

**T.C
ANKARA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
DEPARTMENT OF ANTHROPOLOGY
(SOCIAL ANTHROPOLOGY)**

**UNDERSTANDING THE SOCIO-CULTURAL MEANINGS OF
MALARIA CONTROL THERAPIES IN UGANDA**

DOCTORATE THESIS

BAGWANA PETER

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DECLARATION
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With this document, I declare that I collected and presented all the information here within and in accordance with the academic rules and ethical behaviour. As required by these rules and principles, all information not belonging to me has been properly cited and acknowledged as reference material.

Thesis prepared by

Name and surname



BAGWANA PETER

ACKNOWLEDGEMENT

I owe special gratitude to my supervisor Assoc. Prof. Dr. H. Çağlar Enneli, all staff and lecturers in the department of anthropology and sociology including Prof. Dr. Zafer Ilbars, Prof. Dr. Aslı Yazıcı Yakın, Assoc. Prof. Feryal Turan, Dr. Ceren, and Özlem. Thank you for the constant support, guidance and encouragement.

I am also profoundly grateful to the office of the Rector, Ankara University, as well as the African Study Research and Implementation Centre (ACAUM) for the comprehensive scholarship that enabled me to pursue the doctorate programme in Social Anthropology.

I also want to extend my special appreciation to Mr. Aaron Kabirizi and Mrs. Sande Kabirizi for the moral and financial support. You inspired me to work hard and reach for greatness. Thank you for spurring me on and guiding me during the research process and for always checking on me to see how I was progressing.

I would like to acknowledge my family for all the support rendered to me. My mother, my siblings and cousins, thank you for being a constant pillar of support and guidance.

My friends, Lillian, Sammy, Jagen, Andrew, Joshua, Özgür, Filliz and all guys in Keçioren; thank you for making the difficult days shorter.

To my mother (RIP) for providing a strong model.

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ACRONYMS

ACTs	Artemisinin-based Combination Therapies
AL	Artemether/Lumefantrine
ATS	African Traditional Society
CQ	Chloroquine
DDT	Dichloro-Dyphenyl- Trichloroethane
HM	Herbal Medicine
IRS	Indoor Residual Spraying
IPT	Intermittent Preventive Treatment.
LLINs	Long Lasting Insecticide Treated Nets
LRA	Lord's Resistance Army
MMV	Medicine for Malaria Venture
MoH	Ministry of Health
NACOTHA	National Council of Traditional Healers and Herbalist Association
NEPAD	New Partnership for Africa's Development
NMCP	National Malaria Control program
THM	Traditional Herbal Medicine
OPDs	Out Patient Departments
SP	Sulphadoxine/Pyrimethamine
WOH	World Health Organisation

ABSTRACT

With over 90% of the nation being endemic, malaria remains the leading public health problem in Uganda. Several interventions have been adopted in attempt to reduce malaria morbidity and mortality in the country. The disease burden has however remained high, accounting for a daily death toll of over 200 children in the country. The persistent wide occurrence of malaria in many parts of the country can be attributed to poor regulatory policies that often result into untrained health practitioners joining the health sector, high parasite resistance to cheap antimalarials, the high cost and persistent drug stock outs of effective antimalarials, cultural and religious dictates of some communities, poverty, existence of inefficient treatment options like use of untested traditional medicines, among others.

These multi-dimensional problems require multi-pronged efforts and cannot be addressed in a single scientific study. Addressing the malaria disease burden therefore calls for a socio-scientific approach that would afford proportionate attention to both socio-cultural and scientific properties of the problem. Ironically, Research into antimalarials in Uganda has focused on issues of drug policy, funds, health workers and treatment guidelines, neglecting the role of culture in determining people's medical seeking behaviour.

Using an ethnographic approach, this thesis attempts to understand the dynamic nature of the malaria disease burden from both the western clinical perspective and the traditional cultural value systems of Ugandan societies. It explores peoples' experiences and perceptions of the modern allopathic drugs in comparison with traditional herbal medicines used in the treatment of malaria in Ugandan communities.

The study took place in three communities of Soweto, Masese and Walukuba that are found in Walukuba Masese Division in Jinja District. The selection of the three communities was because of their close proximity to each other. They are also located near the banks of Lake Victoria that makes them prone to mosquito infestations.

While this is not a representative study, and results of which may not reflect the actuality

of the malaria situation in the country, Jinja district represents medium-high malaria transmission rates in Uganda (MoH, 2010). With this rate of malaria transmission, this population would have greater knowledge and experience of coping with the malaria disease burden.

CHAPTER ONE: CONTEXTUALISING THE STUDY

1.1 Introduction

Over the years, Africa and particularly Uganda has been grappling with the malaria disease burden with little or no measurable success in some parts of the continent. The malaria scourge is considered the world's highest killer with most deaths occurring in sub-Saharan Africa. According to the Uganda Ministry of Health (MoH), about 50 countries in sub-Saharan Africa are malarious, representing 50% of the world's total endemic countries (MoH, 2005). Recent global estimates by the World Health Organization (WHO) indicate a significant rise in malaria recorded cases in Africa at 81% (WHO, 2010).

The situation is no different in the endemic East African nation, Uganda. Uganda remains one of the countries with the highest malaria transmission rates in the world (Okiro et al, 2011). According to the Uganda Ministry of Health's National Malaria Control Programme (NMCP) annual plan of 2011-2012, over 90% of the Ugandan population is at risk of malaria infection. Malaria remains the leading public health problem in the country responsible for about 70000-110000 deaths every year (MoH, 2005). It is responsible for over 200 daily recorded deaths in the country and the most vulnerable groups are children below the age of 5 and pregnant women (Malaria control Programme, 2005). Malaria cases have been increasing since the early 2000s, indicating a rise from 28% in 2001 to 45% in 2010 (NMCP, 2011-2012).

The intensity of the malaria disease burden in the country has attracted not only nationwide attention, but also global sympathy; witnessed in the overwhelming donor support the country receives to contain the disease. Despite the huge interventions by the state, donor community and other stakeholders to contain the disease, malaria cases have remained high across the country. There was need for a study that would not only tolerate and integrate divergent ideas about possible solutions, but also one that is open to strategic inquiry into other treatment options outside the formal modern treatment

strategy. The central aim of this thesis was to explore in detail the current socio-cultural state of malaria control therapies in Uganda. Adopting an ethnographic perspective, the study draws on peoples' experiences and perceptions of the modern drugs versus traditional herbal medicines used in the fight against malaria in the country.

The ethnographic perspective was adopted in this study for a variety of reasons: Ethnography is "a way of accessing beliefs and practices, allowing these to be viewed in the context in which they occur and thereby aiding understanding of behaviour surrounding health and illness" (Savage, 2000:321). It allows for the researcher's full immersion in the study community, which enriches and widens their knowledge of the socio-cultural practices of particular communities. While many studies on malaria control therapies (see Tabuti, 2006; Batega, 2004) have adopted this approach, none of them seem to portray an ethnography that delineates an emic perspective of study. The uniqueness of this study is that it presents its findings as directly observed and narrated by the experiencers themselves.

The modern antimalarial market in Uganda is currently grappling with challenges of drug resistance, recurrent drug stock outs and limited accessibility by the affected persons. Yet, little has been done to recognise traditional herbal medicines as a potential make up for the limited options in the modern antimalarial market. Despite lacking a logical explanation, the practice of traditional healing should not be taken at face value as it continues to play a pivotal role in many health care practices of African societies. The approach taken in this study aims to prioritise community involvement, and to listen to the voices of the experiencers themselves about the current malaria control therapies in Uganda.

My interest in the study subject also arose out of the original desire to investigate the socio-cultural context of biomedical technologies in healthcare delivery. My experience with the magnetic resonance imaging in public hospitals in Turkey aroused my desire to understand how other people react, feel, think about, or regard biomedical technologies as a new form of diagnosis and treatment. Understanding the complexity of the study

subject and considering the fact that patients may not have absolute reservation to choose one category of biomedical technology against the other, I envisaged limited patient involvement in the study outcomes. It was against this premise, that I shifted focus to socio-cultural essences of malaria control therapies, as it not only offered feasible alternatives to understanding the daily health care practices of people, but also their participation and involvement in the subject matter.

1.2 Introducing the Research Problem

The malaria scourge is one of the most common public health problems in sub-Saharan Africa. In Uganda, it is the most common cause of hospital attendances and it kills over 200 children every day (MoH, 2006; MCP, 2005). With over 90% of the nation being endemic, malaria is by far the leading cause of ill health and death in Uganda. Despite several interventions by the state, donor community and other stakeholders to contain the disease, malaria cases have remained high across the country. According to the Uganda National Malaria Control Program (2011-2012) annual plan, reported malaria cases have been increasing since the early 2000s, indicating a rise from 28% in 2001 to 45% in 2010. This persistent wide occurrence of the disease calls for quick and drastic research into all possibilities that could evoke a lasting cure to the malaria disease burden in the country.

The intensity of the problem requires a multi-faceted approach that would invigorate not only the clinical but also socio-cultural solutions to the problem. It should be understood that illness and disease in traditional Africa was a complex of the body, mind and spirit, and a traditional/cultural approach was more complementary in seeking a sustainable remedy. Contemporary African societies have not evolved from oblivion; they are rather deeply rooted in their traditional past. What we see today is a continuation of historical precedents that have simply incorporated the inevitable global demands but still potent to preserve ancient practices in their daily lives. Anthropologist, Tambiah has put it that “the history of human race is one in source, one experience and one in progress”

(Tambiah, 1990:1) as he deeply postulates the continuities in life experiences of mankind.

Besides, the limitations associated with the current treatment strategy such as shortage of health facilities and personnel, income disparities and drug stock outs suggest that traditional herbal medicines may be a potential back up to the rather unstable healthcare system in Uganda. While their clinical worth has not been greatly explored, many studies (Gessler et al, 1994; Tabuti, 2006) have suggested that Traditional Herbal Medicine (THM) may provide options which are more tolerated, user-friendly and efficacious in the fight against malaria in the country.

In Uganda, the malaria prevention and control policy is an integral part of the broader efforts to improve health care delivery in the country. The main approach in the management and control of the disease has been the adoption of preventive strategies that inhibit and control mosquito breeding and bites. The preventive strategies are classified into those that hinder mosquito breeding; those that kill mosquitoes, and strategies that reduce the number of infective sites (MoH, 2005). Different preventive methods have been employed to contain the scourge and they include; the use of Long Lasting Insecticide treated mosquito Nets (LLINs), Intermittent Preventive Treatment (IPT), Indoor Residual Spraying (IRS) and Rapid Diagnostic Tests-RDTs (NMCP 2011-2012). Improved universal access to quality antimalarials is also one of the main strategies for malaria control in the country. Attempts to achieve these goals have witnessed nationwide distribution of free mosquito nets to every household. The government has also scrapped all user fees in all public health centres and hospitals to enable universal access to medication (MoH, 2011). However, these interventions have only registered scanty success. For instance, the distribution of free mosquito nets was not followed by mass sensitisation on the purpose and appropriate use of the nets. Consequently, the great majority of the public, particularly in the rural countryside have used the nets for other purposes like fishing, rather than shielding themselves against mosquito bites.

Regarding the treatment strategies, since 1940s, the country has been relying on chloroquine (CQ) monotherapy for treatment of mild malaria (Malaria Control and Prevention: Strategies and Policy Issues, 2007). However, the increasing resistance of malaria parasites to these relatively cheaper antimalarials later led to new policy changes that resulted into the use of a combination of chloroquine and sulphadoxine/pyrimethamine (CQ+SP) for treatment of mild malaria cases (MoH, 2011). Unfortunately, malaria parasites (*Plasmodium Falciparum*) continued to evade every attempt to contain it using the relatively cheap first line drug treatment. This necessitated urgent innovations into new and more effective anti-malarial drugs; artemisinin-based combination therapies (ACTs) as first line treatment for non complicated malaria cases (Bukirwa et al, 2006). ACTs were by far more efficient than the conventional first line drugs of chloroquine (CQ) and chloroquine + sulphadoxine/pyrimethamine (CQ+SP) monotherapies. In 2004, when malaria infection resistance to monotherapy drugs had reached a devastating 77%, drug efficacy for ACTs- artesunate+amodiaquine and artemether lumefantrine was recorded at 99% (Uganda malaria control strategic plan, 2005/6-2009/10).

Despite the high efficacy ratios, the new drugs (artemether lumefantrine) are 60% more expensive than the ordinary/conventional monotherapy medicines (MMV, 2007). Yet, the government does not have sufficient funds to afford adequate and timely supply of these relatively expensive drugs to the public (MMV, 2007; MoH, 2011). Similarly, the rate of introduction of these new drugs and diagnostic devices has not been commensurate to the number of medical staff trained to deliver healthcare services (MoH, 2009; Ezeala, 2011). The recurring drug resistance, the constant innovations into new medicines, and changes in treatments guidelines calls for routine training of health practitioners to match the changing drug policies. On the contrary, Uganda's health sector is largely dominated by untrained health practitioners spread throughout the country. These are "quack" and self inscribed doctors with little or no formal medical training, or with minimum training obtained in other academic fields outside medicine.

This state of affairs, coupled with lack of strong regulatory policies has turned the health sector into a business entity.

As Birungi (1994) notes, pharmaceutical products in Uganda can be sold by everyone; including vendors and hawkers, and can be found anywhere in open markets and many other public places. The complexity of the problem does not favour the public, majority of whom are illiterates, engulfed in extreme poverty while others still hold strong belief in traditional values. The inadequate and often untrained staffing, drug stock outs and relatively restricted community involvement might also significantly influence people's perceptions and understanding of the current antimalarial market.

The introduction of home-based management of malaria symptoms through home delivery of AL-coartem drugs has afforded increased levels of self-medication and this has only exacerbated the burden of disease especially in the rural areas of the country. The ultimate impact of this approach is the inappropriate use of drugs, which is in itself a health hazard (Birungi, 1994).

It therefore follows that the current modern antimalarial market and the general malaria control strategies and policies do not offer substantial alternatives in situations where the availability, accessibility and affordability of the medicine is not explicit to the general public. If the relatively cheap drugs are no longer effective in controlling malaria, the poor will urgently need to explore traditional herbal medicines to make up for the limited options among the modern highly effective medicines for malaria control. As Gessler asserts,

The recognition and validation of traditional medical practices and the search for plant-derived drugs could lead to new strategies in malaria control. Since many modern drugs such as quinine and artemisinin originate from plants, it is essential that other medicinal plants which have folklore reputation for antimalarial properties are investigated, in order to establish their safety and efficacy, and to determine their potential as sources of new antimalarial drugs (Gessler et al, 1994 cited in Madureira et al, 2002:23).

In Uganda, like elsewhere in Africa and other developing countries, the use and practice of traditional medicines is eminent in the provision of health care (WHO, 2003). According to the Ugandan Ministry of Health, about 60% of Ugandans believe in traditional medicine (MoH, 2009). There exists a strong preference for medication with herbal medicines as a primary intervention for malaria treatment in many Ugandan communities. The great majority of Ugandan communities have continued to disparage the efficiency of modern western drugs in saving lives. This can be attributed to easy accessibility, the low cost and efficacy of traditional herbal medicine as opposed to modern medicine.

Ironically, the field of traditional medicines has attracted limited attention in the formal health care practices of many economies. There is limited information concerning the extent of use of medicinal plants in health care systems in many African countries (Madureira et al, 2002). The problem here stems from the failure to develop a culturally competent healthcare system in many impoverished nations. Several innovations into biomedicines often neglect the social cultural context of their activities. Research into antimalarials in Uganda has only addressed issues of drug policy, funds, health workers and treatment guidelines (Batwala et al, 2009). There is also a general laxity on the part of science and technology to understand the socio-cultural context of their activities (Ulrike, Fochler & Winkler, 2010).

Medical research has largely been hinged on eliciting empirical evidence on the functionality of medical machineries, drug efficacy, rather than generating insight into additional alternatives (traditional herbal medicines) in the prevention and control of illnesses. This study aims to explore peoples' lived experiences, perceptions, and understanding of the current antimalarial market alongside traditional herbal medicines for malaria control and treatment. It is premised on the understanding that disease management and control is a concerted effort that starts with the suffering individual, down to the government and donor community. It is clear to us that community participation and involvement is central in the success of any community based programme. Exploring their experiences will complement the current malaria control

strategy and provide alternatives to the dwindling options in the current antimalarial market.

Besides, as external forms of biomedical technologies, the use of AL drugs in particular may not be a viable intermediary in the fight against malaria in Uganda. As Ingold (2000) suggests, it is the persistent externalisation of technology that distorts techno-social relations. Contrary to the situation in Uganda and other African countries, the use of ACTs in South Asia has strikingly yielded positive results (whitty, 2008). The implication is that biomedical technologies may be culturally relative and should not just be imposed on communities. Khan (2010) noted that it is the persistent negation of community beliefs and attitudes that has hindered the development of sustainable measures towards malaria control. It should also be acknowledged that priority needs for healthcare differ from one country to another (WHO, 2010). In Uganda, the historical primitive thinking has persevered despite the increasing number of elite communities and should not be overlooked in the quest for a lasting solution to the malaria disease burden.

This seemingly asymmetrical relationship between modernity and traditionalism in the field of biomedicines should not to be taken lightly in attempts to improve healthcare delivery in Uganda. It should be acknowledged that the use of traditional herbal medicines has got a very long historical backdrop that should not be negated with the development of modern biomedical technology. The Early Greeks recognised the co-presence of traditional healing systems with modern scientific methods and they allowed them to compete together as forms of treatment. The Hippocratic doctors, herbalists, temple medicine priests all practiced simultaneously in early Greece (Tambiah, 1990). From an ethnographic perspective, this study aims to deduce people's experiences, perceptions and attitudes about the new AL drugs in comparison with the widely acknowledged traditional medicines for malaria control in Ugandan communities.

Whether the existence of free and easily accessible herbal medicines for malaria control influence people's medical seeking behavior is a subject of debate that is fully explored

in chapter four. There is also an eminent relationship between the cost, availability and accessibility of modern medicines and patients' medical seeking behavior and rolling back the malaria disease burden in the country. This thesis sought to harmonize these divergent aspects through exploring and listening to the voices of the experiencers themselves. Recently, the Ugandan government has been agitating for legislation to recognise and allow the inclusion of traditional herbal medicines in the mainstream healthcare services delivery in the country. The proposal is based on the recognition of the potential role of traditional medicines in complementing the existing modern healthcare system in the country. Using an ethnographic approach this thesis elicits people's opinions and concerns about the modern malaria control therapies (ACTs) amidst traditional herbal medicines used in the fight against malaria in the country.

1.3 Purpose of the study

The study aims to address the socio-cultural essences of malaria control therapies in Uganda. It draws on peoples' every day experiences, perceptions, and understanding of modern malaria control therapies (Artemether Lumefantrine) alongside traditional herbal medicines used in the daily management of malaria in Ugandan communities.

It specifically aims to:

- i. Understand the malaria situation in Uganda.
- ii. Establish the level of knowledge about the malaria disease burden among the target population.
- iii. Explore the traditional treatment options for malaria in the country
Understand the development, coverage and distribution of the new combination therapies used in the treatment of malaria in Uganda.
- iv. Observe and understand the different ways of coping with the malaria disease burden by the different experiencers in the country.

1.4 Research questions

Research questions were based on respondents' lived experience of the study phenomenon. They explore local descriptions and explanations of the current malaria situation, as well as the different treatment options available in their localities. Using ethnographic research methods, the study sought answers to the following questions.

- i. How is the malaria disease burden understood in the region? This question was envisaged to give insight into the existing knowledge about the disease in the country. The purpose is mainly to create entry points into the broader problem of responding and coping with the disease.
- ii. What are the primary interventions in malaria case management in Ugandan communities? This question was intended to generate answers relating to traditional concepts, medicinal plants, rituals and other local healing procedures relating to the malaria disease burden. It is the empirical core question of the study.
- iii. How has the incorporation of new modern drugs (ACTs) in malaria case management impacted on the socio-cultural and economic lives of Ugandans? The aim is to establish the relationship between issues of drug policy, efficacy and the accessibility of ACTs in the fight against malaria and people's socio-economic lives in the country.
- iv. What are people's experiences of living with malaria in the study area? This will explore the individual stories relating to the malaria disease burden in the country.

1.5 Anticipated contribution of the Study

As already discussed, over 90% of Uganda's population is prone to malaria infections. Despite huge interventions by the state, donor community and other stakeholders to contain the disease, malaria cases have remained high across the country. There was need for a study that would not only tolerate and integrate divergent ideas about possible solutions, but also open to inquire into other treatment options outside the formal modern treatment strategy. Studies on malaria control therapies (Tabuti, 2006; Batega

2004) have been conducted but none of these portrays an ethnography that delineates an emic perspective of study. The uniqueness of this study is that it presents its findings as directly observed and narrated by the experiencers themselves. The findings of this descriptive ethnographic research might not only add to the existing body of knowledge for academic purposes but might also be appealing to particularly foreign aid agencies to give a hand in further exploration of modest strategies to control the malaria disease burden in the country. These results among others can also guide the Uganda National Drug Authority, pharmaceutical companies and other stakeholders in developing more efficient and sustainable malaria control mechanisms in the country.

