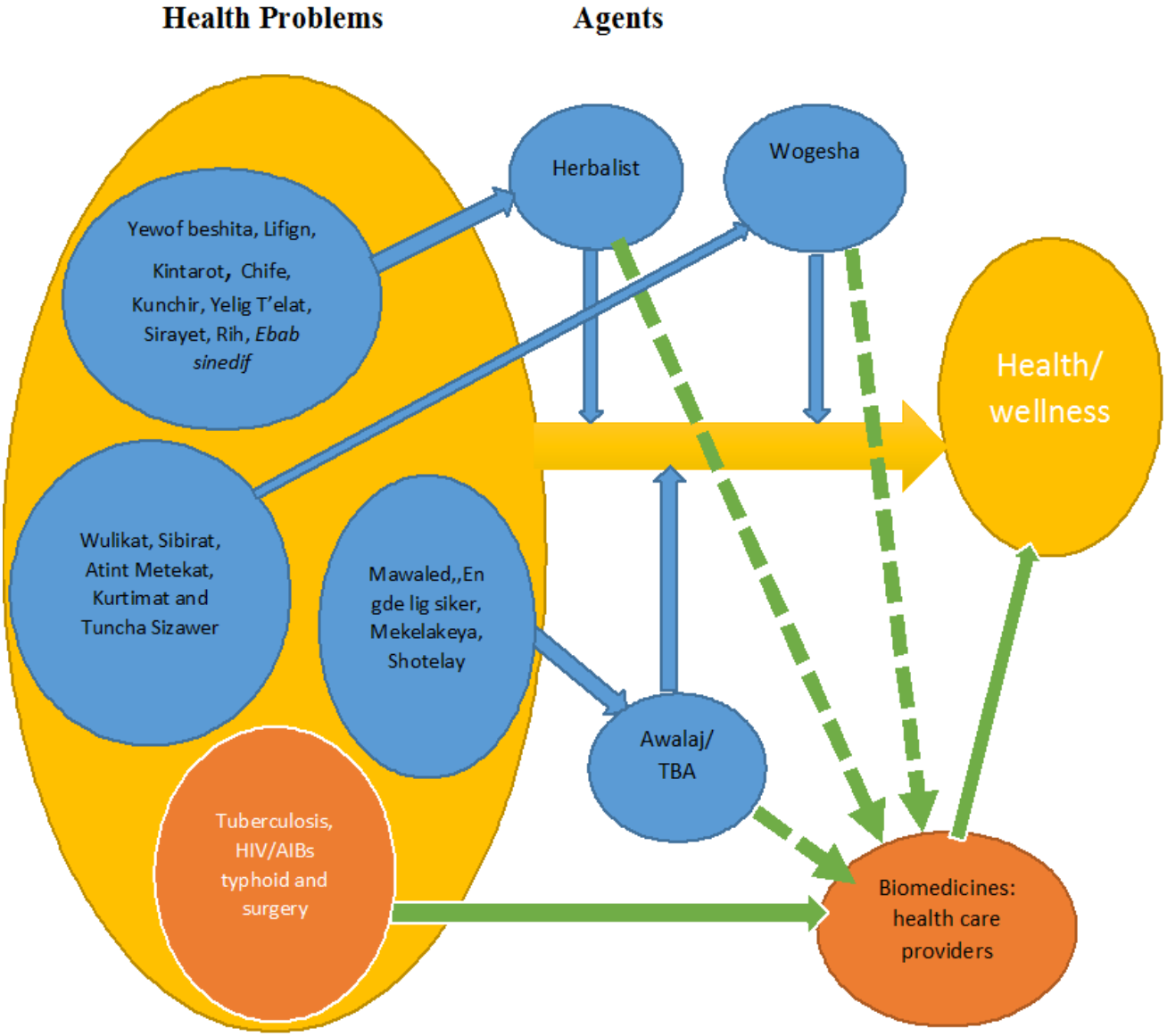


Figure 2. Traditional healers and their roles in healing in the Tehuledere community [● = Traditional healers; ● Biomedical Healers ⇢ = Referral to biomedicine and ➡ the healing process.], *Tehuledere*, North- eastern Ethiopia, May 2013- April 2014

Appendix 4

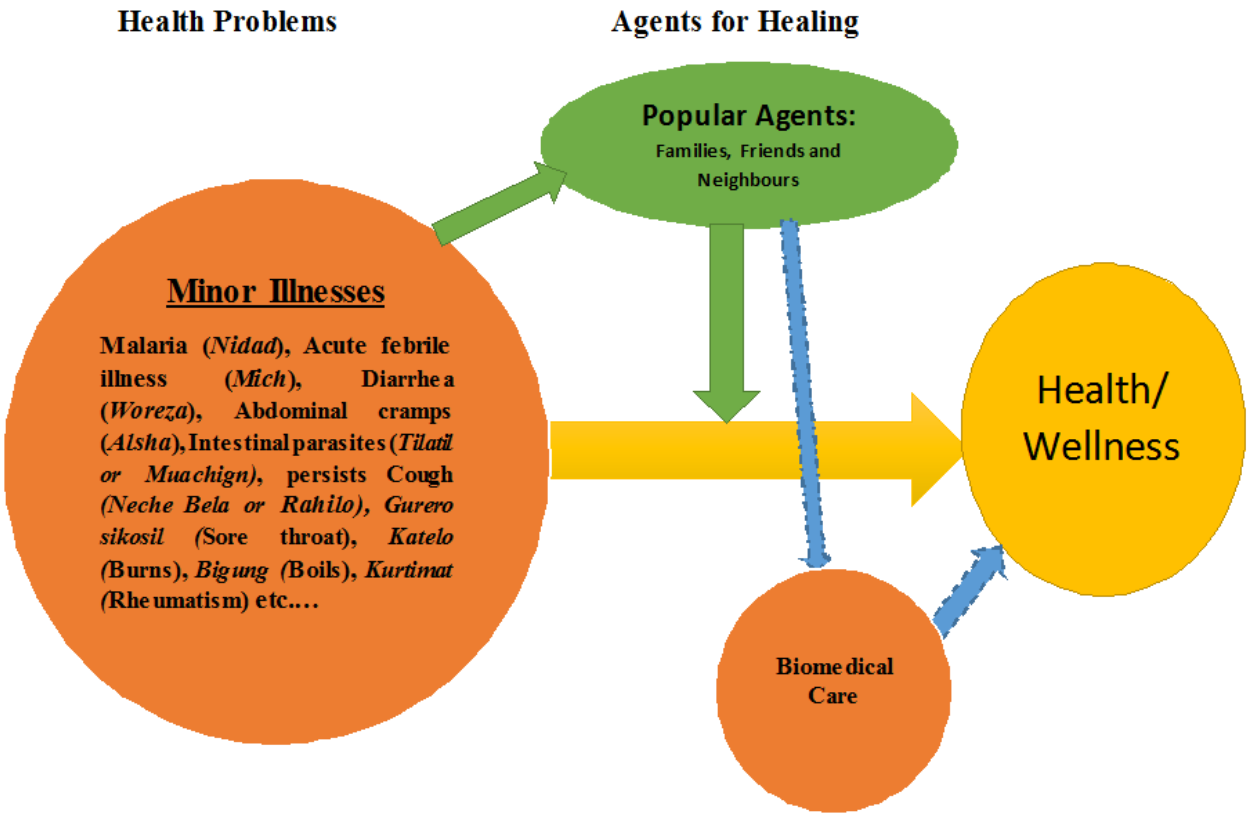


Figure 3. Popular agents and their roles in healing in the Tehuledere community [● = Popular; ● = Referral to biomedicine and ➡ = the healing process.], Tehuledere, North- eastern Ethiopia, May 2013- April 2014