1.6 Definitions of key terms and concepts

In order to understand the subject matter, it is imperative to begin by defining the key terms and concepts, upon which the study oscillates. The following terms and concepts have been referred to throughout the study.

Malaria: A fatal disease that is transmitted through the bites of infected mosquitoes. It is most repugnant in African societies, affecting millions every year.

Drug, medicine and therapy: The three terms may carry different meanings within the medical, legal or even social disciplines. However, they have been used synonymously throughout this thesis as any compound or preparation used in the remediation of a health problem.

ACTs (Artemisinin-based Combination Therapies): These are fixed combination therapies that always contain an artemisinin as one of the active ingredients to put to use its quick acting properties, and another long acting agent like lumefantrine in coartem, piperaquine in duocotexin, amodiaquine in artequine.

AL (Artemether Lumefantrine): This is an anti-malarial belonging to the category of ACTs. It works by killing the organisms that cause malaria. A patient must always take

AL medicines with food. For purposes of this study, both terms (ACTs and AL) have been used interchangeably to refer to the new quality antimalarials used in Uganda.

Monotherapy: Refers to the use of a single drug to treat particular ailments. Monotherapies referred to in this thesis are the single drugs used in the treatment of malaria. Examples of monotherapy drugs for malaria control include: chloroquine, amodiaquine and quinine.

Traditional herbal medicines: concoctions of various plant and tree species used in treatment of diseases.

1.7 Methodology

Data collection requires careful selection of study variables and instruments. To uncover the essences of the use of traditional and modern malaria control therapies, extensive fieldwork (ethnography) was conducted with the help of 2 co-researchers selected from Jinja district. Principles of qualitative investigation were used throughout the study to enable full description, and inference of shared meanings of the phenomenon under investigation.

Qualitative methods of investigation involve rigorous descriptions of practices in the context and actual circumstances in which they appear (Murphy & Dingwall, 2003). This is in addition to its routine, everyday working apparatus that gathers information as it is spoken, written, narrated or drawn. It is this uniqueness that makes qualitative studies “soft studies” and therefore different from other numerical/statistical calculations associated with quantitative studies. With the guide of an interview protocol, in depth interviews were conducted over a period of 2 years in the two target communities.

While ethnographic studies have been perceived to describe particular cultures in their entirety (Spradley, 1979; Moustakas, 2004; Maneen, 1982), recent studies are now focussing on describing particular aspects of those cultures-subcultures (McCurdy, Spradley & Shandy, 2005 cited in Harlacher, 2009). Anthropologist Clifford Geertz

(1926-2006) mentions that the focus of ethnography is “thick description” of specifics as opposed to generalisations (cited in Neumann, 2011). It is to our common understanding that the holistic old fashioned principles of ethnography that required total cultural description, involving ethnographers to live under the same roof, eating on the same food, learning the language and life spheres and social constructions of exotic/primitive peoples in Africa, Asia or South America is no longer desirable in modern anthropology. As many non western ethnographers emerge, the desire to investigate the western industrialised societies has also become subject of anthropological study. Western anthropologist themselves have developed interest to investigate many central features of their own societies and this is part of the major development of the twentieth century ethnography (Denzin & Lincoln, 2005). Subsequently, ethnographic practice shifted from entire cultural description to specific research subjects as health care systems, robbery, trends and fashion bureaucracies, marriage practices among others (Haviland et al, 2001). The ethnography presented in this study delineates a specific research topic as opposed to describing the entire culture of the study area.

In this chapter, I present a detailed description of the research process and the different methods that were used in gathering data.

1.7.1 The research process

Conducting any given research study is always guided or rather dependent on the research questions (Moustakas, 1994). This research was long and tedious, involving careful construction and reconstruction of ideas that eventually developed into the study subject or research problem. Usually, the idea is that the research subject should not appear alien to the principle researcher. In the heuristic research methods, Moustakas suggests that the process of formulation of research subject should begin with “internal search to discover with an encompassing puzzlement” (1990:40). This makes the entire research process and problem formulation much easier because it appears to reflect that internal problem that has always puzzled the researcher. The difficulty however, is the

selection of words that make the subject feasible and understandable to others. My supervisor and I spent a considerable amount of time choosing the right words for this thesis, let alone formulating the thesis subject itself. Ideas relating to my research subject were conceived almost a full year before the actual field research began. But those ideas underwent significant reconstruction and only a handful of the original ideas still appear in the current study.

To test the feasibility of the study, I developed a set of semi-structured questions to guide the study during the first phase of data collection. During the first phase of the study, we realised that the interview guide was incomplete and lacked many essential themes necessary in addressing the unique qualities of the research subject. As we grew into the study, we realised that much of the information about the subject matter was generated through informal discussions with community participants. Study participants preferred to discuss everything they knew about the subject matter without being interrupted at all. This invited us to consider more conversational methods like open ended interviews, dialoguing and other Focus discussions.

To keep track of the study subject, an interview instrument was adopted to guide researchers as they conducted conversational methods of data collection. The same guide was utilised during participant observation method of data collection. Overall, data collection for this study seemed endless and was carried on throughout the entire period of the study. Whenever I realised that a particular theme did not get sufficient attention during data collection, I always went back to the field and gathered more data about the theme in question.

The research process presented in this study covers the process of subject formulation, preparation of study instruments, data collection and analysis, and compilation of study results. An overview of the entire research process is outlined in figure 1

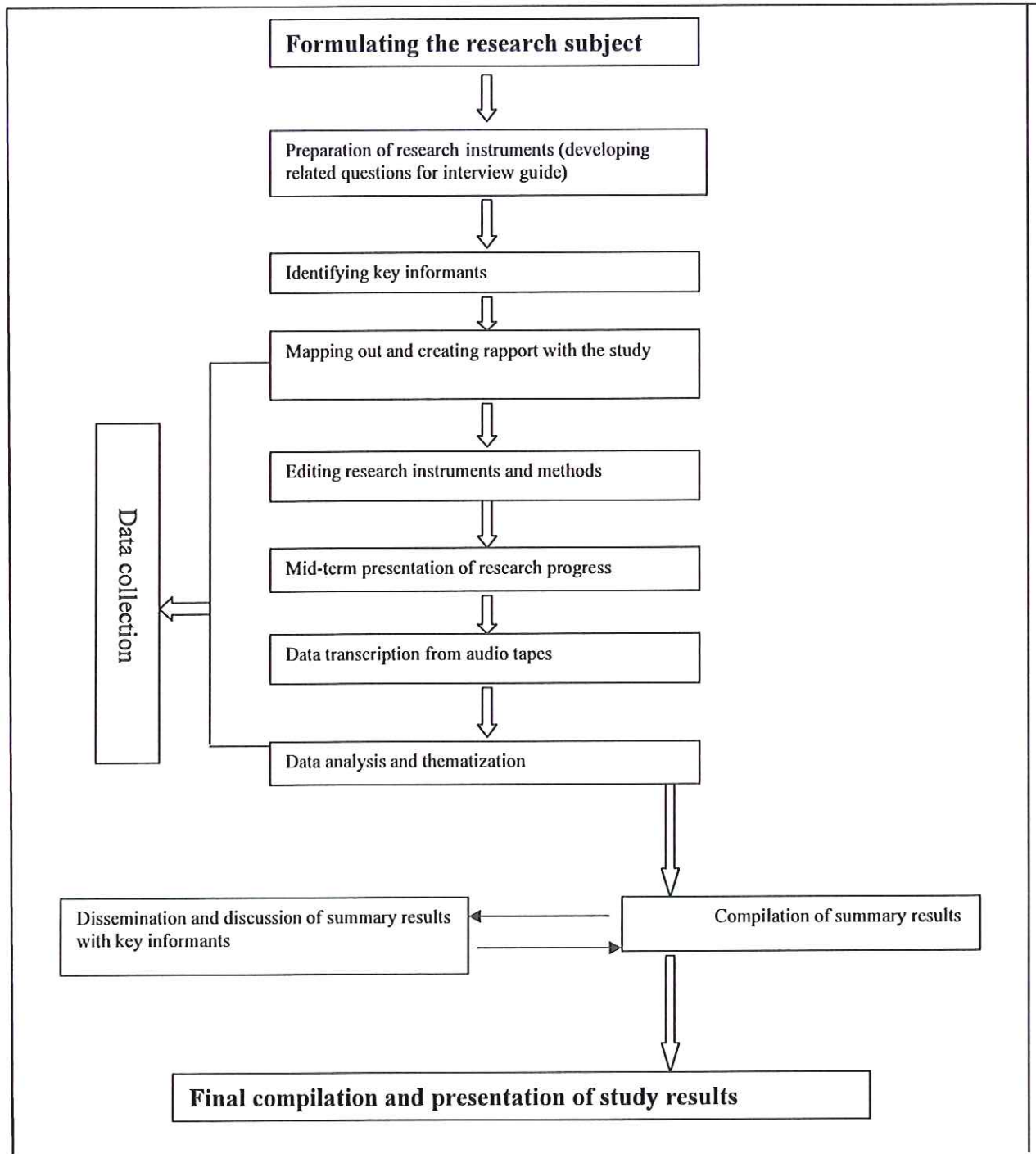


Figure 1 Research Process

1.7.2 Procedure for selection of study population.

Since this was an ethnographic study aimed at assessing beliefs and practices related to health, age limit was not considered as a critical factor. Irrespective of one's given age, all respondents contributed tremendously to the study either through direct semi-structured interviews and dialogues or simply through researcher- participant observation. The open and wide age variation in this study was particularly useful in generating not only large volumes but also varied information about the subject matter. The elderly population was presumed to have vast knowledge of the traditional medicines than the young population, yet arguably less knowledgeable about modern drugs as compared to the young people. These were mainly the patients or experiencers/users of malaria control therapies. This group of respondents (patients and experiencers of the medicines) was the main source of primary source of data. They directly experience, perceive, adapt and ultimately attach or construct meaning to both traditional and modern approaches to healthcare. Through narratives and descriptions, patients revealed their feelings and thoughts which were useful in understanding the general essences of malaria control therapies in Uganda.

The study also considered 3 selective groups of key informants presumed to have vast knowledge about the subject matter. The first category comprised of local culture experts. The selection of this category of respondents follows the popular doctrine in anthropology that cultural competence of key informants (not necessarily representatives of the sample) postulates the desired richness of any ethnographic study (Harlacher, 2009). This category of participants provided vital information about the local culture of the study area. The second group comprised of traditional healers (spiritual and herbalists). This category provided useful information on the different medicinal plants used in the treatment of various ailments including malaria. The third category of respondents comprised of medical personnel. This was vital in defining and interpreting the western allopathic medicine perspective of the study. In total, the expert category of informants comprised of 5 participants selected on basis of their willingness to contribute to the study and the accessibility of the areas in which they lived.

Since this was an ethnographic study, the sample size was not predetermined. It was an open study that at many times involved listening to family rather than individual voices. Upon asking a given question to one member of the family, the rest of the family would join in and concretize the responses. This was particularly useful since it allowed free flow of information that resulted into generation of large volumes of data.

For purposes of tabulation to ease data analysis, I adopted and filled out an interview protocol of up to 80 individual non expert respondents. This comprised the first category of users/experiencers of the study phenomenon. However, I should also mention that a large volume of data was gathered through everyday observations, dialoguing and general interaction with the respondents throughout my extensive stay in the field.

1.7.3 Research design

The research design adopted in this study is similar to that suggested in the phenomenological Research Methods by Moustakas (1994). While this was an ethnographic study, I attempted to follow phenomenological principles suggested by Moustakas at almost every stage of the study. In conducting this study, I gathered a variety of information and I remained focused, not to allow my understanding of the subject matter influence the study findings. In other words, I clearly separated descriptive data from my individual interpretations and judgment. Key respondents were carefully selected and sometimes directly quoted.

1.7.4 Ethnographic research

As already stated, an ethnographic approach was adopted in this study to explore the socio-cultural essences of malaria control therapies in Uganda. Ethnography is a method of inquiry that involves prolonged fieldwork conducted in a social setting that not only allows for direct engagement and observation of activities but also one that enables the researcher to engage in both formal and informal understanding of local relationships and meanings (Moustakas, 1994). Beginning with the work of Bronislaw Malinowski (1992) on Trobriand Islanders, the use of ethnography is identified with the social and cultural transformations of the late 19th and early 20th Centuries (Denzin & Lincoln,

2005.) Meanings can be explicit or tacit and direct involvement and immersion into the study community can generate a rich portrait of a given community's understanding of a particular phenomenon which is only possible through extensive fieldwork (ethnography).

The founding principle of ethnographic studies was prolonged field work that requires staying in the study community for long, observing and learning about their ways of life. However, as the focus of anthropological studies shifted from exploring the past and primitive cultures to everyday practices and engagements of people and their social surroundings, there was also a shift in the mode of data collection.

“...ethnography has witnessed great diversification, with somewhat different approaches being adopted in different areas, guided by different concerns (from traditional socio cultural descriptions, through applied work designed to inform policy makers to a commitment to advocacy and furthering political emancipation). And these different goals are variously associated with different forms of ethnographic practice: traditional long term, in-depth investigation sometimes being abandoned for condensed fieldwork or primary reliance on unstructured interviews...” (Denzin & Lincoln 2005:251)

This study inclined greatly on the modern fashioned principles of ethnography, preferring to delve into a specific topic as opposed to entire cultural description of the study population. Apart from phenomenological principles, the study also employed many other ethnographic methods of data collection such as: participant observation, semi-structured interviews, recordings and photographs.

1.7.4.1 Rationale for ethnographic study.

Ethnography, the popular approach in the study of socio-cultural relations (behavior patterns, values, beliefs and meanings) has not attracted much attention in healthcare studies. Research in health and medicine has focused largely on the application of methods that deduce quantitative data rather than qualitative narratives grounded in constructivism ideologies. Yet, according to Savage, ethnography “...has been seen as a

way of accessing beliefs and practices, allowing these to be viewed in the context in which they occur and thereby aiding understanding of behavior surrounding health and illness” (Savage, 2000: 321). It calls for the researcher’s full immersion in the study community which enriches and widens their knowledge of the socio-cultural practices of particular communities.

The practice of science and medicine occur within a given social setting. It is simply part of the larger complex body of human society, that ethnographers are constantly exploring in attempt to discover unique practices, values and meanings.

The choice for an ethnographic approach in this study was also conditioned by the approach’s versatility that allows the application of multiple/ mixed methods in understanding daily life situations. Ethnographers are aware that social behaviour and practices are not static and the use of standard scientific paradigms exemplifying positivist ideologies may not adequately address the reality of human social behaviour (see Denzin & Lincoln, 2005) as they primarily focus on the observable, or the “what” rather than the “how” questions of human reality. While ethnographers have not completely rejected the scientific positivist paradigm, they are also aware that these methods are destructive to human social behaviour and they would rather adopt a model that would reconstruct links with humanities (Denzin & Lincoln 2005). The purely qualitative participant observation model associated with ethnography has been tremendously useful in discovering human experience and social behaviour.

The adoption of ethnography in this study is also derived from the fundamental definition of ethnography as “the study of socio-cultural contexts, processes and meanings within cultural systems... (Whitehead, 2005:5), which is the main objective for this study. In the field of healthcare, in which this study is largely grounded, the use of ethnographic methods is important as it allows deeper exploration of people’s cultural beliefs and practices that not only determine and shape diseases and illnesses but also patients’ medical seeking behaviour.

1.7. 5 Data Collection Methods and Instruments

As already intimated, this study adopted an ethnographic approach in understanding the socio-cultural essences of malaria control therapies in Uganda. During the collection of primary data, different ethnographic methods were utilised to capture the wholeness of the phenomenon under investigation. These included;

a) Open-ended questions

Understanding universal essences, meanings and experiences requires an informal and interactive process that uses open-ended questions (Moustakas, 1994). With the aid of an interview protocol, in-depth interviews were held with patients (experiencers and users of medicine) about their lived experiences and meanings of combination antimalarial therapies visa-vi traditional herbal medicine in the fight against malaria in Uganda. Interviews were preferred for their indispensable role in revealing people's minds which is essential to understanding the lived experience (Patton, 1990).

With the guide of semi-structured interview instrument, conversational interviews were conducted to determine the socio-cultural essences of malaria control therapies in Uganda. This method of study offered me an opportunity to interact directly with study participants whose responses would at times lead to other questions relevant in understanding the subject under investigation.

All the questions were given equal attention because they each hold a strong appeal in addressing the unique qualities of the subject matter. Questions relating to knowledge of malaria, its signs and symptoms were intended to create entry points into the broader discussion about the malaria prevention and control strategies among the study population. Responses also provided a useful guide on the methods most suitable to gather information from a given respondent. Questions on both traditional and modern antimalarials (ACTs/AL) were intended to generate the local understanding of the two different approaches to malaria control. A comparative analysis of these responses would form the basis upon which conclusions about the socio-cultural meanings of malaria control therapies could be drawn.

A detailed interview guide is attached in appendix 1

While an interview protocol was adopted, much of the study questions that helped in the comprehensive understanding of the subject matter arose from my interactions and conversations with my study participants. Prior to the discussions, I created an environment that made the study participants interested in the study topic. This allowed free flow of information that resulted into generation of large volumes of data.

But as already intimated these questions were just a guide; much of the information about the subject matter was generated through informal discussions with community participants. Study participants preferred to discuss everything they knew about traditional and modern approaches to malaria control without being interrupted at all.

To proactively remedy any shortcomings that the sole interview method of data collection would cause to the study such as data inconsistencies, fallacies, lack of conformability, I adopted additional methods of data collection as discussed below:

b) Participant observation

Participant observation is a mode of data collection that is substantially or rather fully associated with social research (Denzin & Lincoln 2005). It is of great salience to ethnography than any other mode of data collection. The application of ethnography will lose its natural grip of human experience in circumstances where participant observation mode of data collection is not adequately utilised. The ethnographic practices of capturing human experience and behaviour through the researcher's immersion in the study area, relies largely on the indelible salience of participant observation. In simple terms, we define participant observation as the most natural method of discovering and learning about others and this is done routinely in our lives. The use of participant observation and ethnography is evident in the pioneering anthropological work of Bronislaw Malinowski (1922) on Trobriand Islanders, and American anthropologist Margaret Mead's (1925) work in Samoa. Influenced by Bronislaw Malinowski and Radcliffe-Brown, British anthropologist E. E. Evans Pritchard also conducted major

ethnographic research on the Azande people of the upper Nile (1937) and the Nuer of Sudan (1940). These researches have gone on to shape modern day ethnographic studies.

Participant observation is inherently qualitative and a useful method in exploring social behaviour and experience from an emic perspective of inquiry. It has the ability to capture not only the observable but also the cognitive elements of people's daily life practices. In this study, the method was used to capture the directly observable materials and events relevant in the study of traditional and modern approaches to malaria control in Uganda. Key observable events included; people's reaction to malaria signs and symptoms, primary care given to patients, reaction to medication, the preparation procedure of traditional herbal medicine, administration of traditional herbal medicine to patients, and the general process of living and coping with the disease.

c) Dialoguing

Dialoguing was also utilized during the study to enable full depiction of the phenomenon being studied. Since the use of herbal medicine in the treatment of ailments is regarded as a practice of the poor and the uneducated, or simply members of the lower strata, some study participants would deny having any knowledge of the use of such medicine. To evoke their lived experience and generate more insight into the use and practice of traditional herbal medicine in the fight against malaria in their communities, I created an informal and interactive environment where I subjected participants to a series of informal questions. This helped in generating large volumes of data needed to deduce the socio-cultural essences and meanings of malaria control therapies in Uganda.

1.7.5.1 Procedure for gathering primary data:

a) Building rapport with authorities and individual participants

This is the ability to create an environment of trust to enable the community and individual participants accept the researcher and give their responses in a more natural and coherent manner. Before leaving for the field, I made telephone calls to relevant

local council authorities, informing them of my proposed visit and seeking their approval to conduct research in their communities.

b) Getting into the location of every aspect of human experience of the phenomenon under investigation

While the study focused on 2 villages, I was also versatile in an effort to generate holistic information for my study. No designated places were identified to conduct interviews or observe events related to the problem under investigation. I not only visited people's homes but also entered shrines of traditional healers, visited traditional herbal medicine instructional schools, and also followed patients to health centres and hospitals. Information gathering through multiple means (triangulation) is useful in not only generating large volumes but also confirmatory data for any given study or phenomenon under investigation.

c) No specific amount of time was designated for data collection in each of the villages

As already indicated in the research process, data collection was done throughout the entire study period. Whenever a certain theme lacked consistency or was rather weak in addressing the research problem, I always went back to the field and gathered more data pertaining that particular theme. Importantly, I always took time to organize and reflect on the data collected before proceeding to the next village.

d) Primary Data was collected with help of 2 volunteer co-researchers.