Appendix 5

Causation of Health Problems **Health Care Options**

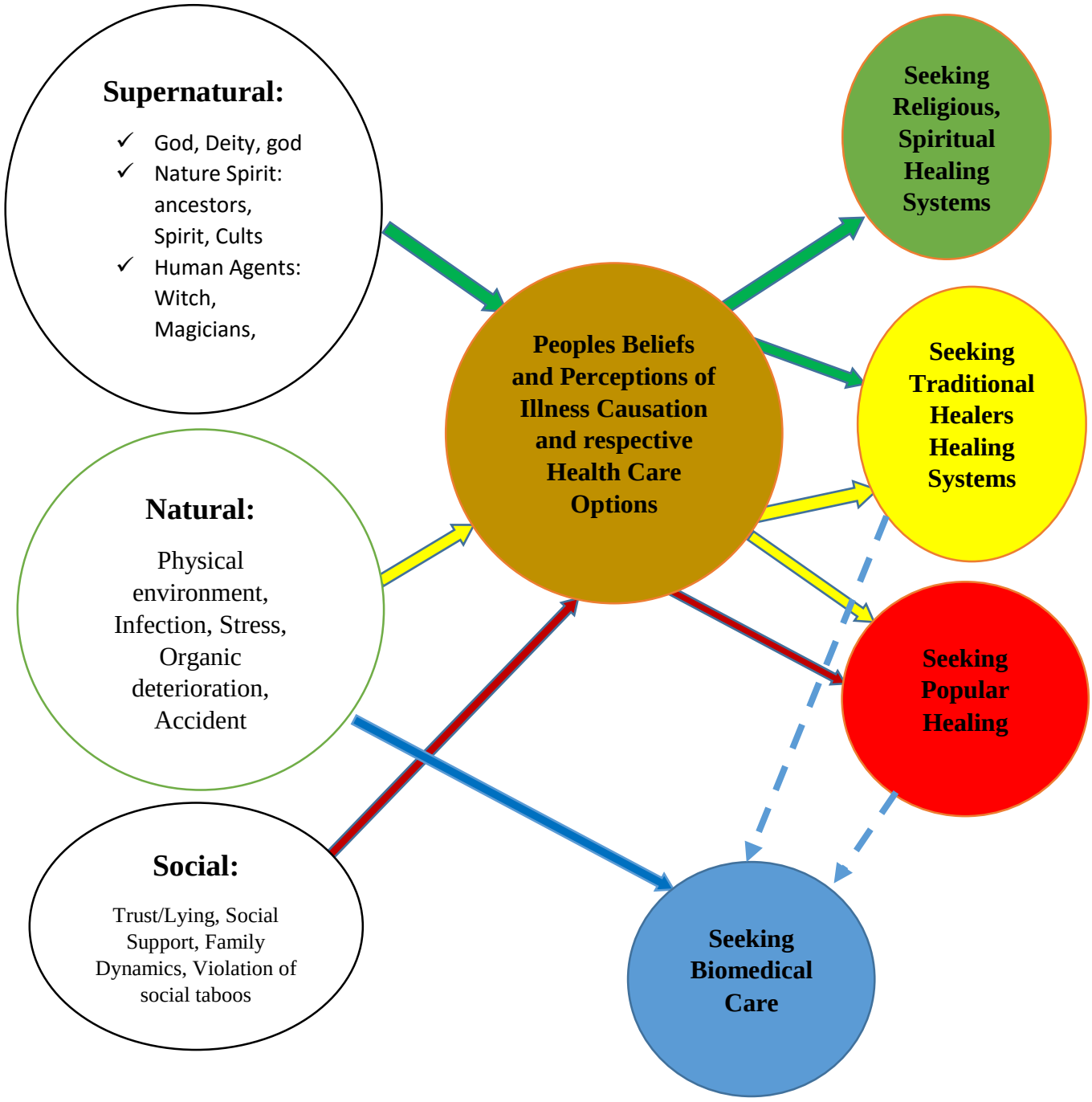


Figure 4: Conceptual Framework of the Study: beliefs and practices illness causation and health seeking behaviour of *Tehuledere* communities, North- eastern Ethiopia, May 2013- April 2014

Appendix 6

Table 2. Composition of Focus Groups in the 5 Study Communities, *Tehuledere,* NE Ethiopia, May 2013- April 2014

	Bededo		**Jari**		**Gobeya**		**Godguadit**		**Mutibelg**	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Total No.	12	9	9	8	9	12	8	9	12	8
Age groups(majority approx. %	80%, 45-60	82%47 -60	75%,45 -67	80% ,42-65	92%, 42-72	91%, 40-69	85%, 55-75	87%, 55-72	72%, 45-79	75%, 45-78
M: Married HH: House Hold Head	60%M 40% HHH	allM/H HH	75% M 37%H HH	allM /HH H	80% M 30%H HH	allM/ HHH	74% M 25%HH H	allM / HH H	70% M 30%H HH	allM/ HHH
Approx. % Literate	<25%	<10%	<10%	<20 %	<10%	<30%	<10%	=20 %	< 25%	<20%

Table 3. Composition of Key Informants, to explore popular healing practice, in the 5 Study Communities, *Tehuledere*, NE Ethiopia, May 2013- April 2014

KI No.	**Kebele**	**Sex**	**Age**	**M:** Married **HHH:** House Hold Head **W:** Widow/ Widower	**Literacy Level** **I:** Didn't read & wright **L:** Read & wright
1	Bededo	M	64	M/HHH	I
2	Bededo	M	35	M/HHH	L
3	Bededo	F	60	M/HHH	I
4	Bededo	F	71	M/HHH	I
5	Jari	M	49	M/HHH	L
6	Jari	M	55	M/HHH	I
7	Jari	F	53	M/HHH	I
8	Jari	F	59	M/HHH	I
9	Gobeya	M	36	M/HHH	L
10	Gobeya	M	64	M/HHH	I
11	Gobeya	F	41	M/HHH	L
12	Gobeya	M	75	W/HHH	I
13	Godguadit	M	69	M/HHH	I
14	Godguadit	M	63	M/HHH	I
15	Godguadit	F	79	M/HHH	I
16	Godguadit	F	41	M/HHH	L
17	Mutibelg	M	54	M/HHH	I
18	Mutibelg	M	39	M/HHH	L
19	Mutibelg	F	62	M/HHH	I
20	Mutibelg	F	54	M/HHH	I