These were selected on the basis of their ability to describe their knowledge and understanding of the subject matter and fluency in the local languages of the study area.

1.7.5.2 Secondary data

Secondary data involved review of available literature about the subject matter. This was done at national, district and sub-county levels. Since this was a socio-scientific study

grounded largely in health research, I maintained close collaboration with all health practitioners (physicians and pharmacists) to help verify and interpret technical aspects of the research study. Detailed Information was obtained from the Ugandan Ministry of Health concerning the general use and practice, coverage, cost, perceptions, worries, and the future of combined therapies in malaria case management in Uganda. I also utilised online journals on malaria control therapies to compound my arguments for purposes of enriching the study subject. Data on current malaria statistics of Jinja district was also obtained from the health department of the district local government.

1.7.6 Data Processing and Analysis

The central aim of data processing and analysis is to check for appropriateness, efficiency and accuracy of research information in relation to the subject under investigation. It is a systematic process that requires taking note of every aspect, behaviour, or actions thought relevant to the experience being investigated. This process of giving equal attention to all expressions of experience is what Moustakas (1994:120) calls “Horizontalization” and it was employed throughout this study. While the researcher may hold some knowledge of the subject matter, it is important that such presuppositions are cast aside to enable actual description of the experience/phenomenon being investigated (Creswell, 1998; Moustakas, 1994).

All expressions of experience about the modern combined therapies and herbal medicines for malarial control were coded and thematized into various categories by the principal researcher. Different *variable/code* names were adopted to represent particular categories of responses. This was intended to ease analysis by compounding together the large volumes of data arising from repetitive and overlapping responses. Dealing with Repetitive and overlapping responses can be cumbersome and it is the reason such data is coded and thematized into fewer categories, whilst exploiting their potential in determining the nature of the experience being investigated. As Guba & Lincoln (1985) note, it is the overlapping expressions that enable consistence and conformability of the data. The major themes/ variable names thought relevant and therefore adopted in this

study included: knowledge of malaria signs and symptoms, knowledge of traditional and modern malaria control interventions, availability of medicines, accessibility, cost, drug efficacy and perceptions of modern(combined antimalarial therapies) and traditional/herbal medicine for malaria control.

After categorising all expressions/ responses, I carried out a final validation of the invariant expressions to ensure that they not only describe but also evoke the desired meanings and essences of malaria control therapies in Uganda. As suggested by Moustakas (1994), all expressions of experiences as they appeared in the different themes were carefully studied for purposes of inducing generalized textural-structural description of experience of the phenomenon among the study population. This was later used in the final interpretation of the socio-cultural essences and meanings of malaria control therapies in Uganda.

Verbatim expressions were transcribed from audio tapes during in-depth interviews. The study also portrayed individual and group excerpts of informants' experiences of the subject matter; representing them in their own words.

Following the steps suggested by Moustakas (1994), I did not disregard information generated until the analysis phase. All data was gathered and listed and regarded important in understanding the socio-cultural meanings of malaria control therapies in Uganda. I would record the entire conversation with a given participant and transcribed it all during the analysis phase. Upon analysis of data, many other themes emerged as a result of the open discussions I conducted with study participants.

1.8 Ethical Considerations

Maintaining ethical standards is a prerequisite feature of all ethnographies. Since this was a step by step study, permissions and agreements were sought at every stage of the study. Before leaving for the field, I made telephone contacts with relevant local council authorities informing them of my proposed visit and sought their approval to conduct research in their communities.

Prior to selection and engagement of voluntary co-researchers in long interviews, I immersed them into the nature and requirements of the study whilst listening and providing solutions to their concerns.

Since the exercise was voluntary, study participants reserved the right to take part in the study or not. Study participants who had reservations or were simply pessimistic about the purpose were neither coerced, nor persuaded to be part of the study.

To protect the identity of research informants, study questions thought to expose the privacy of research participants were eliminated from the study tools

Interviews were also carried out in a conducive atmosphere that did not constrain the researchers or research participants. Interviews and dialogues were conducted in an environment that was open to avoid suspicion and private enough to avoid foreign interference from the surroundings. Data collected was put to its intended purpose and confidentiality was observed.

1.9 Structure of the study

The next chapter (Chapter 2) discusses the socio-economic and political perspective of malaria in Uganda: it highlights the historical anthropology of the study area and socio-economic and political background of Uganda as a whole. It also looks at the current malaria situation in the country and the various control efforts. It further delineates the policy change from treatment with monotherapy drugs to treatment with ACTs. The chapter also discusses the position of traditional herbal medicines and healing practices in the fight against malaria in Uganda.

Chapter 3: theoretical framework.

This chapter covers the concept of disease and healing in the perspective of African traditional societies. It broadly discusses the concept of magic, witchcraft and sorcery, and science and religion, and their application in the daily management and control of diseases.

Chapter 4: the research findings.

It is the empirical body of the thesis. It gives a brief account of the research setting, clearly indicating the justification for the choice of the study area. It gives a detailed account of everyday life experiences of people living with malaria from an emic perspective of inquiry. It also describes an ethnographic account of the traditional and western perspectives of malaria control therapies in Uganda.

Chapter 5: conclusions and recommendations

This is the summary of the thesis. While it covers all the chapters, a large bit of it draws from chapters 3 and 4. It analyses study findings against existing policies and other actions for malaria management and control, and draws recommendations on basis of such analysis.

In summary, a proper understanding of the different perspectives and their application in the daily management of malaria is critical in establishing sustainable remedies to the disease. It is therefore imperative to generate related opinions and perceptions about these approaches from the perspective of the experiencers themselves.

In the next chapter, I discuss the socio-economic and political perspective of Ugandan communities and also establish whether these have got a bearing on the current malaria situation in the country.

CHAPTER TWO: THE SOCIO-ECONOMIC AND POLITICAL PERSPECTIVE OF MALARIA IN UGANDA

2.1 Historical Anthropology and Traditional Relations of the Basoga (occupants of the study area)

Before delving into the socio-economic and political perspective of the malaria in Uganda as a whole, it is imperative that we first understand the historical and traditional relations of the people of the study area. As will be seen in chapter four, these relations singularly or collectively influence people's perceptions and choices of the malaria control therapies. The section therefore aims to orient readers into the local cultures and religion of the study population. It embeds a number of local terms that may not easily be conceived on single reading, but critical in explaining the culture and other social relations of the study population. In the event of this, explanations have been provided to help readers understand the meanings embedded in the different local terms that have been adopted in this section. Jinja district lies in the eastern part of Uganda which is predominantly occupied by the Basoga. Therefore, the historical and socio-political organisation of Jinja cannot be fully explored outside the wider Busoga spectrum in which the district traces both its geographical and cultural establishment. Busoga is a traditional Bantu kingdom in present-day Uganda and is home of the Basoga people. The term Busoga also loosely refers to the area that is generally indigenous to the Basoga. Lusoga is the language of the Basoga. Busoga sub-region is about 38,000 sq miles and occupies the region between Lake Victoria and Lake Kyoga.

As it is the case with many African regions and territories, it is rather intricate to date Busoga history as time was measured in terms of generations. As a result, most of the information about Busoga was not documented in the early days. It was oral knowledge, some of which has been confused or lost. Nevertheless available literature indicates a mixed identity of the Basoga. The history of the Busoga is one of numerous groups who migrated, interacted, and mixed with others, exchanging and assimilating parts of each other's culture and language. It is part of a broader historical narrative of the origins and

spread of other Bantu groups of the Katanga region of Central Africa. They entered Uganda from Northern Katanga (the current Democratic Republic of the Congo) between 400 and 1000 C.E. (Nayenga, 2002). The earliest inhabitants of Busoga are not the modern day occupants of the region. The first settlements in the region are dated far back in the 14th Century and these were the Langi, the Iteso and the Bagisu who were later engulfed by migrants from Buganda.

The migration and settlement of the Basoga is traced from two different directions at different times. The Basoga living in the south are said to have come from the Masaba region (Mt. Elgon) and moved westwards and settled in different places of current day Busoga (Land area occupied by the Basoga) territory. These were mainly associated with Kintu, the earliest cultural leader of Buganda. According to oral tradition, the Basoga in the north came from Bunyoro and these were led by the Mukama (Nayenga, 2002; Isabirye, 2012). The Basoga migration and settlement in their present location is therefore associated with two cultural figures of *Kintu* and *Mukama*, the then cultural leaders of Buganda and Bunyoro respectively. Figure 2 illustrates the present settlement areas of the Basoga.

ADMINISTRATIVE MAP OF BUSOGA KINGDOM BY SUB-COUNTIES



Figure 2: Administrative boundaries of Busoga region

Source: Wambi, August, 18 2014

The mixed identity implied that the Basoga could not have an independent and unifying language and all their practices were bent closely to the respective cultures of the two cultural heroes who settled them. It is thus not surprising that by the 19th century, Buganda's influence over the southern Busoga principalities had greatly expanded and infiltrated Busoga culture and language. Harry Johnston, one of the British explorers and colonial administrators in Uganda once remarked, "In many respects the Basoga resemble the Baganda, so closely in physique, manners, and customs that in describing the latter, I shall consider that I have at the same time described the Basoga" (Nayenga, 1981: 482). Such historical precedents have had greater impact on modern day Lusoga language, culture and traditions of the Basoga. The northern principalities still had a connection with Bunyoro and indeed their language contained many Runyoro words (Bakker, 2002).

The lusoga language spoken in the north is considerably different from that spoken in the south. The lusoga language spoken in the south approximates to Luganda. Within Busoga, there are so many dialects of the Lusoga language that it is difficult to reach agreement on the correct way to spell or pronounce certain words. For instance, in the north of Busoga, there is a distinct H but people from Southern Busoga do not accept this H as being appropriate to the Lusoga Language (Bakker, 2002). While people in the north may listen and understand the dialect of the Basoga in the south, the southerners on the other hand neither listen nor speak the language of their brothers in the north. The pre- colonial principalities or chiefdoms of Busoga were under the sovereignty of Bunyoro and Buganda, further entrenching their supremacy over the Basoga. Busoga was overshadowed by Buganda and Bunyoro –Kitara kingdoms and the impact of this appendage still hovers over modern day Busoga. To date, many Basoga continue to suffer from inferiority complex, historically perpetrated by the Baganda; in urban centres, many Basoga will prefer to communicate in Luganda than their indigenous language, Lusoga.

By the turn of 19th Century, 15 independent principalities some of which were of the babito origin of Bunyoro settled in Busoga. Due to passage of time, these originally different peoples settled to form one Basoga society with clear identifying values they all cherished (Gideon & Wilson, 1996).

2.1.1 Settlement patterns of the Basoga.

The predominance of the Banyoro and Baganda in Busoga also mean that the Basoga emulated the style of building and settlement of their supreme settlers who also doubled as their leaders. The pre-colonial Basoga lived in dispersed neighborhoods, a pattern of settlement that is still evident in the modern day Busoga sub-region. The Basoga lived in randomly dispersed subsistence holdings that were located in highland areas locally known as *omutala*. The *omutala* was subdivided into *ekisoko kisoko* (sub-village), which had an appointed or hereditary headman who distributed land (Nayenga, 2002). Post colonial Busoga has retained these patterns of settlement, except that land is now individually owned and not merely distributed by hereditary headmen as was the case in the past.

Atypical Busoga village consisted of dispersed homesteads. These homesteads consisted of a building or group of buildings. Traditional houses were round, beehive-shaped, and thatched with dry banana leaves from the top to the ground. However, the twentieth century saw a revamp in the building style where walls of houses were being made with mud and roofed with grass.

The infrastructure and settlement patterns of the Basoga were tremendously altered with the arrival of British explorers and missionaries. As Nayenga (2002) asserts, upon realizing the shortages in the housing sector, the explorers put up housing structures for their local colonial administrators and other workers who were employed in the various industries in Jinja. Many other housing units/low cost houses were constructed in the suburbs of Jinja in areas like Bugembe, Mpumudde, and Walukuba to cater for the

housing needs of not only Ugandans but east Africa as a whole (Nayenga, 2002). These housing estates were the first of kind in the entire east African region. The housing infrastructure of Jinja has since been improving with many households building permanent or semi permanent units in both rural and urban areas.

Aside from European explorers and missionaries, there was also an influx of Indian traders flocking Jinja town. The Indian's dominancy in trade also enabled them to set up many structures of Indian style in the Jinja business district. Many of these buildings continue to shape the visual image of modern day Jinja town. Because they were traders, most of the Indian houses were built in the central business district where they lived and also conducted their businesses. To date, the administrative authorities in Jinja have failed to deal with these old and dilapidated Asian buildings because majority of the owners are not known or never returned to Uganda after their expulsion by President Idi Amin Dadda. Jinja has now transformed into a metropolitan town with improved social amenities and infrastructures.

2.1.2 Kinship and descent structure of the Basoga.

The Basoga, just like the Baganda who informed a big part of their culture, have a much elaborated kinship structure that is preserved on basis of sanctions and social regulations. Social relations among the Basoga are governed by rules of kinship, gender, and age. Descent is patrilineal which is traced through the male line to determine kinship. Naming of children follows the male line and upon payment of bride wealth, women would leave their parents' homes to go and reside in their husbands' homesteads. Among the Basoga, children belong to the man's lineage.

2.1.3 Marriage:

Marriage is one of the most elaborate and culturally influenced ceremonies in Busoga society. The idea of getting married is one that every young male looked to, and they worked hard to ensure they got the money to pay bride wealth. Unlike today, the process of identifying a marriage partner was not an individual initiative, but rather a family, if

not clan affair. Upon identifying a prospective marriage partner, the boy would send a team of emissaries (family and clan members) to go and check out the girl at her home (Burite, 2007). The purpose of such visits was to ensure that the girl's family had no record of evil in society and that she was not akin to the family of the boy. Since marriages were between families rather than individuals, the relatives of the girl also would become interested in knowing the family where their daughter was getting married (Nayenga, 2002). Whenever the two families reached an understanding, the team of emissaries would table a formal request (oral or written) to introduce their son and ask for the girl's hand in marriage (*okuzaliibwa mumaka*) (Burite, 2007). In this request, both families would agree on the date of the wedding ceremony and the amount of bride wealth to be paid by the boy's family as a token of appreciation for proper upbringing of the girl.

The traditional marriage ceremony in Busoga is punctuated with exchange of gifts such as *kanzu* (tunics) for the girl's father and his brothers, *gomesi* for her mother, paternal auntie and one for *dada* (grandmother). Different envelopes containing money may be prepared, each meant for a specific branch of the bride's family (Burite, 2007). Recently, traditional marriage ceremonies in Busoga and other ethnic tribes in Uganda have been greatly monetized in such a manner that it is almost impossible for a poor groom to get introduced to his bride's family. Marriage gifts are ranging from household items such as television sets, couches, fridges, and dining tables to motor vehicles and electrical/energy devices like generators, solar panels among others. Many elders have despised today's marriage ceremonies on the premise that they do not mirror the true essence of marriage in traditional Busoga.

Once the bride wealth is paid and the traditional marriage ceremony conducted, the woman is expected to stay with her husband and to bear children for her husband's lineage. By having children, a woman greatly enhances her power and influence within the lineage of her husband. Among the Busoga children defined a complete marriage and if a couple's relationship was barren, it was typical for the man to marry another

wife (Burite, 2007). In the sight of the man's relatives, a barren woman was not tolerated and would be blamed for all the misfortune in the family. The husband's family made sure she suffered psychologically from disrespect and isolation. Bride wealth, given by her husband and his family, contributes to the woman's ability to maintain ties with her own family throughout her life. A married woman builds up alliances for her husband's family by maintaining strong relationships with her brothers and sisters who live at her birthplace or elsewhere. Traditional marriages in Busoga were always initiated by the parents, and the role of the senga (Paternal aunt) and Kojja (Pertanal uncle) was especially important in preparing the couple for their marriage life.

The mother-in-law was the most respected figure in marriages in Busoga. A man avoided his mother-in-law and they kept at distance from each other. It was also a common practice for men to kneel while greeting their mothers-in-law. The same principles applied to the daughter and her father-in-law, they kept distant and accorded great respect to each other. Many of these historical marriage practices are however disappearing in contemporary Busoga. While the mother-in-law and father-in-law still attract great respect from their sons and daughters-in-law, others practices like kneeling while greeting or communicating from different rooms without interface have slowly disappeared among the Basoga.

2.1.4 Family

Locally known as *Amaka*, the family is the smallest domestic organ of a given society. The family concept has remained the same through the pre-colonial, colonial and post colonial periods among the Basoga. Families in Busoga were and are still patriarchal in setting with the male head shielding all the family's financial obligations and well being. Similarly, descent is patrilineal and common ancestors are recognized through the male line. The man was the sole provider of the family and the woman was expected to be submissive to her husband, and was charged with domestic household chores. However, because of education and demographic mobility, this situation has slightly changed and women face the same responsibilities as men.

The Basoga recognize a family unit as a composed of a father, mother and children. This nuclear family was under the control of the male head that had absolute and unchallenged powers over the rest of the family members. Aside from the nuclear families are the extended families where the male household head, his wife and children lived together with other relatives from both the male and female relatives. Extended families were and are still the most common domestic units among the Basoga. They are even more common in- recent times with the coming of the HIV/AIDS scourge that has left many orphaned children who have to live under the guardianship of their relatives. Some families also live with their elderly parents and other needy relatives.

Polygamy is also another common classification of families in Busoga. The idea of marrying more than one wife was witnessed with a lot of pride and respect; it defined a man's socio-economic status in a given society. In many instances, these women lived in the same house, ate from the same pot and worked together for the wellbeing of their children. A man with many wives and children in the pre-colonial Busoga was considered wealthy. Polygamous men, were respected and they also took leadership positions in their communities. The family served many functions in Busoga society; learning and knowledge acquisition always began at home, where parents would teach their children societal values, common practices and customs.

2.1.5 Clan

In Lusoga language, the clan loosely translates into *ekika* or *ebika* (singular and plural respectively). In Busoga, a clan is a patrilineal descent group and common ancestors are recognized through the male line. Among the Basoga, The father is the most important member of the clan and all his children and grand children of his sons belong to his clan (Nayenga, 2002). In Busoga, totems (*emizilo/omuzilo*) that are so sacred, feared and respected in equal proportion distinguish clans. According to Wambi, "totems in Busoga were determined according to the dominant animal or plant that lived or occupied the ancestral epicenter when the first man settled there. It was believed that this animal or plant being a benevolent benefactor of the man, their friendship turned into blood

relationship over time” (Wambi, 2011:5). This is the same reason totems were and are still regarded with utmost importance and value among the Basoga. Totems are important to the clan as the people themselves and they must be treated with respect as the sole identification factor in a given clan.

The sacredness of totems in Busoga manifests in such a way that members of a clan are not supposed to eat, touch, or even get close to the totemic object or animal. Going contrary to the laid principles of totems carries many consequences ranging from developing boils, discolored skin, reddened mouth, infertility and sometimes death. This great respect and fear of the potential negative impact that totems could bring also works to ensure that individuals do not marry members of the same clan. Incest is such a great curse and abomination and whenever it occurs, it must be followed with performance of rituals and sacrifices to ward off the curse. The identity of a person was and is still defined in terms of their relationships with the ancestors and the sacred plants and animals associated with their lineage and settlement.

According to Nayenga, “a clan's identity is based on the name of its ancestors. Clan names are formed by combining the prefix *mu* (singular) or *aba* (plural) with the form *ise* (father) with the name of the common ancestor” (Nayenga, 2002). The Busoga will therefore refer to their clans as *muise* or *abaise*, followed by the name of the common male ancestor. Typical clan names in Busoga include *muise/abaise mususwa*, *Mulondo*, *menha*, *Mukidhi*, *Muwaya* among others.

Busoga mythology also holds that every clan has got an epicentre that is known to the Basoga as “*nkuni*”, the place where they are believed to have evolved. According to Wambi, each clan has its own *nkuni* which is the “heavenly source of the life of the clan. It is maintained by a diviner selected by the gods or spirits of the great ancestors of the clan” (Nayenga, 2002:4). As Wambi (2011) observes, clans in Busoga are still strongly recognized as the basis of their self-identity and social-cultural organization.

In Busoga, two categories of clans existed: *abakopi* (commoners) clans to which the majority belonged and *abalangira* (royal clans) (Nayenga, 2002). However, such social

distinctions did not impede intermarriages and the social gaps have since been diffused. Each clan in Busoga was identified with its own location known as *obutaka* (ancestral lands). It also translated that clan members buried their dead in those lands. However, the increase in population, clashes within clans, catastrophes such as famines and sleeping sickness, affected settlements in obutaka and many clans dispersed. The clans segmented into smaller lineages known as *enda* (individuals who traced their genealogies through the male line to a common ancestor) who have settled in different places in Busoga. These segmented lineages either kept minimal contact with the original base or forgot it.