Appendix 7

Table 4: A list of herbs and their botanical names used by *Tehuledere* communities to treat the health problems that they experienced within the home, North-eastern Ethiopia, May 2013-April 2014

S.N.	Local Name	Botanical Name	Family Name
1	Adem Selala	?Ocimum sp.	Lamiaceae
2	Adro Gobeze	Tagetes minuta L.	Asteraceae
3	Agam	Carissa spinarum L.	Apocynaceae
4	Alashume	Laggera tomentosa	Asteraceae
5	Anterif	Euphorbia sp.	Euphorbiaceae
6	Ariti/ Natra	Artemisia absinthium L.	Asteraceae
7	Azamir	Bersama abyssinica Fresen.	Melianthaceae
8	Azo Kitel	Clematis hirsuta Perro & Guill	Ranunculaceae
9	Betre Muse	Grewia mollis A. Juss.	Tiliaceae
10	Bisana	Croton macrostachyus Del.	Euphorbiaceae
11	Boter	?Plectranthus sp.	Lamiaceae
12	Busike	Kalanchoe	Crassulaceae
13	Cheguagot	Bidens pilosa L.	Asteraceae
14	Dedeho	Euclea racemosa	Ebenaceae
15	Dem Adrik	Cissus quadrangularis L.	Vitaceae
16	Digita	Calpurnia aurea (Ait.) Benth.	Fabaceae
17	Gesho	Rhamnus prinoides L 'Her it.	Rhamnaceae
18	Hatet	Maytenus sp.	Celasteraceae
19	Hide Budiha	Withania somnifera (L.) Dunal	Solanaceae
20	Keret	Osyris quadripartita Decn.	Santalaceae
21	Kiraro	Acokanthera schimperi (A. DC.) Schwein	Apocynaceae
22	Kitkita	Dodonea angustifolia L.f.	Sapindaceae
23	Kobo Hawash	Calotropis procera (Ait.) Airf	Asclepiadaceae
24	Kolkolo	Pachycymbium sacculatum	Asclepiadaceae
25	Kumen	Foeniculum vulgare Miller	Apiaceae
26	Kunde Berbere	Schinus molle L.	Anacardiaceae

27	Kur Hareg	Momordica foetida Schumach.	Cucurbitaceae
28	Ligo Tegedra	? Boscia salicifolia Oliv.	Capparidaceae
28	Milas Golgul	Cyphostemma sp.	Vitaceae
30	Mim	Melia azedarach L.	Meliaceae
31	Misiroch	Clerodendrum myricoides (Hochst.) Vatke	Lamiaceae
32	Munichiro	Rubia cordifolia L.	Rubiaceae
33	Senbo	Ekebergia capensis Sparrm.	Meliaceae
34	Sensel	Justicia schimperiana	Acanthaceae
35	Tembelel	Jasminum grandiflorum L.	Oleaceae
36	Wanza	Cordia africana Lam.	Boraginaceae
37	Yeabesha Tsid	Juniperus procera Hochst. ex Endl.	Cuperssaceae
38	Yejib Shinkurt	Crinum sp.	Amaryllidaceae
39	Yemidir Embuay	Cucumis sp.	Cucurbitaceae
40	Yewoyra Tegedra	Viscum tuberculatum A. Rich	Viscaceae
41	Zigba	Podocarpus falcatus	Podocarpaceae
42	Weyra	Olea europaea	Oleaceae
43	Waginos	Brucea antidysenterica	Simaroubaceae
44	Gumero	Acacia oerfota	Fabaceae
45	Kulqual	Euphorbia abyssinica	Euphorbiaceae
46	Abalo	Brucea antidysenterica	Simaroubaceae
47	Nechilo	Helichrysum citrispinum	Asteraceae
48	Qebericho	Echinops kebericho	Asteraceae
49	weynagift	Inula confertiflora	Asteraceae
50	Karbe	Commiphora myrrha	Burseraceae
51	qundo barbare	Mentha piperita	
52	anzerzaye	Gradiolus pisittacinus	
53	adendash	Adenia venetal	
54	endahula	Kalanchoe stenosiphon	Crassulaceae
55	warq bameda	Coccinia sp.	
56	gommenzer	Bressica interifolia	
57	*yameder embway*	Cucumis prophetarum	Cucurbitaceae

Note: Identification of the collected specimens was made in the National Herbarium (ETH), Addis Ababa University using the published volumes of the Flora of Ethiopia and Eritrea [Volume 2-7]

Appendix 8

Participant observation Guide

(English Version)

(*Indigenous Ill-health Perception and Healing Practices: Socio-Cultural Study in North-Eastern Ethiopia*)

Because of the frailties of human memory, ethnographers have to take notes based on their observations. These should be fairly detailed summaries of events and behaviour and the researcher's initial reflections on them. The notes need to specify key dimensions of whatever is observed or heard. These are some general guidelines.

1. Determine the purpose of the participant observation activity as related to the overall research objectives (beliefs in ill-health causation and healing systems)
2. Consider the accessibility of the population(s) and the venues in which I would like to observe them (such as holly water center, churches, mosques, rituals, festivities, and different public gatherings).
3. Observation is conducted in the selected district and sites regularly on Monday to Friday from 9 AM to 5PM from June 2013 until November, 2013.
4. Begin each notebook entry with the date, time, place, and type of data collection event.
5. Leave space on the page for expanding my notes, or plan to expand them on a separate page.
6. **Take notes strategically**. Write down notes, however brief, as quickly as possible after seeing or hearing something interesting. Direct quotes can be especially hard to write down accurately. Rather than try to document every detail or quote, I write down key words and phrases that will trigger my memory when you expand notes.
7. **Use shorthand.** Because I will expand and type my notes soon after I write them, it does not matter if I'm the only person who can understand my shorthand system. I use abbreviations and acronyms to quickly note what is happening and being said.
8. I write up full field notes at the very latest at the end of the day and include such details as location, who is involved, what prompted the exchange or whatever, date and time of the day, and so on.
9. **Cover a range of observations.** In addition to documenting events and informal conversations, people's body language, moods, or attitudes; the general environment; interactions among participants; ambiance; and other information that could be relevant is noted.
10. Notes must be vivid and clear—I should not have to ask at a later date 'what did I mean by that?'

11. It is worthwhile to write some personal reflections about my own feelings about occasions and people. Such notes may be helpful for formulating a reflexive account of fieldwork.
12. There is likely to be considerable value in including initial analytic thoughts about what is observed and heard. These may be useful for acting as a springboard for theoretical elaboration of the data.