2.1.6 Inheritance

Inheritance (*obusikka*) in traditional Busoga was also organized along patrilineal principles of descent. In tradition Busoga, women were not involved in commercial labor and they did not accumulate any wealth. All property belonged to men and they would pass it over to their sons. Upon the death of a family member, the family/clan gathers to the last funeral rites to ensure the legitimate passage of the deceased's property, home, and family. Property inheritance was a reservation of the male members of the deceased's descent who are expected to maintain the continuity of the values and principles of their patrilineal identities. Female members would marry off, bear children and become members of another descent group and were not given any property on the death of their parents. However, the idea of inheritance has been greatly corrupted among the most elite and wealthy families with the girl child enjoying similar property inheritance rights as her brothers.

Inheritance in Busoga went beyond property take over and ownership. The death of the male household head also implied that one of his brothers took over his wife (widow) and the entire guardianship of the family including paying school fees for his deceased brother's children. The purpose was to deter the widow from remarrying elsewhere and also to ensure continuity of the deceased brother's family. The idea of payment of bride wealth has been misinterpreted in Busoga to nearly reducing the women to being

property of the men who have paid pride wealth for them. And, since the payment of bride price was a responsibility for the whole family, the phrase “*muka muganda wo aba mukazi wo*”, loosely translated your brother’s wife is your wife was born in Busoga and it is one of the principles that guided remarriage of widows by the deceased husband’s family members. However, with the outbreak of HIV/AIDs in early 1980, this popular practice of widow inheritance has steadily been reducing and it is almost no more. Education and literacy have also helped tremendously in scaling down the rate of widow inheritance.

According to Nayenga (2002) two forms of inheritance exist in Busoga: *omusika owenkoba* (heir of the belt) and *omusika owembisi* (property heir). The heir of the belt was charged with the guardianship of the deceased’s family. Omusika owenkoba must be a brother to the deceased who adopts the children, takes over the widow as his wife, and inherits the belt, spear, stool, and other items that symbolize the personality of the deceased.

On the other hand, *omusika owembisi*, (heir of property) was usually the oldest son of the deceased who took over the custodianship of land, livestock and other valuable property of his late father. The remaining property is divided equally among the other children. Lately however, the privileges of *omusika owembisi* are no longer a reservation of the oldest son of the deceased. It is the ability to organize and look after the family that most matters and this comes with education and economic well being. Consequently the most educated and wealthiest sons of the deceased are usually the heirs of the deceased father’s property in contemporary Busoga.

2.1.7 Daily life patterns in Busoga:

a) Gender roles

The concept of gender was and is still a very important factor in the social structure of the Basoga. Role distribution in both ancient and contemporary Busoga is based on age and sex of an individual. The males in ancient Busoga were the beneficiaries in terms of distribution of wealth, property inheritance and resource allocation. Yet, they

considerably contributed less to the routine survival of their households. At the top of family leadership was and still is the man charged with the responsibility to provide for his family's defence and financial needs such as paying school fees for the children. In ancient Busoga, men were mostly hunters and this was their main source of income and food for the family. All hard work, including animal grazing was a responsibility of the men. Women always kept at home and they were meant to fulfil all the household chores. They cultivated crops to ensure that the family did not run out of food although both men and women would at times do this. Women were expected to be submissive to their husbands. For example, they were expected to kneel down when greeting or serving food to their husbands and visitors, and they could not sit on the same table with men while eating. It was also the women's responsibility to fetch water, collect firewood cook food whilst taking care of the children.

However, it was a responsibility of both men and women to ensure proper upbringing of their young children. They taught them morals and social responsibility, the main properties upon which mechanical societies survived.

Equally, young boys and girls also had different roles to play. Young boys always accompanied their fathers for hunting and grazing. They were groomed for hard work like their fathers and as they grew up, boys would move out of their parents' houses and build their own, symbolising maturity and a step forward in preparation for marriage. Slashing and cleaning the compound was also a responsibility of young male children. On the other hand, fetching water and collecting firewood was a responsibility of both male and female children though much inclined to the girls than boys. The girl child kept at home with their mothers and they helped them with domestic chores like cooking, washing clothes, cleaning the house among others. As it was the case in other regions, girls did not enjoy education privileges like their male counterparts in Busoga. They kept at home or were even forced into early marriages as their brothers went to school.

However, the increasing search for equality and emancipation of women in the later years has witnessed a shift in the roles that were once designed for males and females. Education is now for all and with some education, the girl child can now demand for equality with the males. The current “affirmative action” that gives the girl child 1.5 free extra points for entry to the university further helps the girls to compete with the boys. The situation in contemporary Busoga and Uganda in general is the exact opposite of the past in regards to gender roles and responsibilities. All work can be done by men and women, boys and girls. Both men and women are dispersed in the formal and informal sector searching for a living. It is therefore easy to argue that the shift in the face of gender roles lies entirely on western exposure and education that have ensured equal recognition of both men and women, boys and girls.

b) Wealth

Wealth creation in traditional Busoga was also a privilege of the men. As already discussed, Women did not own or inherit property and could not be considered wealthy by any measure. A wealthy man in pre-colonial Busoga is one who owned herds of cattle, many children and one who married many women. Even in contemporary times, having many cattle, children and women is an indication that one is wealthy. A poor cannot marry many women and cannot bear many children.

Having many children and women also afforded one social prestige. Men with many wives and children were considered for leadership positions in society. Society looked at them as powerful, intelligent and generally able to run the affairs of their communities. This perhaps fits into the common analogy that “money is everything.” The wealthy men in pre-colonial Busoga dictated the affairs of their communities without any form resistance from majority others who were poor. The rich still continue to be at the helm of circumstances in contemporary Busoga, but their powers are at least not absolute as was the case in pre-colonial Uganda.

Land was also a great measure of wealth. Individuals who owned large chunks of land were usually richer than those without land. It should be recalled that land allocation was

usually done by the chiefs (*abami*) assisted by sub-chiefs (*abakungu*) and those who owned big chunks of land had close connections to the chiefs and were no less wealthier than other village members.

c) The religious culture of the Basoga

Pre-colonial Busoga had its own belief system and forms of worship. The Basoga believed in traditional ancestral spirits that they called their gods. As already discussed, every clan in Busoga has its own epicentre locally known as “Nkuni” the places where the first ancestors of different clans first settled. To date, many Basoga still believe that “nkuni”, is the place where they evolved. This was a sacred place where the early Basoga of a given clan gathered to pay tribute, meditate and worship their gods, their great ancestors from whom they trace descent. Rituals and sacrifices were part of worship at this “sacred” place. They believed that the gods were responsible for their lives, security and stability, wealth creation among others and it was only appropriate and routine to please them. According to Wambi, the “nkuni” among the early Basoga was regarded “heavenly source of the life of the clan and it is maintained by a diviner selected by the gods or spirits of the great ancestors of the clan” (Wambi, 2011:4).

According to Nayenga (2002), communication with ancestral spirits was done through 3 categories of spirit mediums that is; *abaswezi* (*omuswezi*, singular), *abaigha* (*omuigha*, singular), and *abalogo* (*omulogo*, singular). To distinguish these categories of spirit mediums, Nayenda notes that *abaswezi* (diviners) are the most important of all and are directly selected by *emisambwa* (ancestral spirits). The spirits possess the person they want, who then gets oriented into the skills of divination and mediumship by the senior *abaswezi*. The *abaigha* play the role of doctors. Their divination powers are inherited and they have the capacity to diagnose and heal strange diseases. On the other hand, *abalogo* (witches/ sorcerers) use occult and mystical powers to cause mayhem and death of people.

However, the belief in spiritual ancestral powers does not mean that the Basoga are not aware of the sole creator of their lives. According to Nayenga (2002), the religious

hierarchy of the Basoga comprised the “Kibumba (the Creator), who created the people and the earth, moved into the sky, and left behind the spirits as his representatives. The spirit world left behind consisted of *emizimu* omuzimu-singular *enkuni*, and *emisambwa* (*omusambwa*, singular)” (Nayenga, 2002). Loosely translated, *emizimu* are the spirits of the dead relatives. *Enkuni* as earlier discussed are the early settlement and worship places of different clans, while *emisambwa* are the spirits of busoga’s earliest settlers of Kintu, and Mukama the cultural heroes of Buganda and Bunyoro respectively.

The introduction of Christianity at the fall of the 19th century witnessed a significant shift in the religious expressive culture of the Basoga. Many of them embraced Christianity and Islam. However, amidst such Christian and Islamic pronouncements, many Basoga still observe their traditional religious beliefs synonymously with the popular Christian and Islamic practices. It is a common practice for people in Busoga and elsewhere in the country to attend churches and mosques in the morning and also visit shrines in the afternoon to pay homage to their ancestors.

2.1.8 Traditional health practices of the Basoga.

Traditional African societies believed in both the visible and invisible worlds. Human wellbeing depended entirely on the ability to respond positively to the demands of the 2 different spiritual and physical worlds. In the pre-colonial Busoga, the situation was no different either. While the Basoga believed that normal illnesses are caused by things such as germs, bacteria, bad food, poor sanitation or poor living conditions or environment, they also had other explanations for prolonged and non healing illnesses. Prolonged/abnormal illnesses were associated solely to evil spirits and witchcraft and they always consulted their gods to evoke such evil forces.

Ultimately, the first response in case of strange/ abnormal diseases was consultation with spirit mediums to establish the cause of the strange disease. The spirit mediums are believed to communicate directly with the ancestors and through that relationship they were able to repel the invisible forces that cause strange diseases to the sufferers. This

involved offering sacrifices and performing rituals to please the gods to work in their favour.

The use of traditional herbal medicines, which is still a common practice in the post colonial Busoga and elsewhere in the country also began with the history of mankind in this land. Tabuti (2006), indicates that while the use of modern allopathic medicine has been given great attention and many people in Busoga can now express preference for modern western medicine, a sizeable section of the population in Busoga continues to use THM in the treatment of various ailments. In her study on the Profiles and outcome of traditional healing practices for severe mental illnesses in two districts of Eastern Uganda, Abbo (2011) also demonstrates that the majority of patients with severe mental illness in Jinja and Iganga Districts use both biomedical services and traditional healing systems. Taking on the same approach, this study sought to understand the socio-cultural essences of modern biomedical services and THMs used in the fight against malaria in Jinja district, eastern Uganda.

2.1.9 Colonial Legacy in Busoga and the fight against disease in the region.

It is not adequate to talk about the historical anthropology of the study area without delving into the colonial legacy that informed many greater decisions in the late nineteenth and early twentieth centuries. This section brings forth a brief history of the diseases that ravaged the Basoga and other parts of the country under the pre-colonial and colonial rule in Uganda.

Studies and history today reveals that the primary aspect responsible for the occurrence of new epidemics and other diseases affecting both humans and animals in the East African region was the entrance of traders and ivory hunters into this region. The effects of these diseases have always been described as tragic (Hartwig, 1978).

Many disasters struck Busoga during both the pre-colonial and the colonial era. Apart from natural calamities such as famine, and human caused problems of slavery, reduction in number of the natives of southern Busoga was helped by the prevalence of

diseases such as dysentery, small pox, and sleeping sickness. Fallers consequently contends that many lives were lost in the southern parts of Busoga between 1897-1911 due to catastrophes such as plague, sleeping sickness and small pox (Fallers, 1968).

In the pre-colonial era, the greatest causes of ill health were endemic diseases such as plague, dysentery and pneumonia. These diseases were generally related to worsening conditions of living in the early twentieth century caused by the colonial economic systems. The most feared disease both among the Africans and the Europeans in the early twentieth century was the plague. It gained new virulence as the third pandemic and it was believed to originate from China in 1893 and it reached Uganda through the inland caravan routes and the Mombasa-Kisumu railway. It is thus believed that the disease was introduced into the country by the black rat which was to replace the local rat species as the main vector for plague (Iliffe 1995, 210; Vaughan 1991, 40).

It appears that famine in 1880s and 1890s accelerated the spread of epidemics and they became more deadly during that time. Bubonic plague, that was commonly known as Kawumpuli was always more fatal and dangerous after famine when people had been weakened by lack of food as in 1898 and 1899. Even strains of small pox which were known to be less fatal became more lethal during the famines. Dr. Albert Cook mentioned in his reports that malaria also became rampant during that time as he asserts that fevers and death tolls due to malaria had increased to 30% (Albert Cook, 1899, cited in Kuhanen, 2005).

In 1901 when the problems became worse, the representatives of the government in the region commonly known as the reagents requested the government to set up solutions to stop the sleeping sickness epidemic but their requests were never put into consideration. The reagents therefore devised their own solutions in 1902 and issued instructions to the local chiefs to control the disease (Zeller 1971, cited in Kuhanen, 2005).

The other disease that affected Busoga, Buganda and Bunyoro regions was smallpox. It was usually connected to famine and by the end of the nineteenth century it was evidently endemic to Ugandans. It is reported that the wide spread famine at the turn of

the century caused a major epidemic outbreak of smallpox in Bunyoro in 1899 and again in 1901 and 1902 (Kuhanen, 2005:126).

Like many other disasters, many lives were lost due to sleeping sickness. It was thus estimated that the sleeping sickness epidemic claimed almost 250000 lives between 1900 and 1910, of which 50000 were in Buganda and 10000 on the Sese Islands, 75000 on Buvuma Island and 100000 in Busoga (Duggan 1980, cited in Kuhanen 2005:260)

Apart from epidemics such as tick-relapsing fever and measles reported earlier, the health among the Baganda and Banyoro in the late half of the nineteenth-century was disturbed by endemic diseases such as bubonic plague, dysentery and malaria. The danger of these diseases was aided by malnutrition and the reported breakdown of the social order due to wars, refugee settlements, and natural disasters such as famine and drought.

Dysentery was another disease that disturbed the natives of Uganda during the colonial times. It is believed that in the early twentieth century, due to poor hygiene, the food and water-borne infections were undoubtedly common in Uganda. This was mainly attributed to filthy habits of the natives and medically because of disorders of digestion. The conditions which were extremely common included chronic dyspepsia, gastritis, diarrhoea and colic (Kuhanen, 2005).

The other disease said to be very common during the early colonial era was the tick-borne relapsing fever. This epidemic outbreak was highly manifested in Busoga in 1909, in Buganda between 1903 and 1905. Though a disease usually associated with low death rates, the relapsing fever was a major cause of powerlessness and ill health. The tick-borne relapsing fever was very often confused with malaria, and its other symptoms such as diarrhoea caused it to be wrongly diagnosed as dysentery. It was frequently encountered in northern Bunyoro by 1905 and was mostly prevalent along the caravan routes. It consequently attacked many porters at tick infested camps and rest houses (Kuhanen, 2005).

The effects of malaria and its epidemiology countrywide were unclear to those responsible for health statistics between the two world wars (James, 1929). This is supported by annual reports of the medical department produced in 1927. It asserts that very low mortality rates due to malaria were recorded under clinical malaria. Clinical malaria is a type of malaria treated without confirming the presence of malarial parasites microscopically or using rapid diagnostic methods.

The annual medical and sanitary reports by the Uganda Protectorate (1917-1951) affirm that after the Second World War, cases of malaria epidemics were reported in townships residential areas despite the preventive methods such as creation of permanent drainage schemes and routine oiling of swampy areas employed at that time. Reviewed medical reports in 1950 however suggested that mortality cases among hospital admissions due to Malaria had declined over a period of 20 years among Europeans and Asians and therefore it was uncommon to be infected with malaria in some of the big townships. Although malaria cases had come under considerable decline among the European settlers, the 1950 Annual Reports still suggested that there was no significant change of malaria infections among the indigenous inhabitants. We are however reminded that these reports were not conclusive because 80% of the diagnosis of Malaria at the hospitals was not aided by microscopic examination.

The colonial states had attempted to control malaria by building mosquito-proof houses and engage in mosquito eradication campaigns in townships. These attempts were however greatly affected and did not take place until 1912 due to lack of funding. These malaria preventive programs were aimed at safeguarding inhabitants of European and Asian origins from malaria attacks yet nothing was done to safeguard the local inhabitants. These programs involved draining of swamps by digging ditches. The methods however proved ineffective because new breeding grounds for the *Anopheles* mosquito larvae were created by the ditches dug to clear swamps. Therefore both the urban and rural populations remained unsafe from mosquito bites. This resulted to high malaria infection rates and many infants lost their lives due to the disease. In Bunyoro and Buganda the high infant and child mortality rates were often associated to syphilis

because of the premature births and miscarriages evident at that time. It was not until in the 1930s that malaria was discovered to be the real cause of considerable number of premature births and miscarriages (Kuhanen, 2005).

2.2 Uganda- Local Background

Uganda lies across the equator and covers a total area of 241,038 square kilometres. Out of this coverage, 197,097 km² is surface land water bodies cover 43,941km² (Mulumba, 2010). It is a land locked country bordered by Kenya, Sudan, Democratic Republic of Congo, Rwanda and Tanzania. While this geographic position creates economic potential for Uganda, it also makes the east African nation vulnerable to a huge influx of refugees that have constantly come in from politically unstable neighbours across eastern Africa.

Uganda was unknown to the rest of the western world until the mid 18th century when it was explored by both the Europeans and Arabs. This literary means, that the gradual process of nation building and integration did not take place in the country. Uganda's border lines were almost exclusively determined by its colonial explorers at the fall of the 19th century. The nation is also ethnologically diverse, harbouring more than 40 different indigenous ethnic groups, each with its own languages, norms and customs. This positions Uganda as the most ethnically diverse nation in the world according to a study undertaken by Academics at Harvard University's Institute for Economic Research in 2013.

According to the 2002 national census, the Baganda are the largest ethnic group representing about 16.9% of the total national population. The Banyankole represent 9.5%, Basoga 8.4%, Bakiga 6.9%, Iteso 6.4%, Langi 6.1%, Acholi 4.7%, Bagisu 4.6%, Lugbara 4.2%, Banyoro 2.7%, and others 29.6% (National Census, 2002). The predominance of the Baganda ethnic group also makes their language (Luganda) the most widely spoken local language in the country. It is "extensively used as second language by non native speakers. It is encroaching, rather rapidly into some domains

reserved for the official language, English” (Achimbe & Mforteh, 2011:139). This is mainly attributed to the colonial administrative decisions that placed Buganda at the forefront of leadership in the central Uganda. Kampala, which is both the administrative and commercial capital of Uganda is centrally located in Buganda. This has also made Luganda the preferred language for conducting business around the city.

2.2.1 The economic sector

Like the rest of the sub-Saharan Africa, Uganda’s economy is still very young and is largely dominated by small-scale peasantry farming. While the great majority of Ugandans depend on peasantry agriculture for their livelihood, pastoral and nomadic farming are also common in the sparsely populated areas of Nakasongola, Moroto and Kotido (Mulumba, 2010). The south western part of the country is also partly engaged in cattle rearing, which they do alongside cultivation of both food and cash crops. Industrialisation, though rising very fast, due to good investment policies, is yet to spread to all regions of the country. Major industries and manufacturing firms have been centrally located in Kampala but, they are yet to assert themselves as potential drivers of development.

Worthy to mention while discussing Uganda’s economy is the post independence political instability that irreconcilably crippled the economy during the unstable reign of Idi Amin Dada. Unlike her neighbours in the east (Kenya) and Tanzania in the south who have witnessed relative stability since independence, the post independence era in Uganda is only defined by political upheavals that nearly threatened state existence. Throughout the 1970s and early 80s, the country was deeply entangled in bad leadership and political instability that severely crippled the economy. Until 1986, when the current government assumed power, still through a guerrilla war, the nation was torn by conflict, and the economy was on the verge of collapsing: Inflation was about 200% per annum, induced by poor macroeconomic imbalance and acute foreign exchange scarcity witnessed at the time (Mulumba, 2010). The post 1986 era has witnessed relative peace and security and also produced leaders that have revamped the nation’s economy from

near collapse to a modern liberal economy that has attracted both local and foreign investment. It is therefore easy to argue that Uganda's economy has over the years been greatly determined by the political situation of the country (Kayizzi, cited in Mulumba, 2010).

2.2.3 The Healthcare sector

The pre-colonial and missionary era was characterised by use of traditional herbal medicines for treatment of various ailments. Like many may argue, THM did not have clinical validity to prove their safety and efficacy and this prompted the European missionaries and British colonialists to ban its use because it was considered primitive and unscientific (Lyun, 1994, cited in Mulumba 2010). Until their arrival (missionaries and colonialists), Uganda did not have a functioning medical facility. The first medical facility was established by the church missionary society in 1897 (Mulumba 2010). Several hospitals and dispensaries were later constructed at every district administrative headquarters and townships to extend universal treatment with modern allopathic medicine. Mulago medical school was later started in 1928 to train medics in the diagnosis and treatment of different diseases.

Uganda's health sector has since grown and expanded and it is controlled by the ministry of health. Health care support is currently being delivered through the 5 tier health service delivery system under the ministry of health. This includes: health centre II, III, IV, general hospitals and regional and national referral hospitals. Despite being one of the most improved and functional sectors in the country, the healthcare sector still grapples with problems of inadequate staffing that puts the doctor patient ratio to about 1 -1000. This asymmetrical ratio puts many lives in danger. The increasing drug stock outs in public hospitals also negate universal access to medication. It is this inability to offer full scale healthcare services that lure some people, particularly the less privileged (poor) into searching for possible alternatives in THMs.

About 60% of Uganda's population use THM for their primary health care practices. Realising the potential of THM to complement the existing modern healthcare system,

the government through the ministry has been agitating for legislation to recognise and allow the inclusion of THM in the mainstream healthcare services delivery in the country.

2.2.4 Malaria situation in the country

The history of malaria is likened to the history of humankind and beyond. It is one of the oldest tropical diseases ever recorded. It is an ancient disease of pre-historic era, and could have ...“originated in Africa as the cradle of human race” (Bruce-Chwatt, 1985; cited in MoH, 2005). It is a lethal disease that is commonly transmitted by the female anopheles mosquitoes. In Uganda, malaria is commonly caused by human plasmodia species called plasmodium falciparum (Kiwanuka, 2003). The malaria scourge is considered the world’s highest killer with most deaths occurring in sub-Saharan Africa. About 50 countries in sub-Saharan Africa are considered malarious, representing 50% of the world’s total endemic countries (Ministry of Health, 2005). Recent global estimates by the World Health Organization indicate a significant rise in malaria recorded cases in Africa at 81%.

Table one, indicates the estimated global distribution of malaria cases and deaths in the year 2010 by the World Health Organization.

Table 1: Estimated global malaria cases, 2010.

WHO Region (endemic countries)	Estimated No. (in Percentages) of malaria cases, 2010	Estimated No. (in Percentages) of malaria deaths, 2010
Global total endemic countries (106)	219 million (100%)	
Africa (43)	174 million (81%)	597,000 (90%)
South East Asia (10)	32 million (13%)	43,000 (7%)
Eastern Mediterranean (12)	10 million (5%)	15,300 (2%)
Western Pacific (10)	2 million (1%)	4,000 (<1%)
Americas (23)	1 million (<1%)	1,100 (<0.5%)
Europe (8)	200 (<0.01%)	0 (0%)

Source: WHO, 2010, World Malaria report.

From this table, we learn that Africa represents the highest percentage of malaria cases and deaths in the whole world, even though it is not the biggest demographically

Uganda remains one of the countries with the highest malaria transmission rates in the world (Okiro et al, 2011). According to NMCP, (2011-2012) annual plan, over 90% of Ugandan population is at risk of malaria infection. It is the leading public health problem in the country responsible for about 70,000-110,000 deaths every year (MoH, 2005). It is responsible for over 200 daily recorded deaths in the country and the most vulnerable groups are children below the age of 5 and pregnant women (Malaria Control Program 2005). According to the Uganda National Malaria Control Programme (2011-2012) annual plan, reported malaria cases have been increasing since the early 2000s, indicating a rise from 28% in 2001 to 45% in 2010. The following table, indicates the yearly trend of malaria admission incidences recorded between 1999 and 2009 in 4 major hospitals of Kambuga, Mubende, Jinja, Tororo and Apac.

Table 2: Annual admission data for malaria incidences recorded in five hospitals between 1999-2009 expressed per 1,000 children aged 0-4 years.

Hospital location	Kambuga	Mubende	Jinja	Tororo	Apac
Average annual malaria admission rate 1999-2003 (95% CI), total number of malaria admissions	4.79 (4.52 to 5.07), 5,846	7.80 (6.62 to 7.56), 4,448	5.93 (5.70 to 6.16), 12,570	9.56 (9.23 to 9.89), 15,899	17.18 (16.47 to 17.92), 10,879
Average annual malaria admission rate 2004-2006 (95% CI), total number of malaria admissions	11.95 (11.54 to 12.37), 9,372	10.39 (9.86 to 10.93), 4,374	7.89 (7.63 to 8.14), 11,114	14.74 (14.35 to 15.14), 16,332	22.04 (21.28 to 22.82), 9,602
Average annual malaria admission rate 2007-2009 (95% CI), total number of malaria admissions	5.06 (4.80 to 5.33), 4,180	10.84 (10.33 to 11.36), 5,038	10.25 (9.98 to 10.53), 15,671	14.20 (13.84 to 14.58), 17,182	22.56 (21.84 to 23.30), 10,870
Average annual non-malaria admission rate 1999-2003 (95% CI), total number of non-malaria admissions	1.50 (1.35 to 1.66), 1,823	4.82 (4.44 to 5.23), 3,000	4.69 (4.49 to 4.90), 9,880	2.89 (2.71 to 3.08), 4,729	11.89 (11.27 to 12.47), 5,328
Average annual non-malaria admission rate 2004-2006 (95% CI), total number of non-malaria admissions	1.50 (1.35 to 1.65), 1,176	5.08 (4.71 to 5.47), 2,142	3.25 (3.09 to 3.41), 4,568	2.32 (2.16 to 2.48), 2,570	10.67 (11.66 to 12.80), 5,328
Average annual non-malaria admission rate 2007-2009 (95% CI), total number of non-malaria admissions	1.21(1.08 to 1.34), 998	5.31 (4.96 to 5.69), 2,465	3.38 (3.22 to 3.54), 5,174	3.59 (3.41 to 3.78), 4,296	10.67 (10.18 to 11.18), 5,119

Source: Okiro et al, 2011:7, increasing malaria hospital admissions in Uganda between 1999 and 2009.

The table confirms that malaria is by far the most common cause of all admissions in health units and hospitals in Uganda. It also shows an upward trend in malaria incidences recorded between 1999 to 2009 with exception of Kambuga where admission rates declined significantly from 11.95 (11.54 to 12.37), 9,372 to 5.06 (4.80 to 5.33), 4,180 between the period 2004-2006 and 2007-2009 respectively.

However, these mortality figures may not be a true representation of the gross malaria cases in the country given that many people in rural communities die without visiting hospitals (MoH, 2005). We should be reminded that with the introduction of home based management of fever, the majority of patients don't seek treatment from hospitals/health units. The situation is even worse in rural areas due to drastic poverty, illiteracy, and sometimes inaccessibility to health centres (Batega, 2004). According to the malaria control and prevention strategies and policy issues, 2007 report, about 80% of Ugandans offer home treatment for malaria and such cases are never recorded. This is attributed to poor policies and inadequate funds that have negated universal coverage of preventive mechanisms such as the distribution of ITNs, LLINs, and DDT among others. IRS has been restricted to only 10 districts in northern Uganda with certain parts of the country receiving little or no intervention at all (NMCP, 2011-2012). Environmental policies have also been fragile to initiate community-based programmes to minimize breeding sites for mosquitoes.

The historical geography of Uganda also makes the wider part of the country vulnerable to the malarial spreading mosquitoes. Save for the mountainous areas of Rwenzori, Elgon and the highlands of Kabale, the rest of the country is experiencing high transmission rates almost all year round (NMCP, 2011-2012). Uganda has two wet seasons that is: march-may and October-December. Malaria transmission during these months is always at record (MoH, 2011) attributed mainly to water stagnation in ponds and valleys, overgrown grass, which are potential sites for mosquito breeding.

Malaria transmission is most high in low altitude zones of Central and northern Uganda. Transmission in these areas is all year round, although the disease mostly manifests during wet seasons. Transmission rates lower as one transcends the mountainous regions of south-western and far eastern Uganda. Government and donor efforts to contain the situation have been broad but only registering subtle results. Government efforts to control malaria through fumigation with DDT, met public resistance and this has continued to compound the malaria disease burden. Yet ideally, the best practices to roll back the disease would be effective adoption of preventive mechanisms like the use of DDT.

According to the environmental impact statement on the proposed re-introduction of DDT to control malaria by the Ugandan Ministry of Health (2005), indoor residual spraying with DDT effectively controls “an gambiae which rests indoors before and after breeding. The method achieved permanent eradication in the US and Europe and greatly reduced the burden of malaria in part of Asia and Latin America” (MoH, 2005).

Table 3: Global Malaria Cases Before and after use of DDT.

Country	Year before DDT use	No. of cases	Year after DDT use	No. of cases
Cuba	1962	3,519	1969	3
Jamaica	1954	4,417	1969	0
Venezuela	1943	8,171115	1958	800
India	1935	>100 million	1969	285962
Italy	1945	411,602	1968	37
Yugoslavia	1937	169545	1968	15
Taiwan	1945	>1 million	1968	9
SriLanka (Ceylon)	Before 1950	>2million	1963	17

Source: *Buchel, 1983 cited in MoH, 2005*).

As indicated in table no 3, other than co-occurring side effects, the use of DDT is an effective preventive mechanism against malaria.

2.2.5 General knowledge about malaria in Uganda

In his literature review of the Knowledge, Attitudes and Practices about Malaria Treatment and Prevention in Uganda, Batega (2004), mentions that the great majority of Ugandans are now aware of the malaria disease burden and its possible causes. In some localities, the awareness about the malaria disease burden has risen to 99% (Net Mark, 2001). Studies have shown that knowledge about the cause of malaria increased from 40-50% in the early 1990s in most parts of the country to as high as 80-90% by 2001 in several districts. However, a few misconceptions regarding the possible causes of malaria still prevail, particularly in the rural areas of the country. In a study he did in Hoima district, Kalisa (1997) recorded several misconceptions about the causes of malaria that included poor nutrition, Bedbugs, maize and mangoes. In many rural communities, such misconceptions have gone ahead to inform people's medical seeking

behaviour, which in many situations has made timely and appropriate response to the malaria disease burden complex and non yielding. In the following discussion, I look at the prospect of containing the malaria disease burden from a western clinical perspective of disease diagnosis and treatment in Uganda.

2.2.6 Western clinical perspective of malaria management and control in Uganda.

The history of development of biomedicines is linked to earlier developments in science and medicine. As Ira Brodsky (2010) suggests, biomedical technologies evolved along with developments in biological research, clinical practice and the general health care industry. In the Ugandan case, the development of biomedical technologies is closely linked to the modernization of the healthcare system during the early days of colonialism and missionary activities (Mulumba, 2010). The pre-missionary and colonial era in Uganda was characterised by use of traditional herbal medicines for treatment of various ailments. Like many may have argued, THM did not have clinical evidence to prove their safety and efficacy which prompted the European missionaries and British colonialists to ban its use because it was primitive and unscientific (Lyun, 1994, cited in Mulumba 2010). Until their arrival, Uganda did not have a functioning medical facility.

For a very long time, Uganda relied on monotherapy medicines to contain the persistent burden of the malaria disease. The introduction of combination drugs (ACTs), particularly AL as the first line treatment of mild malaria followed drug resistance of malaria parasites to monotherapy treatment. The shift from monotherapies to combination therapies was therefore a long process that necessitated involvement of all stakeholders to attempt to find a sustainable cure for the malaria disease burden. Nanyunja, et al (2011) outlines the whole process of drug policy change in the following figure.

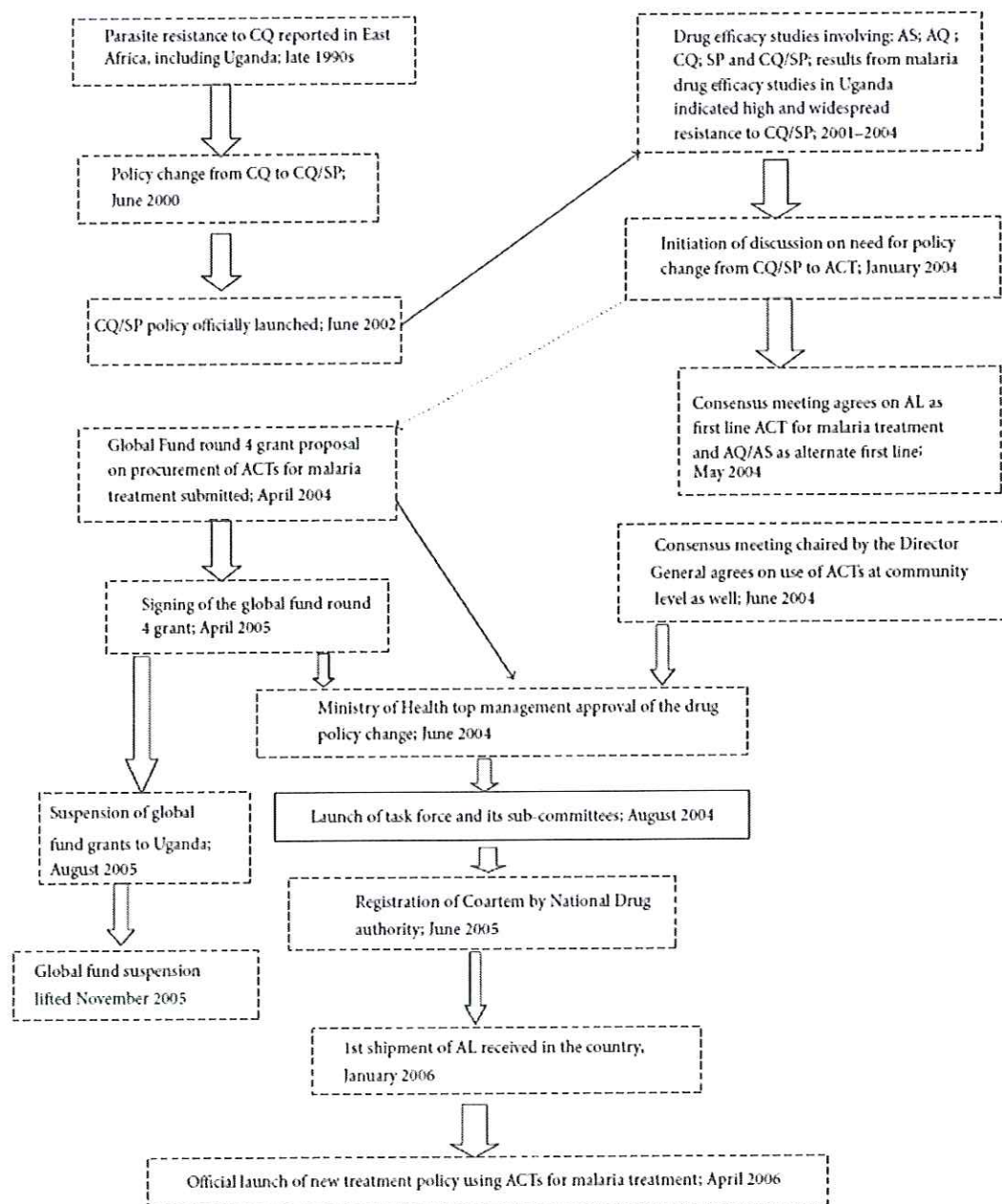


Figure 3: The Implementation of Malaria drug policy in Uganda

Source: Nanyunja et al, 2011 Malaria Treatment Policy Change and Implementation: The Case of Uganda.

2.2.6.1 History of monotherapy drugs for malaria control in Uganda.

For many years, Uganda relied on chloroquine (CQ) monotherapy and later chloroquine + sulphadoxine/pyrimethamine (CQ+SP) for treatment of simple malaria cases (Nanyunja et al, 2011; MoH, 2011). Examples of monotherapy antimalarial drugs on the market today include amodiaquine and quinine. Quinine can be administered either as oral, or as injectables and has remained the preferred treatment for complicated malaria cases. These drugs were relatively cheap and easily accessible in health centres and clinics across the country.

However, since the 1970s, malaria parasites became strikingly resistant to most of the existing cheap monotherapy antimalarials. Between 1999 and 2001, drug resistance to chloroquine treatment had reached 33% and the chloroquine + sulphadoxine/pyrimethamine (CQ+SP) treatment failure was averaging 7% (Uganda malaria control strategic plan, 2005/6-2009/10). The period between 2001 and 2004 witnessed yet another significant decline in the efficacy of CQ+SP, with infection resistance to drugs ranging from 22%-77% (Nanyunja et al, 2011). It was in 2004 that a new national malaria policy was reviewed to enable the introduction of highly effective drugs as first line treatment of malaria in the country (MoH, 2005; 2011). Consequently, in 2006, with support from development partners, the Ugandan government introduced Artemisinin-based Combination Therapy (ACT) and more specifically Artemether/Lumefantrine (AL) combination as a replacement for the ineffective monotherapies. The following table indicates the periodic treatment failure rates in children below 5years before the introduction of Artemisinin-based Combination Therapy (ACTs).

2.2.6.2 Artemisinin-based Combination Therapies (ACTs)

The invention of ACTs and more specifically AL drugs followed a decline in the efficiency of monotherapy drugs as first line treatment for malaria in Uganda. The main objective of the 2004 national malaria policy convention was to lead a policy change that would enable the introduction of new and highly effective antimalarial drugs (Nanyuja et al, 2011). Consequently in 2006, AL drugs were made available in all public health units. The different categories of ACTs on the Ugandan markets include coartem, Doucotexin and Artefan. While Doucotexin and Artefan are not commonly found especially in public hospitals, the former (coartem) is widely acknowledged and accessible in all major public hospitals and health units. The support from the donor community, WHO and the Global Fund for AIDS, Tuberculosis and malaria increased availability and accessibility of the drugs in all public hospitals and health units. In subsequent years, AL drugs particularly coartem were extended to communities for home-based treatment of malaria symptoms (Nanyuja et al, 2011). For easy access, the drugs were also made available in private clinics and hospitals.

In subsequent years, besides coartem, other brands of AL antimalarials such as lumet forte, and Artefan were introduced and became available in private hospitals, clinics and drug shops (Nanyuja et al, 2011).

ACTs are by far more efficient than the customary chloroquine (CQ) and chloroquine + sulphadoxine/pyrimethamine (CQ+SP) monotherapies. In 2004, when malaria infection resistance to monotherapy drugs had reached a devastating 77%, drug efficacy for ACTs- artesunate+amodiaquine and artemether/lumefantrine was recorded at 99% (Uganda malaria control strategic plan, 2005/6-2009/10). Act [artemisinin combination therapy] are fixed combination therapies that must contain an artemisinin as one of the active ingredient to put to use its quick acting properties and another long acting agent like lumefantrine in coartem, piperaquine in Doucotexin, amodiaquine in artequine. It was this positive change in drug efficacy that enabled the malaria policy change to consider ACT (artemether/lumefantrine) as first line treatment for non complicated malaria cases in Uganda.

2.2.6.3 Availability and Accessibility of ACTs (artemether/lumefantrine)

Despite several efforts to contain the disease, it remains a challenge to bring down the number of deaths resulting from malaria in Uganda. The introduction of new and effective drugs (ACTs) and specifically AL in Uganda marked a great transition towards achieving a sustainable cure for malaria. When limitations like low accessibility, drug stock outs and high costs are properly addressed, the use of ACTs will substantially contain the malaria disease burden across Africa and south Asia. As already intimated, ACTs are fixed combination therapies and are the most effective drugs against *P. falciparum* malaria.

Ironically, every effort towards sustainable management and control of the disease has had limitations ranging from policy, personnel and finances. Whilst ACTs (A/L drugs) are given free in all public health units and hospitals, universal access to these drugs has remained low across the country. The introduction of home-based management of malaria symptoms through home delivery of AL-coartem drugs has yielded subtle results. Village health teams (VHTs) or village doctors as often referred, to are charged with the distribution of drugs. Unfortunately, they are not facilitated enough to effectively carry out their job. While they are supposed to move on bicycles to distribute drugs, the ministry of health has not been able to provide bicycles to a significant number of village doctors. This has negated access to essential drugs especially in the remote and hard to reach zones of the country which has further compounded the burden of malaria disease.

Besides, the new antimalarial drugs have remained far from being developed and accessed by all, especially in the rural areas of the country (MMV, 2007). The country quite often runs out of antimalarial drugs and this too has undermined universal access to malaria treatment (Achan et al, 2011; Nanyuja, 2011). The 2008 news report, *Understanding the Antimalarial Market: Uganda 2007* by the Ugandan Ministry of health and Medicines for Malaria venture showed that ACTs occupied only 10% of the total 174 and only 50% of patients could afford full dosage treatment with ACTs in the

country. These figures indicate significant gaps in the availability and accessibility of ACTs among the Ugandan populace.

Whilst ACTs are available in some private hospitals and health units, they are highly priced and very few Ugandans in rural areas and lower urban zones can afford them. Yet, when 80-90% of Ugandans experience malaria symptoms, they visit private health units for immediate treatment (MCP, 2008). This has often resulted into the sale of low priced, ineffective antimalarials in private clinics to allow increased accessibility by all patients. This situation further deteriorates in rural areas where most of the rural private health operators do not stock ACT drugs in their shops. Reducing the exorbitant price gap of ACTS in the private sector would be a stepping stone towards increasing accessibility to more efficient drugs and saving many lives that are vulnerable to the malaria disease burden. Adoke and Jamal (2011) note that access to ACTs is lowest in African countries with children under 5 years treated with ACTs on malaria diagnosis not exceeding 15% . This is a serious challenge considering that children and pregnant women are more endemic to malaria than other categories of people.