Appendix 9

Focus Group Discussions and In-depth Interviews Guide

(English Version)

(*Indigenous Ill-health Perception and Healing Practices: Socio-Cultural Study in North-Eastern Ethiopia*)

To better understand participant's experiences of ill-health perception and healing practices, focus group discussion and in-depth personal interviews with adult community members will follow a semi-structured interview format.

Note: ***Encourage participants to tell the story in their own way and in their own words.***

At start of interview, collect basic demographic information: age, length of residency in *Tehuledere,* level of education, living arrangements, marital status, and number of family members.

1. I'm interested in knowing what it is like the health condition of your community. Can you tell me the major health problems commonly experienced by your families and village?
2. Could you explain your understanding of health? Illness?
3. What is your understanding of your family health?
   Probe: Tell me about your families [specific condition] illness?
4. How would you describe illnesses and health in your family and village generally?

   Probe: from the perspectives of natural and supernatural beliefs and perceptions;

   Probe: *Tell me* if you have other beliefs and perceptions of ill-health

   Probe: *Tell me more about* social elements of ill-health

   Probe: *If so, what are the main perceived differences? How is this expressed in local language? What are the local terms for 'supernatural'; 'natural' and others (if any) explanations of ill-health'?*

5. What are the main causes of illnesses in your communities?
   Probe: What particular illnesses are believed to be caused through supernatural, natural and other (if any); please give me specific example?

Probe: I am interested in knowing more about your experiences related to your beliefs related to supernatural, natural and other causes of illness. Could you describe your experiences when your parent became ill due to supernatural causes? Natural causes? Other causes of illness?

Probes: *How is this expressed in local language? What are the local terms for 'supernatural'; 'natural' and others (if any) causes of ill-health'?*

6. When a family member is diagnosed with illness (supernatural, natural and social), a lot of things can change, not only in the life of the individual but also in the lives of others. How have things related to everyday activities, healthcare and life in general changed since your family was diagnosed with [specific illness]? Describe the changes for you and for your family.

   Probe: focus on social causes of illness here

7. I am interested in knowing more about your experiences related to causes of illnesses and health care. How can indigenous beliefs and perceptions of ill-health be improved so that indigenous way of ill-health perceptions co exists with the biomedical one for the betterment of your health?

8. Can you tell me the major health problems commonly experienced by your families?

9. Where do you go for help with these illnesses?

   Probe: What particular illnesses are believed to be treated effectively only through modern medicine, traditional healers and home-based traditional treatments, please give me specific example?

   Probes: cost of treatment and cost/availability of transportation a consideration in deciding to seek modern/biomedical, traditional healers and home-based traditional treatments care? What are the perceived general advantages/disadvantages of health care provided by these?

   Probe: If so, what are the main perceived differences? How is this expressed in local language? What are the local terms for 'traditional healer'; 'traditional medicines used at the household-level'; 'modern/biomedicine'?

10. How are decisions regarding health care choices made at the household level?

    Probes: Who usually diagnoses illness at the household level? Who usually decides what action to take? Who collects medicinal plant materials for home use? Who prepares/administers home-based traditional medicines? Who

provides the payment for treatment outside the home (modern/biomedical or traditional)?

11. What do you do to try to prevent illnesses?

    Probe: Do you tell me type of preventive home-based traditional treatments routinely used and what are they intended to protect against?

    Probes: Which types of foods/food crops are believed to 'restore strength' or prevent illness? What types of preventive treatments are provided by traditional healers?

12. How do you perceive about the local natural environment, the extent of habitat conversion and changing land use patterns over the years, including any losses of locally-valued plants?

13. How can traditional practices be improved so that traditional way of healing co exists with the modern medical practices?

If there is something we discussed today that you want to discuss with me further or elaborate on, please feel free to contact me.

የቡድንና የአንድ ለአንድ ጥያቄዎች ውይይት መመሪያ

(በአማራ ክልል (በተሁለደሬ ወረዳ ያሉ የባህላዊ ህክምና ዘዴዎችንና የህመም ምክንያቶችን በጥልቀት ለመረዳት ያለመ የቡድንና አንድ ለአንድ ውይይት)

1. **ከአካባቢው ያሉትን ዋና ዋና የጤና ችግሮች ከራሳችሁ ቤተሠብ ልምድ በመነሣት ልትነግሩኝ ትችላላችሁ?**
2. **ስለ ጤናና ህመም ያለዎትን ግንዛቤ ቢነግሩኝ?**
3. **የቤተሰብዎ ጤንነት ሁኔታ ምን ይመስላል?**
4. **ህመምና ጤንነትን በተመለከተ ከግልዎ ቤተሰብና ከአካባቢዎ እምነት ጋር በማቀናጀት ይንገሩኝ፤**
    - **ከተፈጥሮና ከአምልኮት አኳያ ቢነግሩኝ?**
    - **ከሌላ እምነት ጋር አያይዘው ይንገሩኝ?**
    - **ከማኅበራዊ ኑሮ ጋር አያይዘው ይንገሩኝ?**
    - **ይህ ከሆነ ልዩነታቸው ምንድን ነው?**
    - **በአካባቢው ቋንቋ እነዚህ ምን ይባላሉ?**
5. **በናንተ አመለካከት የህመም ምክንያቶች ምንድናቸው ብላችሁ ታመናላችሁ?**

- በአምልኮ፤ በተፈጥሮ እና በሌሎች የሚመጡ ካሉ፤ ምሳሌ ይጠቀስ
- ከቤተሰብዎ ጋር ያጋጠምዎት ህመም ካለ፤ በአምልኮ፤ በተፈጥሯዊ ወይም ሌላ፤
- በአካባቢ ቋንቋ እነዚህ ምን ይባላሉ?

6. የቤተሰብ አባል በሚታመምበት ጊዜ (በአምልኮ፤በተፈጥሯዊ ወይም ማኅበራዊ) የቤተሰቡ የዕለት ከዕለት ኑሮ ሊስተጓጎል ይችላል፡፡ ይህንን መስተጓጎል ከቤተሰብዎና ከራስዎ ልምድ ጋር በማቀናጀት ቢያብራሩልኝ፤

    - ማኅበራዊ ጉዳይ ላይ ማተኮር

7. የአካባቢውን የህመም ምክንያቶች እምነት ከዘመናዊ የህመም ምክንያቶች ጋር አብሮ ወይም ጎን ለጎን ለማስኬድና የተሻለ የጤና አገልግሎት ለማግኘት ያልዎትን ልምድ ቢያካፍሉኝ?
8. ከአካባቢው ያሉትን ዋና ዋና የጤና ችግሮች ከራሳችሁ ቤተሠብ ልምድ በመነሣት ልትነግሩኝ ትችላላችሁ?
9. ከላይ ለተጠቀሱት ህመሞች እርዳታ ለማግኘት ወዴት ትሄዳላችሁ?

    <u>ተጨማሪ ጥያቄ፡-</u> የትኞቹ ህመሞች ናቸው ባጥጋቢ ሁኔታ በዘመናዊ ህክምና፣ በባህል መድሃኒት አዋቂዎች ወይም በቤት ውስጥ ባሉ ህክምናዎች የሚታከሙት

    <u>ተጨማሪ ጥያቄ፡-</u> ከላይ የተጠቀየውን ጥያቄ ከገንዘብ ወጭ አኳያ፣ ከመጓጓዣ አኳያ ለእያንዳንዱ ህክምና አይነት እንዴት ይገመግሙታል? ባጠቃላይ የእያንዳንዱን ህክምና አይነቱን ጥቅምና ጉዳት ቢነግሩን?

    ተጨማሪ ጥያቄ: በእርስዎ አመለካከት የሶስቱን ህክምና አይነቶች ልዩነት ቢነግሩን? በአካባቢው ቋንቋ የባል መድሃኒት አዋቂዎች፣ የቤት ህክምናና ዘመናዊ ህክምና ምን በማለት ይጠራሉ?

10. በቤት ውስጥ የጤና እንክብካቤ ምርጫ ውሳኔ እንዴት ይካሄዳል?

    ተጨማሪ ጥያቄ

    - በቤት ውስጥ ሰው ሲታመም ስለህመሙ ምርመራ የሚያደርገው ማን ነው? ማን ውሳኔ ይሰጣል?

    - ለቤት ጥቅም የሚውሉትን መድሃኒቶች (ዕፅዋት) ማን ይሠበስባል? ማን ለአወሳሰድ በሚያመች መልኩ መድሃኒቱን ያዘጋጃል?

    - ከቤት ውጭ ለሚደረግ ህክምና ክፍያውን ማን ያከናውናል?

11. ህመሞችን ለመከላከል ምን ምን ጥረቶችን ታደርጋላችሁ?

ተጨማሪ ጥያቄ

- **በቤት ውስጥ ተግባራዊ የሚሆኑ አንዳንድ የበሽታ መከላከያ ዘዴዎችንና ከምን አይነት ህክመም እንደሚከላከሉ ልትነግሩን ትችላላችሁ?**
- **ከምግቦች ውስጥ በእናንተ እምነት ህክምና ለመከላከልና ጥንካሬን ለመስጠት የትኞቹ እንደሆኑ ብትነግሩን?**
- **በባህል መድሃኒት አዋቂዎች የሚሰጡ የህክምና መከላከያ ዘዴዎችንና የሚከላከሉትን ህመም ቢነግሩን?**

12. **በእናንተ አመለካከት የዚህ አካባቢ አየር ሁኔታ፣ የተፈጥሮ እንክብካቤ፣ የመሬት አጠቃቀምና እየጠፉ ካሉ ባህላዊ መድሃኒቶች አኳያ ያለው የአሁኑ ተጨባጭ ሁኔታ ብትነግሩን?**

13. **በእናንተስ አመለካከት የባህል ህክምና አጠቃቀም እንዴት ሊሻሻል ይችላል? ከዘመናዊ ህክምና አንዴት ጎን ለጎን ሊሄድ ይችላል?**

Appendix 10

Subject Information Sheet and Informed Consent Form

(English & Amharic Version)

1. Subject Information Sheet Form (In-depth Interview)

Good Morning/Afternoon,

My name is Mesfin Haile Kahissay. Currently, I am enrolled into doctoral study in Social and Administrative Pharmacy, at the Department Pharmaceutics and Social Pharmacy, School of Pharmacy, Addis Ababa University. My research advisors are Dr. Teferi Gedif Fenta (Associate Professor, Pharmaceutics and Social Pharmacy Department, School of Pharmacy, Addis Ababa University) and Prof. Heather Boon (Professor, Leslie Dan Faculty of Pharmacy, University of Toronto).

I invite you to participate in this study entitled*: Indigenous Ill-health Perception and Healing Practices: Socio-Cultural Study in North-Eastern Ethiopia*. You are chosen purposefully and because you fulfill our criteria on the indigenous ill-health knowledge and healing practices. Study participants involved in this study are among *Tehuledere* district residents of those who are adult age above 30 years.

The study aimed to explore the socio-cultural contexts of indigenous beliefs regarding ill-health causation and healing practices among *Tehuledere* communities found in the Amhara Regional State of Ethiopia. The purpose of this project is to provide an effective and practicable means for achieving in-depth understanding of indigenous health knowledge practices surrounding particular illnesses. Such an integrated approach can enable prioritization of major health problems; facilitate the documentation of illness specific local knowledge, whilst also allowing for the identification of specific needs and areas for intervention.

Your responsibilities will be: To share to the best of your ability how ill-health are perceived and caused; treatment options available in your situation and to respond to the best of your ability to any questions regarding the causes of ill-health in your communities and to assist in paving the way showing how this knowledge could be integrated into the present primary health care services and education institutions.

The interview will take only 45-90 minutes. I will be taping the interview session because I do not want to miss any of your comments. Although I will be taking some notes during

the session, I cannot possibly write fast enough to get it all down. Because we will be on tape, please be sure to speak up so that we do not miss your comments.

Next I will ask you some questions which are simple to answer. The confidentiality of your response is maintained. Your responses will be only shared with in our research team members. We would like to ensure you that any information we include in our report does not identify you as the respondent. Also the finding will be disseminated by different means; such as publishing in journals, presenting in scientific meeting, reporting to local governors to best use of this exploration to the study communities and similar communities in the globe. You will not be paid to take part in the study, but your transport and meal costs will be covered for each study visit. There will be no costs for you personally, if you do take part.You are not obliged to answer any question which you do not want to answer. You can also quit the interview if you feel to do so. If you have any questions concerning the study, please feel free to ask at any point. However your valuable response will help us to know the indigenous ill-health perception and healing practices of the community. Also the study communities who carry indigenous knowledge will benefit from your taking part in this research, because the finding of this study may contribute input on culture sensitive primary health care.

Thank you beforehand for your valuable answer. Do you want to participate in this interview?

1. Yes 2.No

Contact details

- ✓ You can contact MHK at telephone 0924475185 if you have any further queries or encounter any problems.
- ✓ You can contact the Ethical Review Committee of College of health science, Addis Ababa University 002511560212 if you have any concerns or complaints that have not been adequately addressed by MHK.
- ✓ You will receive a copy of this information and consent form for your own records.

Declaration by participant

By signing below, I (name)...……...……...……...……. agree to take part in a research study entitled : Indigenous Ill-health Perception and Healing Practices: Socio-Cultural Study in North-Eastern Ethiopia

I declare that:

- ✓ I have read or had someone read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- ✓ I have had a chance to ask questions and all my questions have been adequately answered.