2.2.6.4 Affordability of ACTs/artemether lumefantrine drugs.

The transition from the use of ineffective CQ and SP+CQ to new and more effective ACTs- artemether/lumefantrine was inevitably going to be an expensive venture for both the state and the public. The fundamental objective of the 2004 national malaria policy convention was to kick out malaria through the introduction of new and highly effective drugs that would be accessible by all. However, the high cost of ACTs curtailed government's effort to avail adequate quantities of AL to the malaria suffering population. The cost of ACTs (AL drugs) is 60times higher than that of ordinary monotherapy antimalarials (MoH & MMV report 2008). Frequent drug stock-outs in public health units has undermined universal access to malaria treatment (Achan, 2011, MoH, 2011). Inexplicable poverty in the country makes half of the total Ugandan population unable to afford full course treatment for malaria using AL (MMV report 2008). In the retail market, "the price range for a full dose of ACT, in 2007, was

Ugandan shillings (UGX) 9,000-20,000 (USD 5.40-12.00), while that for a full course of chloroquine in a drug shop was UGX 200–500 (USD 0.12-0.30)” (Talisuna et al, 2012:4). The government does not have sufficient funds to afford adequate and timely supply of these relatively expensive drugs to the public (MMV, 2007; MoH, 2011).

Besides, limitations in socioeconomic development at household level such as poverty, and illiteracy hinder the feasibility and effectiveness of malaria control efforts in the country. However, realising the effectiveness of ACTs in controlling malaria, the government and donor community came in to subsidize a few licensed private drug shops to enable them stock and sell ACTs at a much lower cost.

Despite the subsidies, a snapshot into the current antimalarial market in retail shops across the country does not depict a change in the prices of effective antimalarials. Prices for ACTs have remained high in most private health units and drug shops and have remained less available and inaccessible by all in the country. The idea of subsidizing private health shops could not be sustained when public health units themselves experience persistent drug stock-outs. This creates major challenges amongst Ugandan communities where 60% of the population believe in the use of traditional medicine to treat similar ailments.

2.2.6.5 Adherence to malaria treatment guidelines.

Having the right medicine alone does not guarantee good health, Rather, adherence to the instructions given by the physician (appropriate dosage) is essential in improving the health of patients. Unfortunately, the vast majority of Ugandans (irrespective of their level of literacy) do not take full course treatment for their illnesses. Studying the use of antimalarial drugs among children in the districts of Busia and Tororo, Nshakira et al, 2002 cited in D.W Batega 2004) indicated that out of 94% of children who were using antimalarial medicine, only 34% followed treatment guidelines as prescribed by health workers. This study also attempted to relate the dilemma of taking under course treatment to the general failure to contain malaria disease burden in the country.

Since the management of malaria symptoms is mostly done at home, there is general laxity on part of patients and their attendants to adhere to full course treatment as directed by physicians. The underlying reasons for this negligence are poverty, where a patient cannot afford full dose treatment, ignorance, illiteracy, and failure by health practitioners to guide patients on the right use of drugs.

The liberalisation of the health sector, to allow in many private operators has attracted both qualified and non-qualified private health practitioners operating in different markets all over the country. Unfortunately, some of them have little or no medical and pharmaceutical training background and, most likely rather than less likely, they will make wrong prescriptions for their patients. This aside, patients also share the blame for the deliberate failure to use medicine as prescribed. Most patients will deliberately stop medication on experiencing some relief or when they feel they are cured. Forgetfulness, not recovering in time, uncomfortable effects of drugs are some of the others reasons patients give for not taking full course treatment (Batega, 2004). The following table indicates the right drug prescriptions for AL (Coartem tablets) for the different age groups of patients.

Table 4: Drug prescription per age group.

Age group	Colour of the pack	No. of tablets per pack (dosage)
4months - 3years	Yellow	6 tablets
4 – 7years	Blue	12 tablets
8 – 12 years	Brown	18 tablets
12 years +	Green	24 tablets

Different colours were adopted to ease prescription of medicines for different age groups of patients. The following figure indicates the correct packaging and branding adopted to enable correct use of the products for the different age groups.



Figure 4: Branded coartem for the four different age groups.

Source: Talisuma et al, 2012:5 Closing the access barrier for effective anti-malarials in the private sector in rural Uganda: consortium for ACT private sector subsidy (CAPSS) pilot study.

2.2.7 Traditional approaches to malaria control in Uganda.

The concept of traditional healing is not new in the world history. As Tambiah (1990) asserts, ...“Despite the development of a scientific mode of thought in early Greece, early Greece knew the co-presence of many types of healers and healing systems which both competed with one another and also overlapped as regards therapy: Hippocratic doctors, herbalists, temple medicine priests practiced simultaneously and there was a general belief in the efficacy of drugs, amulets, spells and prayers...” (1990:10).

In the case of malaria, Traditional knowledge and treatment of the disease with herbal medicines is traced way back in ancient times. History indicates that the first antimalarial treatment was in form of Babylonian clay tablets recorded way back in 2600 B.C (Bertrand, et al 2011). In Uganda, despite the upward trend towards modernity, the use and practice of traditional herbal medicine has remained at the centre of healthcare

delivery in the country. Majority of Ugandan communities have remained indigenous and continue to uphold the virtues of their cultures. Regardless of one's socio-economic status or education background, majority of Ugandans continue to be guided by the cultural dictates of their societies. But it is also important to mention that the use of magic, a salient property in traditional healing formed a great part of the renaissance and reformation period and was not alien to the intellectual community. According to Tambiah (1990), this "witchcraft craze", as it was regarded by some scholars raged the western world for about 2 centuries.

In Uganda, the tribal and clan system is instituted in such a way that individuals must be nurtured to respect and pay allegiance to norms and customs of their particular clans. Whilst traditional healing methods may cross-cut ethnic sentiments, some tribes are still known for their healing abilities than others.

Traditionalism shapes people's understanding of a particular disease and the desired response to contain it. Important to mention is that some communities will even consider traditional medicine as their preferred first line treatment for malaria. Modernity therefore builds on the existing local/ traditional knowledge of the signs and symptoms of particular ailments, the corresponding traditional methods of control and hold no to moral background to claim autonomy of the process of improving and saving lives. Besides, as Bertrand, et al (2011) asserts, the two most effective antimalarials (quinine & artemisinin) are derived from traditional medicinal plants, which prompts the use of the original mother plants with strong beliefs that it is more effective than the modified modern medicine. Modern day ideas and beliefs about traditional medicine, witchcraft or magic are simply reflections of the past, and an indication of the continuities in life experiences of mankind (Tambiah 1990).

In Uganda, like elsewhere in Africa and other developing countries, the use and practice of traditional medicines is central in the provision of health care (WHO, 2003). According to the Uganda Ministry of Health, about 60% of Ugandans believe in traditional medicine (MoH, 2009). And this has a strong bearing on the way they

perceive modern drugs as an approach to healthcare delivery in the country. There exists a strong preference for self medication with herbal medicines as a primary intervention for malaria treatment in many Ugandan communities because of easy accessibility, and the low cost of traditional herbal medicine as opposed to modern medicines (Tabuti, 2006; Anoka, 2012). Worldwide, an estimated 1200 plant species are used in the prevention and control of malaria (Wilcox & Bodeker, 2004).

In Uganda, the kinship structure has also had tremendous impact on health care delivery. The innovation, acceptability and implementation of medicines and drugs particularly in the rural zones of the country are sometimes dependent on the cultural setup and kinship structure of those communities. According to (Katabarwa & Richards, 2000), the success of Invermectine Treatment Program (CDITP) in Uganda was enabled by the strong patrilineal relationships and clan systems of communities where it was being implemented. The high levels of poverty, illiteracy and desolation propel the public to disregard modern drugs in preference for culturally grounded herbal medicines.

Regarding traditional medicine, for malaria control, standard drug prescriptions are almost non-existent. Self medication is a common phenomenon and this often results into over or under use of medicines. Consultation with traditional herbalists is a nightmare considering that herbal medicines are free and almost within everyone's reach especially in the rural areas of the country (Tabuti, 2006). But even where consultation is done, there is lack of coherence among traditional herbalist on the preparation procedure and correct dosage of herbal medicines (Wilcox & Bodeker, 2004). Treatment with herbal medicine is conditioned by many factors such as availability and accessibility of herbal medicine, poverty, remoteness of a particular community, lesser side effects, taste of herbal medicines, among others. Since most of the malaria control medicines have a sour taste, many patients tend not take appropriate quantities of their medicines. Studying the herbal medicines used in the treatment of malaria in Budiope sub-county, Tabuti (2006:15) identified that appropriate dosage for any given concoction ranged from 100 – 500ml for adults; 100 – 250 for children above 5 years, and 1 – 3

tablespoons for children below 5 years, taken 1 – 3 times a day for a period of 1 – 3 days.

In most Ugandan communities, the knowledge of the right dosage and adherence to such strict standards is almost nonexistent. As will be seen later in the findings of this study, there is no universal appropriate dosage for traditional medicine. Instead, patients take the medicines in such large volumes until their situation improves. Efforts to come up with standard preparation procedures and dosage have been subtle and there is no clinical data to suggest the efficacy of traditional herbal medicines. Little research has been carried out to measure the impact caused by the misuse of herbal medicines to human health.

Nevertheless, in the era of increasing drug resistance to western medicines, the role of traditional herbal medicines in improving lives should not be disregarded. Its limitations could easily be rectified if all responsible bodies recognised the value and importance of using herbal medicines to save lives. More research and clinical trials should be carried out to identify the right medicinal plants and correct dosages to improve and ascertain efficacy of traditional herbal medicine.

CHAPTER THREE: THEORETICAL FRAMEWORK

OVERVIEW

This chapter presents a review of related literature on a wide range of study variables and the general subject matter. First, it discusses the social cultural perspectives of the study problem with an aim of creating a link between the social and scientific realms of human sociality. It also looks at concept of disease, healing and coping, from the perspective of traditional value systems of Ugandan societies.

3.1 The concept of Culture

Culture is a pattern in mind, invisible, learned and changing. In fact, some anthropologists and other behavioural scientists, limit culture to the set of human learned behaviour alone. British anthropologist, Edward Taylor's celebrated definition of culture as a complex whole that includes knowledge acquired by man as a member of society also postulates the principle of "learning" as an invariant property of culture.

However, limiting the concept of culture to the invisible or learnt behaviour alone may be quite misleading. Objects identify us with our cultural and religious values and beliefs and should not be treated outside the general composition of culture. In this regard, Plate (2002) summarised culture as an attempt to talk about the visual components that are embedded in everyday life. They may include advertisements on billboards, films, sports graphic design, architecture, public art, landscape, artefacts, among others. However, he is keen to note that a culture's visual comprehension is not simply a matter of images utilised, rather visual culture always mixes with verbal culture; though in many religious traditions, the word has taken precedence over the image. Even in our contemporary world, as Appadurai (1986) notes, individuals have persistently opposed images/objects to words. Objects are regarded as mute and static and only set in motion and animated by persons and their words. On the whole, culture is a complex of social realities, whether visible or invisible, inward or outward that are

unique and learnt through social interaction. These realities are passed from generation to generation and they define the mode of life of a particular society.

3.2 The socio-cultural understanding of science and technology.

Since the use of modern malaria control therapies is deeply rooted in the current scientific and technological transformations, it is quite imperative for this study to delve into the relationship that exists between the social and the technological in regard to disease control. Understanding the socio-cultural relations of science and technology is undeniably a complex task (Mackenzie & Judy, 1985). There is only a thin line of difference between the world of engineering and the social world: the “social” is not exclusively “sociological” and the “technical” is also not exclusively “technological” (Wiebe & Law, 1992). The social and the scientific may appear distinct but are equally complementary elements in the maintenance of the whole; the cultures in which they were invented (Mackenzie & Judy, 1985; Friedman, 1952; Lorenzo Simpson, 1995; Neil Postman, 1993; Ingold, 2000; Wiebe & Law, 1992). According to Callon (1987), as engineers design new technologies, they get immersed in a flood of ideas and hypotheses that transforms them into sociologists. Understanding the two concepts therefore requires digging deep into theories and other sets of relations and components that give them shape.

According to Ihde (1993), technology can only be understood when its material component is conjoined with some set of human praxes, particularly relating to use and meaning. Technology and human praxes are therefore interwoven aspects of the society matrix. Ironically, scientific and technological studies regard technology as an independent force, occurring outside the realm of human nature. Technological studies have often been linked to scientific and natural laws as opposed to social laws. Thus technology has time and again been defined exclusively in terms of tools, techniques, machinery and procedure meant to perform particular tasks.

However, many developments that came with industrial revolution also meant a big shift in the conceptualisation of technology from a mere study of science and art, to one of

material worlds (Schwartzberg, 1930). Defining technology in terms of science and art demeans the role of society in shaping technology. The main problem is that people think of science to be independent of society. Yet scientific theories are drawn and developed from the wider society (Mackenzie & Judy, 1985). Grounded in the realm of natural laws, technological determinism was never realistic in its claims for autonomy over society. As Tilley (1990) suggests, the wide diversity of automobile designs could not have been destined by any natural law. Technology cannot be understood outside the social cultural, economic and scientific realms of a given society (Simpson, 1995; Postman, 1993; Wiebe & Law, 1992). The social and the technical, dwell in a world where each element manifests in the totality of its relations with each and every other (Ingold, 2000). Our modern technology is simply a transformation of human capacity to develop and use tools in the earlier days of civilization and should be understood as such (Elliot, 2003; Postman, 1993).

Earlier evolution and archaeological studies show that the making and using of tools were works of early hominids and that it could not have occurred before they were fully human (Rosen, 2006). Technological determinism was therefore preceded by human evolution that appropriated and categorized tools in order to conceptualize and work out their own world (Simpson 1995; Rosen, 2006). Such technology was morally guided and never compromised cultural or religious integrity (Postman, 1993). The argument here is that all material things, objects, are integral aspects of culture and do not possess moral capacity to claim autonomy over culture that fathers them. Technology is only embraced by a particular society because of its promise for efficient and effective control of other functional domains of life. Human abilities, needs and desires guide, if not dictate a particular type of technology and in the end, technology is just a product of community values (Simpson, 1995).

In his conceptualization of taskscapes, Ingold (2000), noted that all human activities manifest in a "social chain" that not only involves performance of tasks but also helping one another in the social network. It therefore takes human activities and technological objects to conjoin, before we talk of technological development and thus relegating the

earlier assumptions of technological rationality. Technological development is a step by step process that requires inclusion of all functional aspects of society.

However, we should also recall that while technological reason/rationality is embedded within the functional matrix of society, its end values and effects greatly affect society and may not easily be altered. This to me, changes the way we think about the social shaping of technology. It redefines the positions of the two terms in the relational matrix of human nature. If society was at the centre of technological invention and control, then it would be in position to control the effects technology causes onto society. My purpose is not to disregard the pivotal role of society in shaping technology to which I have already conceded, but to bring to light the fact that technology can also be an independent force particularly in regard to its ends. The social is important in making technology be, but doesn't always hold ransom for what technology produces, and cannot change it either (Simpson, 1995).

Consequently, as (Elliot, 2003) notes, the relationship between Technology, environment and society is always a troubled one. It is a fussy and fragile relationship that stifles proper functioning of the whole. Throughout history, the 3 concepts have had an asymmetrical relationship of domination and subordination (Ingold, 2000). Such imbalances in the nature of interaction are however more evident in complex societies where technological development has rivalled the peak of human reason. The early 19th century witnessed a proliferation in the growth of industry and machinery that seems to subordinate other realms of social and cultural reality. As Eliot notes;

...technology, at least in the service of modern industrial society leads, they say, not to social progress but to social divisions, conflicts and alienation, and underpins a rapacious, consumerist society in which materialism dominates. Other critiques go even further and from a radical political perspective, challenge the whole industrial project and the basic concept of development, which they see as in practice reinforcing inequalities, marginalizing the poor, exploiting the weak and disadvantaging minorities, destroying whole cultures and species, all in the name of economic growth for a few (David Elliot, 2003).

Significantly influenced by Heidegger, Simpson (1995) also developed a socio-economic critique of value oriented technology and argued that it not only leads to cultural bereavement but also denies humanity its practical life and self realization because of its self-determining and totalitarian tendencies. The industrial machinery, embraced for its effectiveness and efficiency relegates human labour to mere means/ raw materials for exploitation, disrupts social relations and also subjugates nature. As Ingold (2000) notes, "...productive work is divorced from human agency and assigned to the functioning device". In African societies where mass literacy has not fully been entrenched and cultural royalty remains the guiding principle in the moral and physical lives of the masses, such advancements in technology will in the short run be received with a lot of scepticism and unwillingness to incorporate its properties into the daily life practices of the people.

My purpose here is not to discuss technological development in its totality. The study is rather focused on the socio-cultural understanding of one aspect of technology called "Biomedicines". The transition from the tools age to the mechanical one in the latter half of the 18th century also witnessed a shift in the way physicians and medical researchers approach and monitor patients using biomedical devices and mechanisms. As Miranda, Doggett & Evans (2005) note, "...medicine slowly changed from the use of subjective evidence provided by the patient to objective evidence obtained by mechanical and chemical technology devices". As a result, stethoscopes, microscopes were invented as the first technological approaches to disease detection and monitoring. Today, the use of biomedical technologies has tremendously expanded and is the only proven way of detecting diseases. Doctors and patients are compelled to adapt to the use of machineries in hospitals and clinics. Of course as a new invention, it comes with prospects and challenges, particularly relating to adaptation and use. This study seeks to explore people's experiences and perceptions of biomedical technologies as an approach to disease detection, treatment and control.

3.3 Social determinism

The concept of biomedicines cannot be understood outside the socio-cultural, economic and scientific realms of a particular society. As already discussed, the concept of culture is multi-dimensional in nature and quite difficult to coin in a single definition. It crosscuts many academic disciplines such as social sciences, humanities, law, and economics, among others. But on the whole, culture may be seen as an evident representation of social reality; an embodiment of societal values, language, consumption patterns and human behaviour in general. Culture therefore defines what is “real” in a given social setting. However, how we assume the real, is sometimes puzzling and we cannot definitively assent to it. In his book, “primitive culture” anthropologist Edward Taylor’s conceptualisation of culture offers credible evidence of what constitutes the real in a given social setting. He defines culture as “that complex whole which includes knowledge, belief, art, law, morals, customs and any capabilities and habits acquired by man as a member of society (Edward Taylor, 1871, cited in White, 1959:227).

From this universally accepted definition, we discern that culture is “everything” in society; it is the ontological essence of a given human sociality. My next task then, is to trace the position of biomedicines within the complex body of social reality. To attempt this laborious task, I will begin with the following excerpt from Lock and Vinh-kim

Culture, history, politics and biology (environmental and individual) are inextricably entangled and subject to never-ending transformations ... Research in epidemiology, population genetics, biological anthropology and a small amount of work in cultural anthropology, together with remarkable new findings being produced at an exorbitant rate in molecular biology, have shown convincingly how evolutionary, historical, political and social variables as well as individual behaviors can bring about changes in human biology, some transient and others long lasting. For example the misuse of antibiotics has actually produced new pathogens and transformed others, bringing about so-called “emerging epidemics” (Lock & Vinh-kim, 2010:1-2)

From this excerpt, we discern the indispensability of society (portrayed in its cultural presence) in the shaping and transformation of biomedicines. Science and medicine are not stand alone practices; they require the presence of man to carry out and confirm laboratory tests, measure extent drug efficacy, variance in adaptability, carry out medical research among others. Steven Epstein, cited in Burri & Dumit (2007:3) revealed the credible role of ordinary Americans in attempting to find a cure for HIV/AIDS in the 1980s. They were a formidable group in carrying out medical research on HIV/AIDs, whilst inventing and influencing methods used in clinical drug trials. Cultural practices and beliefs of a given community can also greatly influence peoples' perceptions and attitudes towards a particular illness, let alone their medical seeking behaviour. In sub-Saharan Africa, traditional healing is such a common practice and nearly every home practices/uses herbal medicine to cure particular illnesses. Historical precedents have persevered, even amongst elite communities, preferring traditional system of healing to modern treatment in hospitals and clinics. While this behaviour may, to some extent be attributed to poverty and injustice, manifested in the different socio-economic setup of communities, it is also a reflection of the social forces upon which cultures are invented and deeply embedded. The practice of medicine therefore reflects the values and beliefs of a given a society.

However, I should also reiterate the fact that the relationship between society and medicine is complex and ever changing. Whilst biomedical rationality is inherently embedded within the functional matrix of society, its values and practices are sometimes one-sided and independent, and can impact greatly on social values and identities. Recent inventions in science and technology (bio or medical technologies) have greatly influenced and reconfigured the conventional understanding of disease and treatment. Technological innovations in science and medicine have altered the way we think about the human body. Today, diseases can be manufactured, and human physical bodies can be altered. This is attributed to aesthetic surgery and pharmaceutical drugs that are increasingly being used to aid cognitive functions and also change people's bodily identities (Burri & Dumit, 2007). The new culture of facial and body

whitening/blackening, breast enlargement, artificial lips and hips, indicate a shift in social order and identity induced by the new wave of techno-scientific rationality. New trends in science and medicine are also capable of changing people's immune systems, making one more flexible and adoptable than others, thus identifying new forms of social classes (Burri & Dumit 2007).