- ✓ I understand that taking part in this study is voluntary and I have not been pressurised to take part.
- ✓ I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- ✓ I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (place) .....….....…….. On (date) ……...……..

Signature of participant Signature of witness

Declaration by investigator

I (name) ……MHK……..…… declare that:

- ✓ I explained the information in this document to (name) ……..
- ✓ I encouraged him/her to ask questions and took adequate time to answer these questions.
- ✓ I am satisfied that he/she adequately understands all aspects of the research, as discussed above.
- ✓ I did not use a translator.

Signed at (place) .....….....…….. On (date) ……...……...

Signature of investigator Signature of witness……

ለጥናት ተሳታፊዎች የሚሰጥ መረጃ

ቅጽ 1 (ቃለ-መጠይቅ)

ጤና ይስጥልኝ !!

ስሜ መስፍን ሃይሌ ይባላል በአሁኑ ሰዓት በአዲስ አበባ ዩኒቨርሲቲ፣ ጤና ሳይንስ ኮሌጅ፣ ፋርማሲ ት/ቤት፣ በማህበራዊና አስተዳደር ፋርማሲ በፍልስፍና ዶክትሬት/ፒ.ኤች.ዲ/ በመማር ላይ እገኛለሁ፡፡ በዚህ ጥናት ዶ/ር ተፈሪ ገድፍ /ከአዲስ አበባ ዩኒቨርስቲ/ እና ፕሮፌሰር ሂዘር ቡን (ከቶሮንቶ ዩኒቨርሲቲ) አማካሪዎቼ ናቸው፡፡

እኔ አሁን ለመመረቂያ ጽሁፌ የማጠናው ጥናት አርእስቱ ፡- **በተሁለደሬ ወረዳ የኅብረተሰቡ የህመም ምክንያቶች እምነት አሰሳ እና የሚጠቀምባቸው የባህላዊ ህክምና ዘዴዎች** ይመለከታል፡፡ እርስዎ ለዚህ ቃመጠይቅ የተመረጡት የጥናቱ ተሣታፊዎችን መመዘኛ መስፈርት ስላሟሉ ነው፡፡ በዚህ ጥናት ተሳታፊ የሚሆኑት በተሁለደሬ ወረዳ ነዋሪ የሆኑ፣ እድሜያቸው ከ30 አመት በላይ የሆነና በአጠቃላይ የባህል ህክምና ዕውቀት አላቸው ተብሎ የሚታመንባቸው ናቸው፡፡

የጥናቱ አላማም በአካባቢው የሚገኙትን በሽታ ተኮር የባህል ህክምና እውቀቶች በጥልቀት በማወቅ ውጤታማና ህብረተሰቡ ሊተገብረው የሚችሉ መፍትሄ ለማፈላለግ ነው፡፡ በተጨማሪም በዚሁ ጥናት የዐካባቢውን ዋና ዋና ህመሞች በቅደም ተከተል ማስቀመጥ፣ ለነዚህ በሽታዎች በአካባቢው የሚገኙ ህክምናዎችን መመዝገብ፣ እና ትኩረትና መፍዔት የሚስፈልጋቸውን ቦታዎች ለመለየት ይረዳል፡፡

ስለዚህ ከርስዎ የሚጠበቁት የሚከተሉት ናቸው፣ ስለ ህመምና ጤና ያልዎትን ግንዛቤ አንዲነግሩን፣ ህመም ሲያጋጥም ምን እንደሚያደርጉ የግልዎን ተሞክሮ እንዲነግሩንና ባጠቃላይ በዚህ አካባቢ ያለውን የባህል ህክምና እንዲያብራሩልን ነው፡፡

ቃለ መጠይቁ ከ30-45 ደቂቃ ሊወስድ ይችላል፡፡ እርስዎ የሚሰጡኝን ሀሳብ ሙሉ በሙሉ ለመያዝ ድምፅዎትን በቴፕ እቀርፅዎታለሁ፡፡ ስለሆነም በቃ-ምልልሱ ጊዜ ድምፅዎትን ከፍ እንዲያደርጉልኝ እጠይቅዎታለሁ፡፡ በተጨማሪም በቃለ መጠይቁ ወቅት አንዳንድ ማስታወሻዎችን በደብተሬ ልወስድ እችላለሁ፡፡

በመቀጠል ቀለል ያሉ ጥያቄዎችን እጠይቅዎታለሁ፡፡ ለሚሠጡን መልስ ሚስጥራዊነቱ በፍፁም የተጠበቀ ነው፡፡ ከጥናት ቡድኑ ውጭ ለማንም አንነግርም፡፡ በሪፖርታችንም ላይ የእርስዎን ስምና ማንነት የሚያመላክት ምንም ነገር አናካትትም፡፡ መመለስ የማይፈልጉትን ጥያቄ እንዲመልሱ አይገደዱም፡፡ በተጨማሪም ቃለ-መጠይቁን መቀጠል ካልፈለጉ ማቋረጥ ይችላሉ፡፡ ነገር ግን በአካባቢው ስላለው አጠቃላይ የባህል ህክምና ግንዛቤ እንዲኖረን የእርስዎ ተሳትፎ የማይተካ ሚና ይኖረዋል፡፡ በመጨረሻም ስለጥናቱ ማንኛውም አይነት ጥያቄ ካለዎት ነፃ ሆነው መጠየቅ ይችላሉ፡፡

አመሰግናለሁ!!

በቃ ምልልሱ ላይ ለመካፈል ፈቃደኛ ኖት?

1. አዎ ☐ 2. አልፈልግም ☐

የፈቃደኝነት መግለጫ

ከላይ የተሰጡኝን መግጫዎች በሚገባ አንብቤ ተረድቼያለሁ፡፡ አስፈላጊ ጥያቄዎችንም እንድጠይቅ እድል ተሰጥቶኛል አጥጋቢ መልስ ተመልሶልኛል፡፡ በማንኛውም ሰዓት ቃለ-ምልልሱን ለማቋረጥ እንደምችል በመገንዘብ የጥናቱ ተሳታፊ ለመሆን ፈቃደኝነቴን እገልፃለሁ፡፡

የተሳታፊው ፊርማ _____ ቀን _____
የቃለ መጠይቁ ጠያቂ ፊርማ _____ ቀን _____

2. Subject Information Sheet Form (Focus Group Discussion)

Good Morning/Afternoon,

My name is Mesfin Haile Kahissay**.** Currently, I am enrolled into doctoral study in Social and Administrative Pharmacy, at the Department Pharmaceutics and Social Pharmacy, School of Pharmacy, Addis Ababa University. My research advisors are Dr. Teferi Gedif Fenta (Associate Professor, Pharmaceutics and Social Pharmacy Department, School of Pharmacy, Addis Ababa University) and Prof. Heather Boon (Professor, Leslie Dan Faculty of Pharmacy, University of Toronto). My collogue name is Teshager Shiferaw, who will assist me in note taking.

I invite you to participate in this study entitled *Indigenous Ill-health Perception and Healing Practices: Socio-Cultural Study in North-Eastern Ethiopia.* You are chosen purposefully and because you fulfill our criteria on the traditional medicine knowledge. Study participants involved in this study are among *Tehuledere* district residents of those who are adult, male and female, age above 30years.

The purpose of this project is to provide an effective and practicable means for achieving in-depth understanding of indigenous ill-health perceptions and healing practices surrounding particular illnesses. Such an integrated approach can enable prioritization of major health problems; facilitate the documentation of illness specific local knowledge, whilst also allowing for the identification of specific needs and areas for intervention.

Your responsibilities will be to share to the best of your ability how ill-health are perceived and caused and healing practices in your situation; and to respond to the best of your ability to any questions regarding the causes of ill-health in your communities and to assist in paving the way showing how this knowledge could be integrated into the present PHC services and education institutions

The discussion will take only 90-120 minutes. I will be taping the interview session because I do not want to miss any of your comments. Although my colleague will be taking some notes during the session, I cannot possibly write fast enough to get it all down. Because we will be on tape, please be sure to speak up so that we do not miss your comments

Next I will ask you some questions which are simple to answer. The confidentiality of your response is maintained. Your responses will be only shared with in our research team members. We would like to ensure you that any information we include in our report does not identify you as the respondent. Also the finding will be disseminated by different means; such as publishing in journals, presenting in scientific meeting, reporting to local governors to best use of this exploration to the study communities and similar

communities in the globe. You will not be paid to take part in the study, but your transport and meal costs will be covered for each study visit. There will be no costs for you personally, if you do take part.You are not obliged to answer any question which you do not want to answer. You can also quit the interview if you feel to do so. If you have any questions concerning the study, please feel free to ask at any point. However your valuable response will help us to know the indigenous ill-health perception and healing practices of the community. Also the study communities who carry indigenous knowledge will benefit from your taking part in this research, because the finding of this study may contribute input on culture sensitive primary health care.

Thank you beforehand for your valuable answer. Do you want to participate in this interview?

1. Yes 2.No

Contact details

- ✓ You can contact MHK at telephone 0924475185 if you have any further queries or encounter any problems.
- ✓ You can contact the Ethical Review Committee of College of health science, Addis Ababa University 002511560212 if you have any concerns or complaints that have not been adequately addressed by MHK.

ለጥናት ተሳታፊዎች የሚሰጥ መረጃ

ቅጽ 2 (የቡድን ውይይት)

ጤና ይስጥልኝ !!

ስሜ መስፍን ሃይሌ ይባላል በአሁኑ ሰዓት በአዲስ አበባ ዩኒቨርሲቲ፣ ጤና ሳይንስ ኮሌጅ፣ ፋርማሲ ት/ቤት፣ በማህበራዊና አስተዳደር ፋርማሲ በፍልስፍና ዶክትሬት/ፒ.ኤች.ዲ/ በመማር ላይ እገኛለሁ፡፡ በዚህ ጥናት ዶ/ር ተፈሪ ገድፍ /ከአዲስ አበባ ዩኒቨርስቲ/ እና ፕሮፌሰር ሂዘር ቡን (ከቶሮንቶ ዩኒቨርሲቲ) አማካሪዎቼ ናቸው፡፡

እኔ አሁን ለመመረቂያ ጽሁፌ የማጠናው ጥናት አርእስቱ ፡- በተሁለደሬ ወረዳ የጎብረተሰቡ የህመም ምክንያቶች እምነትአሰሳ እና የሚጠቀምባቸው የባህላዊ ህክምና ዘዴዎችን ይመለከታል፡፡ እርስዎ ለዚህ የቡድን ውይይት የተመረጡት የጥናቱ ተሣታፊዎችን መመዘኛ መስፈርት ስላሟሉ ነው፡፡ በዚህ ጥናት ተሳታፊ የሚሆኑት በተሁለደሬ ወረዳ ነዋሪ የሆኑ፣ እድሜያቸው ከ20 አመት በላይ የሆነና በአጠቃላይ የባህል ህክምና ዕውቀት አላቸው ተብሎ የሚታንባቸው ናቸው፡፡

የጥናቱ አላማም በአካባቢው የሚገኙትን በሽታ ተኮር የባህል ህክምና እውቀቶች በጥልቀት በማወቅ ውጤታማና ህብረተሰቡ ሊተገብረው የሚችሉ መፍትሄ ለማፈላለግ ነው፡፡ በተጨማሪም በዚሁ ጥናት የዕካባቢውን ዋና ዋና ህመሞች በቅደም ተከተል ማስቀመጥ፣

ለነዚህ በሽታዎች በአካባቢው የሚገኙ ህክምናዎችን መመዝገብ፣ እና ትኩረትና መፍሄት የሚስፈልጋቸውን ቦታዎች ለመለየት ይረዳል።

ስለዚህ ከርስዎ የሚጠበቁት የሚከተሉት ናቸው፣ ስለ ህመምና ጤና ያልዎትን ግንዛቤ አንዲነግሩን፣ ህመም ሲያጋጥም ምን እንደሚያደርጉ የግልዎን ተሞክሮ እንዲነግሩንና ባጠቃላይ በዚህ አካባቢ ያለውን የባህል ህክምና እንዲያብራሩልን ነው።

ቃለ መጠይቁ ከ30-45 ደቂቃ ሊወስድ ይችላል። እርስዎ የሚሰጡኝን ሀሳብ ሙሉ በሙሉ ለመያዝ ድምፅዎትን በቴፕ እቀርፅዎታለሁ። ስለሆነም በቃ-ምልልሱ ጊዜ ድምፅዎትን ከፍ እንዲያደርጉልኝ እጠይቅዎታለሁ። በተጨማሪም በቃለ መጠይቁ ወቅት አንዳንድ ማስታወሻዎችን በደብተሬ ልወስድ እችላለሁ።

በመቀጠል ቀለል ያሉ ጥያቄዎችን እጠይቅዎታለሁ። ለሚሠጡን መልስ ሚስጥራዊነቱ በፍፁም የተጠበቀ ነው። ከጥናት ቡድኑ ውጭ ለማንም አንነግርም። በሪፖርታችንም ላይ የእርስዎን ስምና ማንነት የሚያመላክት ምንም ነገር አናካትትም። መመለስ የማይፈልጉትን ጥያቄ እንዲመልሱ አይገደዱም። በተጨማሪም ቃለ-መጠይቁን መቀጠል ካልፈለጉ ማቋረጥ ይችላሉ። ነገር ግን በአካባቢው ስላለው አጠቃላይ የባህል ህክምና ግንዛቤ እንዲኖረን የእርስዎ ተሳትፎ የማይተካ ሚና ይኖረዋል። በመጨረሻም ስለጥናቱ ማንኛውም አይነት ጥያቄ ካለዎት ነፃ ሆነው መጠየቅ ይችላሉ።

አመሰግናለሁ!!