The common belief that doctors know everything about the patient and what is required to heal is also held universally amongst all health/medical practitioners. But this will further distance science and medicine from the "real" world, and attempt to make it a standalone practice in human sociality. Subsequent to this, will be a range of questions being asked in regards to the independence of science and medicine. If doctors knew everything about the patient, why then is it a common practice in medicine to ask about the patient's disease and healing history before prescriptions are made? What is the cause for the variations in the treatment and healing patterns for people of different cultures and identities?

To claim that doctors know everything about the patient is to ignore the patient's illness and healing experience, which is central in the effective diagnosis and treatment. Patients understand their situation much more than the doctors and it is pertinent that doctors reflect on such experiences before administering any treatment. To compound this argument, I will consider this excerpt;

...Arnella L., age (sic) 64, woke up one morning unable to see or use her right arm. An ambulance was called and she was taken to the emergency room. Her problem was diagnosed as a "light stroke," and, as the hospital was overcrowded, she was sent home in the care of relatives. The attending clinician gave her a bottle of pills; medication, she was told, that she would have to take for the rest of her life. She, however, felt that "that don't make no sense," and discarded the medication. She believed her blood had "boiled up" in her brains – her own fault for eating too much rich food. She then embarked on her own combination of healing strategies. The first of these was to sleep propped up on pillows, as postural change to allow some of the excess blood to drain back into the body. She then began a course of vinegar and honey in hot water (taken daily for nine

days) to bring the excess blood down to a safe level. Finally, she called in her minister to pray for her; she later reported that she "felt the stroke leave" her body when he laid his hand on her head. In any case, a niece stated bitterly, "The doctors didn't do nothing' for her, that's for sure..." (Snow1980: 52 cited in Blue, 2012).

This excerpt demystifies every attempt to regard science and medicine as an autonomous and independent discipline of study. Regardless of their knowledge of medicine, a doctor's ability to make right prescriptions is dependent on their experience of interaction with patients. Patients understand their own bodies much better than their doctors and they play a big role in informing the doctors' knowledge about the right prescriptions.

Such expressions only confirm the inter connection of the social and biological worlds of inquiries. They bring about a new era of socio-scientific knowledge, and lay a platform for sustainable science-society interactions. The main focus of the thesis is to uncover the nature of relationship between technological innovations in antimalarials and people's traditional health practices in Uganda. To achieve a healthy community, we must strike a balance between the preventive social, economic, political, spiritual and cultural factors, and the medical remediation of disease and illnesses. Policy makers must envisage the impact that social forces may cause to the general healthcare sector. Both imbued in the large complex network of human sociality, they inevitably contribute toward the sustenance of each other and should not be investigated in isolation.

3.4 The Concept of Disease, Healing and Coping in Traditional Africa.

The concept of disease/illness is not new in African Traditional awareness. Traditional African societies suffered a multitude of diseases such as gonorrhoea, sleeping sickness, small pox, among others. As Melissa asserts, "...the earliest record of death due to sleeping sickness came in 1373 when a traveller noted that the Sultan of Mali suffered from lethargy, a disease that frequently befalls the inhabitants. European slave traders were aware of the disease and would check for swollen lymph glands in the neck—an

early symptom of sleeping sickness.”(Melissa, 2010:2). But this is not to conclude that contemporary African societies do not suffer from these diseases any more. Transmitted like sleeping sickness, is a new disease in Uganda called “nodding disease.” The disease has affected many people, particularly in the northern region of Uganda. Gonorrhoea, small pox and perhaps sleeping sickness are recurring tropical diseases, though not as common and life threatening as was the case in ancient Africa.

However, it should also be understood that sickness in traditional Africa was such a rare occurrence that was associated with bad omen, curses or simply deviating from the social order built on shared cultural value systems of a given society. Disease and illness had devastating social-economic impacts that did not only affect the ailing/suffering individuals and their immediate families but also the entire community in which they lived. It should be recalled that traditional African societies were mechanical in setup and an individual’s problem was equally seen as a community problem and could compel community empathy in seeking remedy. Preventive healthcare in African societies includes ... “scheduled and mandatory environmental cleaning, avoidance rites to ward off evil forces (human and spiritual mien) as well as constant musical arts theatre that coerces mass participation, annual group spirit purgation music-drama (new year rites), and compound hygiene” (Nzewi, 2002:2) These would all be invoked to heal and avoid recurrence of disease in communities. Similar to modern day western treatment patterns, African traditional societies also involved surgery, dietary therapy, psychotherapy on top of traditional exorcism, rituals and sacrifice (Tasha, 2012).

Disease and illness were a result of malfunctioning of some parts of the social order. The wellbeing of a given society depended entirely on the proper functioning of each and every part of the whole. Like Borromean rings, the moral, social, physical and spiritual aspects of societies were supposed to be interconnected for proper functioning of any given social setting. If any of the rings were separated or pulled out, the deviant could become physically ill or would suffer spiritually. This explains why disease was not viewed as an individual problem but rather societal/community concern ignited by the malfunctioning of one or more parts of the physical or spiritual components of the social

fabric. It therefore called for community rather than individual intervention to create balance between the physical and spiritual dictates of that particular society.

This also implies that traditional African societies believed in both the visible and invisible objects, and human wellbeing depended entirely on the ability to respond positively to the demands of the two different spiritual and physical worlds.

3.4.1 Disease/illness

Distinguished from sickness which is the feeling of not being normal and healthy, disease is conceptualised as a measurable condition of the body (Nkosi, 2012). Many people believe that Diseases may have either a normal or abnormal cause. Diseases such as coughs, fever, stomach ache and headaches are regarded as normal since they appear occasionally in the life of individuals and are easily treated. Normal illnesses are usually treated with modern (western medicine) or traditional medicines (herbs).

The choice of a particular mode of treatment is determined by the affordability, accessibility and social acceptance of that particular form of treatment. Many people agree that normal illnesses are caused by things such as germs, bacteria, bad food, poor sanitation, poor living conditions or environment, among others. However, when an individual suddenly gets unbearable pains for example in the legs, it believed that may be he stepped on some herbs which were intended to harm him. This is considered an abnormal illness. Others still believe that ancestors, evil spirits and witchcraft are the sole causes of abnormal illnesses.

In African traditional setting, it is held that there is always an explanation as to why someone is suffering from a certain disease at a particular time. It could be associated with hatred; that someone through some magical means has inflicted pain and caused disease to another. Ultimately, the concerned parties will always seek an answer by going to a diviner or to a pastor. However, we should also remember that different societies and cultures have different methods of understanding and responding to illnesses, and what is regarded as a right way of treatment in one society may differ in

another community (Chavunduka, 1980). It is upon a given culture to define what is normal and abnormal illness and they are taken as such, even when they don't bear any absolute truth.

People feel that western medicine is able to cure illness but it is unable to get to the root cause of the illness. For example a mosquito bite is the recognised cause of malaria and patients are sent to a doctor/hospital. However for the person schooled in traditional thought the question remains: "Why did the mosquito bite me and not the person next to me?" or "Who sent the mosquito to bite me?" The logical answer for those living in traditional societies is that the spiritual cause must be dealt with before material medicine can take effect.

According to Ayodele (2002), illness revolves around four perspectives: it can be traced to enemies which include witchcraft and sorcery, gods or ancestors, and natural illness and inherited diseases. However, earlier studies by Erinoso (1978) and Oke (1982) have classified the causes of illness into three categories, namely supernatural, paranormal or mystical and natural forces. But they failed to take into consideration the African belief about inherited diseases. In his book, *Magic, Science, Religion and the Scope of Rationality*, Tambiah (1990) takes on a single explanation of the causes of disease and illnesses. Drawing evidence from the Greek tradition, Tambiah is quick to assert that illnesses are attributed to natural causes. He refuses to associate diseases/illnesses with magic or mystical forces and further mentions that whilst early Greece was familiar with the concepts of magic and occult powers, they still could not attach/associate magic with illness and disease.

While Tambiah's explanation of illnesses may be seen in many respects as ideal and standard for understanding disease and illnesses, we should also bear in mind that it is drawn from a European perspective whose value systems are significantly different from those of other regions of the world. I have already intimated that different societies and cultures have different methods of understanding illness which may significantly differ from one another.

3.4.1.1 Causes of illness

From an anthropological perspective, the causes of illness and disease may be traced in social or spiritual domain of a given social setting. Ordinarily, illness may simply refer to unhealthy feeling of the body. The general weakness or that unhealthy feeling is believed to be brought by both natural and unnatural causes. when tasked to distinguish the two (natural and unnatural causes), many people will respond that natural diseases are as a result of poor sanitation or poor living environment and bad feeding habits contrary to unnatural causes that revolve around evil spirits which are either cast by someone else or by themselves. In Uganda today, we witness a lot of religious practices where people claim to be bewitched or attacked by evil spirits and pastors chasing away those spirits or sending them back from wherever they came from.

Among other factors contributing to illness or sickness are punishment as a result of being disobedient to the spiritual forces which include both the spirit of darkness (ancestral) or the spirit of light (Christianity). Drawing more examples from traditional Africa, certain diseases were attributed to the evil planning of certain persons who seemed to bear certain grudges against the sufferer. Among the Yoruba it is believed that the Aje (witch) and oso (sorcerer) can inflict diseases on people through their mystical powers. Apart from these categories of people, certain traditional healers (babalawo) are considered to have the power to cause diseases and also to heal the sick (Oke, 1982). This is not different from the traditional concepts of fear and respect in many Ugandan societies. For instance among the Basoga, there is a common belief that the a *senga* (one's father's sister) has mystical powers and can cause misfortune to her brothers sons and daughters for being disobedient or behaving contrary to the established standards of family/clan setting. But in other circumstances, they may simply act out of hatred and pass out curses that may bring misfortune and illnesses to her brother's children.

Disease/illness or sickness may also be traced to power and the distribution of resources, without ignoring the cultural traditions and beliefs about diseases as elaborated below:

a) Witchcraft and Sorcery

In traditional African cultures, the first aspect associated with the cause of diseases and illness is witchcraft. Witchcraft has been defined “a spiritual practice or act by which forces of darkness are transferred via the spiritual world” (Garretson,1981:139) In other words, witchcraft is the practice of harming others at a distance through magical means; the inherent power to harm other persons by supernatural means either from a distance or other sources. In traditional African societies witchcraft is taken as an everyday aspect of life and thus visiting shrines for divine intervention is not a strange thing. It is regarded by many people as a force coming from sorcery which might be learnt. While Witchcraft and sorcery may be regarded as attempts to invoke the spirits to work harm against people (Ember & Ember, 1985:275), these two practices may imply different scenarios (depending on purpose) in real life situations as will be seen in the subsequent sub-topics. The harm inflicted by witchcraft may result into illness/sickness depending on the intention behind its use. The underlying difference between sorcery and witchcraft is that individuals involved in the use of witchcraft often, employ invisible images in their practices. Witchcraft, according to Ember & Ember (1985:276), is said to cause illness by means of thought and emotions alone.

b) Punishment as a result of disobedience to supernatural forces.

Another significant cause of illness or sickness in traditional Africa was punishment because of being disobedient to the spiritual forces. Societies with strong cultural value systems will always assent that when an individual fails to do something that has been done before by his fore fathers, then that person is a deviant and must be punished by the spirits of his very angry ancestors. We must understand that societies are built on strong value systems where societal behaviour is regarded with utmost reverence. These cultural control mechanisms always define and refine order in society and must be adhered to by all.

c) Ancestor Spirits

The practice of ancestry is one of the most popular beliefs in African societies. Many traditional African cultures believe that there is life after death and that the “dead are not dead” since their spirits continue to linger on earth. The dead are considered as important people of lineage, fathers and ancestors and as a result those who are alive consider them as near and joined together with them in spirit. The practice of appeasing the dead through traditional rituals and sacrifices is thought to bring about fortune and good health. As Ember notes, “when they communicate to the ancestors most people believe that ancestors bring some sort of fortune, prestige and the continuity of their descent group as strongly as the living” (Ember, 1985: 265). Ancestors can equally bring about illness, bad luck and other kinds of misfortunes whenever there is a communication breakdown or disobedience to their demands. There is a common belief that ancestors possess the ultimate powers to punish those individuals who break the tradition and act contrary to their demands and it becomes essential for the living to conduct rituals in honour of the dead.

e) Cultural norms and practices

Culture may be defined as “a system of related values active enough to influence and form perception, judgment, communication, and behavior in a given society” (Mazrui, 1986: 239). Hahn (1995) highlights the role of culture and society in relation to sickness and healing and highlights the use of language in the understanding of illness concepts. The recognition of the role of cultural in health care delivery stems from the need to “question and examine critically the assumption inherent in Western based conventional theories and models, which postulate that health behavior is a-cultural” (Airhihenbuwa & Webster, 2004:5)

In the introduction, we saw that culture plays an important role in medical seeking behaviour of many individuals and it should therefore not be taken at face value. The idea of preferring traditional herbal medicines to western allopathic forms of treatment is deeply rooted in the traditional cultural systems of societies and neither of the

transformational political debates nor coercive measures will easily change the popular cultural aspects of societies. But, in light of necessity (for instance response to a health hazard), behaviour change among the population is still achievable.

According to Nkosi (2012), certain accepted cultural beliefs and practices concerning sexuality contribute to the risk and the cause of illness and sickness.

The recent outbreak of Ebola hemorrhagic fever in western Africa is also a candid example to explain the role of culture in causing and spreading diseases. In Liberia, where the Ebola virus claimed thousands of lives, the “finger of blame” pointed at the cultural value system of Liberians. In his article “Ebola: The Virus of Quick death: the socio-economic implications in Liberia” Romeo D.N. Gbarte (2012) shares how the cultural value system of Liberians can help contain or spread the Ebola hemorrhagic fever. He states:

For our society, shaking hands is a cultural or customary practice...In the rural setting, the people are more homogenous in their practice while in the urban locality, our practice is heterogeneous in nature. Whenever a Liberian shows their hands for greetings and you dis-allow it, it is disrespect and an act of unfriendliness. Sometimes this action will lead to the victim not speaking to you or there will be a palava hut discussion on why you did not speak. Whatever the case is, especially in most cases you will have to apologize for not speaking. Sometimes such a person will be considered a deviant. Now, Ebola has entered the society and violated our cultural practice of shaking hands. Perchance, this disease has introduced a new cultural scenario for the future where we will not be shaking hands easily. What we now have to do is to respect our lives and relax the cultural practice of shaking hands so as to avoid the spreading of the disease. Gbarte (2012).

3.4.2 Understanding Witchcraft, Magic, Science and religion.

As already discussed, there is no definite distinction between Witchcraft and sorcery in African societies. These are usually identical terms, although witchcraft is more of manipulation and sorcery much inclined to black magic. Individuals practicing

witchcraft may aim at both evil and good, in contrast with sorcerers who solely aim at evil. The relationship between magic, witchcraft, science and religion has attracted vigorous debate among several scholars starting with British anthropologists of the Victorian school of thought, Sir Edward Taylor (1832-1917) and Sir James Frazer (1854-1938) to functionalists like Radcliffe Brown, Bronislaw Malinowski (1884-1942) down to modern anthropologists like Evans Pritchard, among others.

The idea of witchcraft, magic and science may not be limited to African societies alone. These generic concepts have been recurrent events in all societies in Africa and the entire world. The generic concept of magic in the form of witchcraft or vice versa, as well as science and religion has got a very long historical backdrop. The early Greeks used or were familiar with words like “magi” to refer to the magician and “Magea” to mean the religion of the magician (Tambiah, 1990:9). What is happening today in the field of traditional medicines, magic and witchcraft is simply a reoccurrence of the past. They still carry the same meaning and they occur almost in equal proportion as they did in the past and this is what Tambiah has termed as continuities in life experiences of mankind.

In Uganda, the extent of belief in witchcraft, sorcery and magic shows itself in forms ranging from media stories such as Nigerian home videos, stories in the Newspapers, adverts on Ugandan radios (Senga's and Jjaja's) of magical infliction of injury and cure of the same. Miracle workers in both churches and other places of worship claiming to chase away demons and psychic powers back to wherever they came from is also an indicator that the belief in witchcraft and sorcery is still rampant. Almost all traditional societies recognise a category of people who are believed to systematically harm those around them or save them by psychic power. The various names given to these people translate as “witches” and their powers as “witchcraft”, sorcery among others.

The idea of witchcraft/magic covers a lot of meanings. Witchcraft is a spiritual practice or act by which forces of darkness are transmitted via the spiritual world (Nkosi, 2012). Individuals who believe in magic and witchcraft will assert that they have intrinsic and

automatic efficacy (Tambiah, 1990). Tambiah has however defined witchcraft in the form of magic as the opposing side of religion. He categorises it as a sin intended to manipulate God and therefore hugely denounced in the bible. Sir Edward Taylor, looks at magical arts as false arts, "one of the most pernicious delusions that ever vexed mankind" (cited in Tambiah, 1990:45). Magical ideas according to Taylor are premised on the principle of "association of ideas" where humanity has continuously failed to distinguish cognitive relations from causal relations. While Evans Pritchard and Bronislaw Malinowski may blame Taylor for postulating a psychological contextualisation of magic and for not recognising that the associations are social and only occur when evoked in specific ritual situations, my own understanding of the vice would be double edged. Looking specifically at my own culture, several associational ideas exist but barely contain any empirical truth and they have remained recurrent events in our cultural awareness.

For instance, while growing up, we were told not to touch our head when a swarm of bees is moving; that if we did, we would develop a bald head. We were not allowed to sweep or sow at night time as these were associated to magic and witchcraft. Interestingly, these are the things we did often and none of the pre-associational outcomes occurred. It would simply be unimaginable to associate touching your head and becoming bald when a swarm of bees is passing. However, there were instances when such connections (association of ideas) turned out to be the absolute reality. Whenever an owl made relentless cries around a given home, it was a sign of misfortune, in most cases death of a relative or a village member.

Taylor will therefore coin magic and witchcraft as "pseudo sciences." Similarly, Sir James Frazer looks at magic as a "precursor of sciences but it was its bastard sister." The two scholars do not directly disassociate magic from science but magical science was rather false science bent on the rhetoric use of "ambiguous phrases, vague diagnoses and predictions such that most outcomes can be retrospectively interpreted as fulfilments" (Tambiah 1990:46). However, when put on a continuum, Frazer maintains that the 2 terms are rather identical in their practices. The magician, just like the modern medical

doctors believes that similar causes produce similar results and remediation follows standard rules set against a particular cause.

3.4.2.1 Magic, witchcraft and sorcery in African societies.

Away from the general contextualisation of magic, witchcraft, science and religion, I also want to give a practical understanding of these generic terms in everyday life practices of an African man. In many African societies, the witch/magician or sorcerer, symbolises evil as much as good which is both feared and respected because he is part of the invisible world and is consequently in contact with spirits (Nkosi, 2012). The witch is both someone who could cause harm, but who also possess special gifts of second sight and healing. In Uganda, individuals involved in witchcraft are always invoked to do so. It is quite uncommon that a witch may harm someone for its sake, but it occurs depending on the purpose of their clients. In circumstances that an individual hates another, they may ask the witch through magical powers to inflict harm onto the enemy, in which case, the witch will be regarded as an agent of evil. In a twist of events, it will again be the witch to heal the individual onto which harm has been inflicted and here we regard the witch as a healer. The bottom line however, is that the witch causes and heals evil. However, the idea of healing evil is not sufficient to distinguish witches from sorcerers because evil practices are actually instigated by the witches themselves. The witch and the sorcerer are both instruments of evil.

In Uganda, witchcraft is only known for bad causes. Ugandan televisions have featured stories of witches confessing to causing rain or dry spells depending on need through their magical powers. Taylor may call such practices “psychological association of ideas” (see Tambiah, 1990), but many instances of the same have been happening across all regions of the country. Under British and other forms of colonial rule in Africa, the practice of witchcraft and sorcery and traditional herbal medicines in general was made illegal and those accused were punished.

While the idea of witchcraft, magic and sorcery is mostly known and associated with evil, the outcome of which inflicts harm to people, and therefore feared in equal

proportions, some writers (Opoku, 2002; Mbiti, 1978 cited in Schmidt, 2005) suggest that these practices may also perform a social definite function that can bring about social order and stability. For instance, the fear to be bewitched often serves to impose a degree of respect within a family. A suspected witch should not be offended otherwise he/she will react with mysterious powers. This again invites us to think that the practices of witchcraft and magic have been harshly misjudged by subjective interpretation arising particularly from christian believers. While they are aware of the empirical results of magic, they are hesitant to believe in them because they have time and again castigated it as false religion.