በቃ ምልልሱ ላይ ለመካፈል ፈቃደኛ ኖት?

1. አዎ ☐ 2. አልፈልግም ☐

Appendix 11

	Addis Ababa University College of Health Science Institutional Review Board **Title:** **3.2. Use of Study Assessment Form**	**SOP# AAUMF 008** **Version 2.0** **Effective date: 1 Feb. 2009** **Page 13 of 13**

ANNEX 3

Form AAUMF 03-008

IRB's Decision

Meeting No: 052/13 *Date (D/M/Y): August 9,2013*

Protocol number :037/13/PSP *Assigned No.……*

Protocol Title: *Indigenous Health Knowledge and Medicinal Plant Use Study in Rural North Eastern Ethiopia*		
Principal Investigators:	*Ato Mesfin Haile*	
Institute:	AAU-CHS Department of Pharmaceutics and Social pharmacy	
Elements Reviewed (AAUMF 01-008)	☑ Attached	☐ Not attached
Review of Revised Application ☐ Yes ☐ No	Date of Previous review:	
Decision of the meeting:	☑ **Approved** ☐ Approved with Recommendation ☐ Resubmission ☐ Disapproved	

I. Elements approved- 1. Protocol Version No. ……
2. Protocol Version Date……
3. Informed consent Version No. ……
4. Informed Consent Version Date ……

II. Obligations of the PI-
1. Should comply with the standard international & national scientific and ethical guidelines
2. All amendments and changes made in protocol and consent form needs IRB approval
3. The PI should report SAE within 10 days of the event
4. End of the study, including manuscripts and thesis works should be reported to the IRB

III. **TO ESTM**

Institution Review Board (IRB) Approval: Period from **October 2013-October2014**

Follow up report expected in

3 Months __ 6 months ____ 9 months_____one year_√_

Chairperson, IRB
Dr. Yimtubezenash W/Amanuel
Signature _____
Date: 14/08/13

Institutional Review Board (IRB) Office
Faculty of Medicine
ADDIS ABABA UNIVERSITY

Associate Director of Research and Technology Transfer
Signature _____
Date _____

በፋርማሲ ት/ቤት
የፋርማሲዉቲክስና ሶሻል
ፋርማሲ ትምህርት ክፍል

አዲስ አበባ ዩኒቨርሲቲ
Addis Ababa University

School of Pharmacy
Department of Pharmaceutics
& Social Pharmacy

ቀን Date ሰኔ 25, 2005

ቁጥር Ref. No. Ph/Ceutics/292/05/2013

ለሚመለከተው ሁሉ

ጉዳዩ፡ ትብብር ስለመጠየቅ

አቶ መስፍን ሃይሌ ካህሳይ በአዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ ፋርማሲ ት/ቤት ፋርማሲዩቲክስና ሶሻል ፋርማሲ ት/ክፍል በ"Social and Administrative Pharmacy" የ3ኛ ዓመት የፒ.ኤች.ዲ ተማሪ ናቸው። በአሁኑ ሰዓት በ" Indigenous Health Knowledge and Medicinal Plant Use Study in Rural North Eastern Ethiopia" በሚል የፒ.ኤች.ዲ የጥናት ርዕስ የምርምር ጥናታቸውን ለማድረግ ዝግጅታቸውን አጠናቀው ወደ መስክ ለመውጣት በዝግጅት ላይ ናቸው። በመሆኑም በምርምራቸው ሂደት በመ/ቤታቹህ በኩል አስፈላጊውን ትብብር ይደረግላቸው ዘንድ በአክብሮት እንጠይቃለን። ለሚደረግላቸውም ትብብር በቅድሚያ እናመሰግናለን።

ከሰላምታ ጋር

ፍጹም ፈለቀ ሳህሌ (ዶ/ር)

የትምህርት ክፍሉ ኃላፊ

☎ 00251156 02 12 ✉ 1176 ቴሌክስ Telex: 21205 ፋክስ Fax: 00251(11)1558566 ቴሌግራም Cable: AAUNIV

ቁጥር ተሀ/ጤ/ጥ/ 924 /2006
ቀን 11 / 07 /2006

ለተሀድሶደሬ ወረዳ ሚኒኪሽን ጽ/ቤት

በአማራ ብሔራዊ ክልላዊ መንግሥት ደቡብ ወሎ ዞን ተሀሰደሬ ወረዳ ጤና ጥበቃ ጽ/ቤት

ሐይቅ

ጉዳዩ፡- ትብብር ስለመጠየቅ፤

ከላይ በርእሱ እንደተገለፀው አቶ መስፍን ኃይሉ በአዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ ፋርማሲ ትምህርት ፋርማሲዩቲክስ እና ሶሻል ፋርማሲ ትምክርት ቤ " sosal and Adminstrative Pharmaccy " የመጨረሻ ዓመት የጥናትና ምርምር ተማሪ ናቸው በአሁኑ ሰዓት በ Indigenous Health Kowledge and Medical Plant use study in Rural North Eastern Ethiopian በሚል ርዕስ የምርምር ጥናታቸውን በማድረግ ላይ ይገኛሉ። በመሆኑም ለምርምራቸው ሂደት በመሚኒኪሽን ጽ/ቤት በኩል የሚያስፈልንቸውን ማለትም ፡-

1. የወረዳው አጠቃላይ የህዝብ ብዛት መረጃ
2. Agro Econological data
3. Health data
4. Educational data
5. Cultural and turism etc...

መረጃዎች በእናንተ በኩል አስፈላጊው ትብብር ይደረግላቸው ዘንድ በቀን ሰኔ 25/2005 ዓ.ም በቁጥር Ph/Ceutics/292/05/2013 በሆነ ደብዳቤ ከአዲስ አበባ ዩኒቨርሲቲ ቡድኃፊላቸው ደብዳቤ መሠረት አስፈላጊውን ትብብር እንዲደረግላቸው እንጠይቃለን።

ከላምታ ጋር

ጀማል አህመድ

የጽ/ቤቱ ኃላፊ

ግልባጭ፤

- ለተሀ/መምህልና ተደጽም ጽ/ቤት
- ለተሀሰደሬ ወረዳ ግ/ዘልአ/ጽ/ቤት

ሐይቅ

[illegible]

[illegible] 66 2006

[illegible] 6 / 1 2006

በአማራ ብሔራዊ ክልላዊ መንግሥት [illegible] [illegible] ቢሮ [illegible]

ለ 6ቱ [illegible]

[illegible]

[illegible] Pharmaceutics & Social Pharmacy [illegible] Social and Administrative Pharmacy [illegible]

[illegible]

[illegible] የመረጃ ጤና ጥበቃ ጽ/ቤት ኃላ/

[illegible]