In Uganda, the belief in witchcraft is culturally cultivated, to the extent that every social happening of negative nature is blamed on forces of witchcraft. This is similar to Taylor's assertion that many unsuccessful diagnoses and treatment of natural illnesses are often misconstrued to be results of strong and efficacious magic (Tambiah, 1990). Witchcraft in all Ugandan societies offers the opportunity to blame others for one's misfortune, sickness or death. It is easy to argue that most people will blame the evil forces of witchcraft for every death in their communities even in situations that the medical cause of sickness or death is well known to the public. For example if a wall was to collapse on an individual and break his leg, a medical doctor can cure it, but he would be unable to explain why the man was standing at that particular place at that particular time and only a diviner could do this. The implication is that traditional African societies have less or no regard for natural causes of illness and death. Natural causes of death such as accidents diseases, war, old age, are well recognised, yet in every case even among some who call themselves Christian, no satisfaction is felt unless an act of sorcery or the ill will of a particular individual can be invoked to explain why this natural cause produced death at that particular time.

According to Chavanduka (1980), witches may be categorised into night witches and day witches. Sorcery is always on a deliberate, conscious, voluntary basis. The practice of sorcery is usually done by "blowing harmful medicine towards victims or by putting

poison in the victim's food, drink or tobacco or by putting the poison or the poisonous objects on a path where the victim will pass" (Chavanduka, 1980: 132).

Witchcraft and sorcery are two different words that carry the same meaning in daily life practices of the great majority of African societies. To crown the discussion on the two identical terms, I have adopted and slightly edited the following excerpt from Schmidt.

The witch/sorcerer usually inflicts harm on personal belongings like hair or clothes in a ritual. Charms may be dug in the ground. Passing over them bewitches the person. Witches also can send animals and seeing or touching them causes a disease or misfortune. Or their spirits visit the victim during the night and eat the soul. If there are tensions in between families of a clan or within a family, witchcraft might be used out of greed or revenge. Other abominable actions of witches are: they avoid company, eat alone, act secretly during night (e.g. witch assemblies and night running), they don't observe sexual taboos (e.g. incest and sex with spirits or animals), turn into animals, make themselves invisible, eat human flesh of recently buried persons, resurrect the dead as their servants, etc. [...] Therefore, Africans watch the graves of their relatives after a burial for some time.

[...] Harmful intentions like hatred, envy, jealousy, lying and evil speech (perverted life-force) originate from there, voluntarily or involuntarily. Especially the evil eye is associated with witchcraft. The victims are harmed or killed just by gazing at them. Witchcraft is inborn, inherited or acquired by contact with practicing witches ... children drink in the witchcraft from their mother's milk (Schmidt, 2005:13).

Like many other writers and scholars, Gregor doesn't make a distinction between witchcraft and sorcery and he chooses to use the two terms synonymously to mean the evil practices of the social misfit loners and killers. In my own thinking, the question of the inevitability of witches/magicians and sorcerers is culturally relative; and highly dependent on the socio-cultural setup of a given community.

3.4.2.2 Oracles

An oracle is a device for revelation. For example, among the Azande an oracle was the most important aspect of their life. The Azande consulted oracles regarding a wide range of things about which they needed information. They asked for guidance in planning a marriage, taking a journey or organising a raid. Depending on their current circumstances or misfortune, they inquired about whether their health will be endangered in the future (Evans-Pritchard, 1976).

In traditional Africa, An oracle was used for judicial purposes. Chiefs would consult an oracle before going to battle. Every accusation that was brought before the chief to solve he employed several people whose responsibility was to assist in the consultation of oracles. It has been said that the Azande belief in oracles and witchcraft is the supporting framework of their entire judicial system (Mair, 1974:221).

It was older men who were likely to have the means to seek counsel from the oracle; this access to information gave them power over younger men. They did not only can ask the oracles about the objectives and behaviors of their communities, but also were always supported in their decisions by the significant authority form oracles, to which younger or poorer men had no direct access, and so could not challenge. (Evans-Pritchard 1937).

3.4.3 Traditional healing practices in Africa.

The recognition of disease and illnesses in ATS, also translated that every society needed to devise means of containing the problem. All traditional cultures in Africa had diverse, yet unique traditional knowledge of treating disease, wielding off demons or giving fortune. Contrary to the popular belief, African traditional healing is intended for good cause and is far different from witchcraft. African traditional healing, based on local knowledge of medicinal plants is the oldest medical science ever, extending between 20,000 and 100,000 years of existence. Traditional healing systems were also evident among the early Greeks. The early development of scientific rationality in Greece did not devour the many types of traditional healers and the strong healing system that earlier existed in Greece. Instead, the Greeks chose to uphold the co-

presence of scientific rationale with traditional healing systems and they both competed as modes of remediation of disease and illness (Tambiah, 1990).

Traditional herbal medicine refers to the various ways used in maintaining good health that existed way before modern medicine started in Africa. The pre-existence of traditional herbal medicine does not outdate its potential in restoring health. Rather, it is the foundation upon which modern medical inventions are crafted. It is this pre-existence that perhaps explains the continuous search for traditional herbal medicines in an era where modern medicines are heavily present in the medical markets of many African countries.

The WHO defines traditional medicines as health practices, approaches, knowledge and beliefs that combine plant, animal and/or mineral based medicines, spiritual therapies, manual techniques and exercises applied exceptionally or in combination to maintain well-being, as well as to treat, analyse or prevent illness.

3.4.4 Ethnomedicine:

In order to understand the field of traditional medicine, it is important that we classify it under the discipline of ethnomedicine in which it is greatly rooted.

According to Inhorn (2010) ethnomedicine is a sub field of medical anthropology that deals with the study of traditional medicine not only those that have relevant written sources, but especially those whose knowledge and practices have been orally transmitted over the centuries. According to Nkosi (2012) the concept ethnomedicine denotes those ethnographic studies that focus on indigenous and usually non-western forms of healing and classifications of disease and illness. Ethnomedicine itself is defined as the interpretation of indigenous concepts of sickness and its treatment. These have already been explicitly debated in the previous discussions but it is still important to reiterate that disease and illness are defined based on cultural values and norms and perception of the cultural causes of illness and treatment.

According to McElroy (2002:4), ethno-medical perspective focuses on health beliefs and practices, cultural values and social roles. According to him, health ethnographies encompass beliefs, knowledge and values of specialists including the roles of healers, patients or clients, the implements, techniques and pharmacopoeias of specialists, legal and economic aspects of health practices and the symbolic interpretation and interpersonal experiences of illness.

African Traditional Medicine according to WHO's Centre for Health Development is defined as, "The sum total of all knowledge and practices, whether explainable or not, used in diagnosis, prevention and treatment of physical, mental, or communal inequality and relying entirely on practical experience and observation handed down from generation to generation" (cited in the Kampala District Traditional Healers Directory, 2005).

Traditional medicine and traditional healers form part of a broader field of study classified by medical anthropologists as ethno medicine (Truter, 2007).

In Uganda, traditional healing is widely acknowledged and the attempt to integrate it into the mainstream healthcare is one of the top priorities of the directorate of research under the ministry of health. Apparently Uganda's health system does not offer adequate quality services to her increasing population and legalising the inclusion of traditional/indigenous medicine as a backup to the dwindling options in the modern treatment would strengthen universal healthcare delivery in the country. Besides, modern treatment options tend to ignore the spiritual needs of people as they lay focus on the mind and physical aspects of illness. It should be realised that the health of African peoples had always depended on the holistic aspect of the mind, body and spirit. The act of traditional healing within a family setup is passed on from one individual to another, from generation to generation. The traditional healer chooses one of his children, teaches him/her the different medicinal plants and their uses, the preparation/mixing of the plants as well as administration of the medicine.

3.4.5 Types of African traditional healers.

The traditional healer is “someone who is recognised by the community in which he lives as competent to provide healthcare by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious backgrounds as well as the prevailing knowledge, attitudes and beliefs regarding physical, mental and social well-being and the causation of disease and disability in the community” (Pretorius, 1994:250.)

Throughout history, traditional healers have been part of the healthcare practices of the great majority of African societies, using rituals and herbal solutions to treat various physical, mental and spiritual disorders of African people. Unfortunately, the role of traditional healers has been dwindling with the emergence of modern ways of diagnosing and treatment of diseases. It is therefore not surprising that many traditional healers in Africa are mistakenly regarded as witchdoctors, far from the true principles of traditional healing. But, even with this state of affairs surrounding the role of traditional healers, modern science has still not offered viable and optimum healthcare options in many poor African societies creating ground for continued consultation with traditional healers. According to the National Council of Traditional healers and Herbalist Association of Uganda (NACOTHA), the proportion of traditional healer to patient is 1:200, compared to doctor patient ratio of about 1:1000.

In Uganda, the National Council of Traditional healers and Herbalist Association (NACOTHA), an umbrella for traditional healers and herbalists has been in existence since the 1990s to not only unite them, but also actively agitate for incorporation of traditional medicine into the mainstream healthcare sector of the country. The cause for incorporation of traditional herbal medicines into the mainstream healthcare system is grounded in the fact that over 60% of Uganda’s population use traditional medicine for their primary healthcare needs.

Since illness and disease is a complex of the body, Mind and spirit, in traditional African sense, a traditional/cultural approach is more complimentary while seeking sustainable

remedies. Traditional healers and herbalists tend to understand the social cultural backgrounds of patients which increases their ability to heal the spiritual disorders of their patients than orthodox physicians. It should be understood that a significant number of illnesses in traditional Africa are conditioned by traditional beliefs. Therefore, it requires a more cultural approach to deal with the invisible. Income disparities, shortage of health facilities, and personnel also suggest that traditional herbal medicines and traditional healers may have a huge complimentary role to the healthcare system of the country. According to the world health organisation, approximately 95% of rural births and about 70% of urban births in developing countries are attended by traditional midwives; an indication that developing countries are yet to develop their healthcare systems to sustainably serve their populations.

However, the traditional healers' society has also experienced a number of limitations that have severely damaged their public reputation and operations. Human sacrifice for wealth is recently on the rise in the country. Traditional healers are asking their clients to sacrifice fellow humans as a quicker way of getting rich. Traditional healers and their clients involved in these dreadful acts have been arrested and remanded but this has not stopped the practice. Similar to the quack/untrained medical personnel who have joined the modern healthcare sector, the traditional medical practice is also grappling with fake traditional healers who extort money from the public under the guise of extending primary healthcare to their clients.

Traditional healers are generally divided in several categories: those that serve the role of diviner (mediums) and those who are healers (herbalists). The diviner provides a diagnosis usually through spiritual means, while the herbalist chooses and applies relevant remedies. (Richter, 2003).

The other type of traditional healers are those who claim to derive their healing power from a range of indigenous African traditions and practices. These include those who claim to have supernatural powers and they claim to communicate with the spirit world and also spiritually communicate with the ancestors.

a) Diviners

This category of traditional healers is the most respected and at the same time, the most feared in the country. Diviners are the most important link between humans and the supernatural. They analyse the causes of specific events and interpret the messages of the ancestors.

Diviners possess occult powers that help in mediating between the visible and invisible worlds or the physical human and the supernatural being. Hirst (1990:99) suggests that while medical doctors deal with the metonymical aspects of illness, diviners deal with it metaphorical effects. It is the knowledge of the known and the unknown, the visible and invisible aspects of disease that accordingly differentiates orthodox medicine from divine pathology. Unlike herbalists, no one can become a diviner by personal choice. Diviners, do not choose to be, but are called on by ancestors. The ancestors call them, and they regard themselves as servants of the ancestors (Pretorius, 1999). Diviners concentrate on diagnosing the difficult conditions.

In traditional Africa, every family or clans must own some ancestral occult powers that descend from one individual to another. The transfer of these powers only occurs when the current servant is either acting contrary to the demands of the ancestors or when he is dead. Ancestors then call for a replacement through a number of supernatural signs that may involve speaking through the living humans, they may cause plagues and in worst scenarios deaths in the event that the affected family is not swift in arranging for a successor. But, it should also be known that while the affected family (ies) may arrange for ceremonies, carry out rituals and other sacrifices, they do not have a hand in choosing diviners. During the ceremony, which is of course punctuated by traditional music and drama, ritual performances and other sacrifices to please ancestors, a diviner is selected whether in attendance or not. The selected person automatically becomes possessed with ancestral powers and can interpret the messages of ancestors. To ascent to this fact, Nzewi notes that:

In some African cultures, a person who will eventually become a healer is supernaturally selected through signs such as sickness. The signs which often result

in strange behaviour or physiological ill health, manifests irrespective of age and gender. When diagnosed, preparing or capacitating the person to become a healer could entail the medico-musical theatre of opening the inner eyes(to receive beyond the commonly visible) or the reception of extraordinary communications (from the supernatural forces) (Nzewi, 2002: 2).

Diviners use divination objects in interpreting/explaining the unknown by means of their mediumistic powers (Pretorius, 1994).

I have already indicated that disease and illness in traditional Africa is a complex of the body, mind and spirit and by use of their divination powers, diviners can see through the human spiritual condition through greater intermediary communication with the ancestors. I have also discussed that many families, clans or tribes in traditional Africa share a common belief that illnesses are a result of spiritual disharmonies (Schulte & Hoffman, 1992) and it requires spiritual intervention to bring about social order. It is against this background that diviners, upon dispensation of medicine, ask their patients to have faith in the powers of ancestors before the medicine can have positive impact on their health.

In Uganda, diviners are locally referred to as “*Basamize*” among the Baganda and Basoga. They usually operate in small grass thatched houses where they assemble a multitude of symbolic objects and instruments that they use in evoking spirits. It is the ancestral spirits through the intermediary of a diviner that provide divination, establish the origin of disorder, and what rituals to perform to bring about social order. Spirits usually ask for animal or poultry sacrifices depending on the severity of the disease/misfortune. They mostly cast out misfortunes, which are particularly believed amongst the Bantu speakers to be as a result of wrath of ancestors, witchcraft or magical curses by superiors in the tribe, clan or family.

Like other private health practitioners, diviners are also accomplished tradesmen. Hirst (1990:157) looks at a diviner as an “entrepreneur who not only works with his hands but renders various services in return for cash.” He combines aspects of the healer, the social

psychologist, priest and the social worker. Consequently many people have wrongfully joined the sector claiming that they possess occult powers with an aim of extorting money from the public. They advertise their services on radios, Televisions and in news papers. This is one of the biggest challenges of NACOTHA, weeding out the increasing number of fake traditional healers.

b) Herbalists

Different from diviners, herbalists are entirely concerned with prescription and administration of traditional herbal medicines. Herbalists have great knowledge of different medicinal plants used in the treatment of different diseases/illnesses. They are ordinary people and they do not possess any mystic or occult powers. They are expected to diagnose and prescribe medicines for every day ailments and illnesses, to prevent and to alleviate misfortune or evil, to provide protection against witchcraft and misfortune, and to bring prosperity and happiness. In the healing practices of herbalists, empirical knowledge plays an important role, as they are able to diagnose certain illnesses with certainty and to prescribe healing herbs for those illnesses (Pretorius 1999).

However, the role of magical powers in the administration and dispensation is not to be underestimated among the herbalist because almost all categories of herbal medicines contain substances grossly pounded with magical powers that define their symbolic meaning.

c) Prophets/faith healers

These are the modern pastors or church ministers. In the process of healing, prophets/faith healers use either prayer, candle light or divine water. In many instances, their patients upon healing become followers/members of the churches to which the faith healer who cured them belongs (Pretorius, 1994). But, this is not always automatic as some patients simply visit faith healers for miracle performances and they return to their churches upon healing. The source of the powers of faith healers is not yet known. While they claim, its biblical powers, critics/analysts insist they use occult powers under the guise of priesthood. Through divination and ministration, faith healers believe that

they can cure illnesses, provided the affected person holds strong religious faith. Faith healing is more connected to Christianity than Islam. Faith healers believe they can cure all illnesses and diseases. Today there are at least half a dozen different denominations of churches in every village in Uganda. Christian church practitioners combine their biblical beliefs in prayer, fasting and vision through the holy ghost and supplementary knowledge of indigenous African medicinal practices.

Another contributing factor to the proliferation of faith healers is the colonial legacy that branded traditional medicine as witchcraft. Traditional healers are still regarded as witches creating a sense of fear and compelling the public to regard them as such. This is one of the reasons faith healers choose to operate from churches, contrary to the ancestral shrines where diviners operate.

Although they may be offering similar services, a patient would rather visit the modern church based faith healer, than a diviner. In his thesis on the Akan people of Ghana, Opoku (2002) mentions that while witchcraft and exorcism lack a theological framework and pastoral considerations, it continues to persist among the Akan people of Ghana in Christianity. He continues to note that “almost all churches in Ghana include exorcist activities, referred to as *deliverance* in their programmes, since failure to do so amounts to losing members to churches that include such activities”(Opoku, 2002:3). The practice of faith healing is simply a response to colonial suppression of traditional healing, replanting itself in the modern day Pentecostal deliverance churches common in all communities in Africa.

In line with the explanation given in this chapter, I can assert that Disease, illness and coping patterns in Traditional Africa are not very different from the modern Africa and industrial societies. To generalise, or provide a purely western perspective of illness and disease in an African setting is not sufficient but rather requires exploration from both applied anthropology and medical point of view, without ignoring the inherent cultural value systems of different societies. Social life meets with different concerns, applications, sensations and practices that require multipronged approaches. This

following chapter discusses not only government western interventions, but also closely looks at the traditional approaches that have over the years been intermittently used in containing the disease.

CHAPTER FOUR: STUDY FINDINGS

Overview:

This chapter forms the empirical part of the thesis and postulates an ethnography that focuses on the socio-cultural essences of both modern and traditional malaria control therapies from the perspective of the experiencers themselves. To increase validity and generate greater insight into the subject matter, I have severally directly quoted respondents.

As already discussed, the purpose of the study was to uncover the socio-cultural essences of malaria control and therapies in Uganda. With over 90% of the nation being highly endemic, malaria is by far the leading cause of ill health and death in Uganda. Yet, interventions by the state, donor community and other stakeholders to contain the disease have only yielded subtle results. The persistent wide occurrence of malaria in many parts of the country can be attributed to poor regulatory policies that often results into the untrained health practitioners, joining the health sector, the high parasite resistance to cheap anti-malarials, high cost of effective anti-malarials, cultural and other religious beliefs of some communities, poverty among others. These multi-dimensional problems cannot be addressed in a single scientific study. Addressing the malaria disease burden therefore calls for quick and drastic innovations that are not only scientific, but also culturally grounded. Ironically, several innovations in biomedicines often do not take into account the social-cultural context of their activities. Research into antimalarials in Uganda has been focussed on issues of drug policy, funds, health workers and treatment guidelines, neglecting the role of culture in shaping people's medical seeking behaviour.

Medical research has largely been hinged on eliciting empirical evidence on the functionality of medical machineries and, drug efficacy, rather than exploring peoples' lived experiences, perceptions, worries and other concerns related to science and medicine. Yet, it is clear to us to that community participation and involvement is central in the success of any community based programme.

From an emic perspective, this thesis aims to understand the socio-cultural essences and meanings of malaria control among the residents of Walukuba Masese (Sub County) Division, Jinja district in eastern Uganda.

It provides an overview of the study area, and its location in the wider Jinja district. It describes the research findings mainly from an emic perspective of inquiry, representing the views and experiences of study participants in their own words.

The use of traditional herbal medicines, which is still a common practice in the most part of the post colonial Busoga and elsewhere in the country also began with the history of mankind in this land. Tabuti (2006), indicates that while the use of modern allopathic medicine has been given great attention and many people in Busoga can now express preference for modern western medicine, a sizeable section of the population in Busoga continues to use traditional medicines in the treatment of various ailments. In her study on the Profiles and outcome of traditional healing practices for severe mental illnesses in two districts of Eastern Uganda, Abbo (2011) also demonstrates that the majority of patients with severe mental illness in Jinja and Iganga Districts use both biomedical services and traditional healing systems. Taking on the same approach, this study sought to understand the socio-cultural essences of modern and traditional herbal medicines used in the fight against malaria in Walukuba Masese Division.

4.2 Research Setting

The study was conducted in Walukuba Masese (Sub County) Division. It is one of the three divisions that make up Jinja municipality. Some of the parishes that make up this division are; Walukuba, Masese, and Masese III (Soweto). These communities are found in Jinja district in Eastern Uganda.

Jinja district is located along the northern shores of Lake Victoria and east of River Nile. It has an area of 767.7sq Km, of which 701.9 sq km is land and the rest (65.8 Sq km) is covered by water bodies.

Administratively, the district is subdivided into 3 counties namely, Butembe, Kagoma and Jinja Municipality. There are 11 Sub-Counties; 46 parishes and 381 villages. Jinja Municipality has three sub-counties and 55 villages. Jinja district is part of the greater Busoga sub-region and is greatly inhabited by the Basoga (people) with Lusoga as their unifying language.

Jinja District is bordered by Kamuli District in the north, Luuka District in the east, Mayuge District in the southeast, Buvuma District in the south, Buikwe District in the west, and Kayunga District in the northwest. The coordinates of the district are: 00 30N, 33 12E. (Latitude: 0.5000; Longitude: 33.2000). (Jinja District Local Government, 2014)

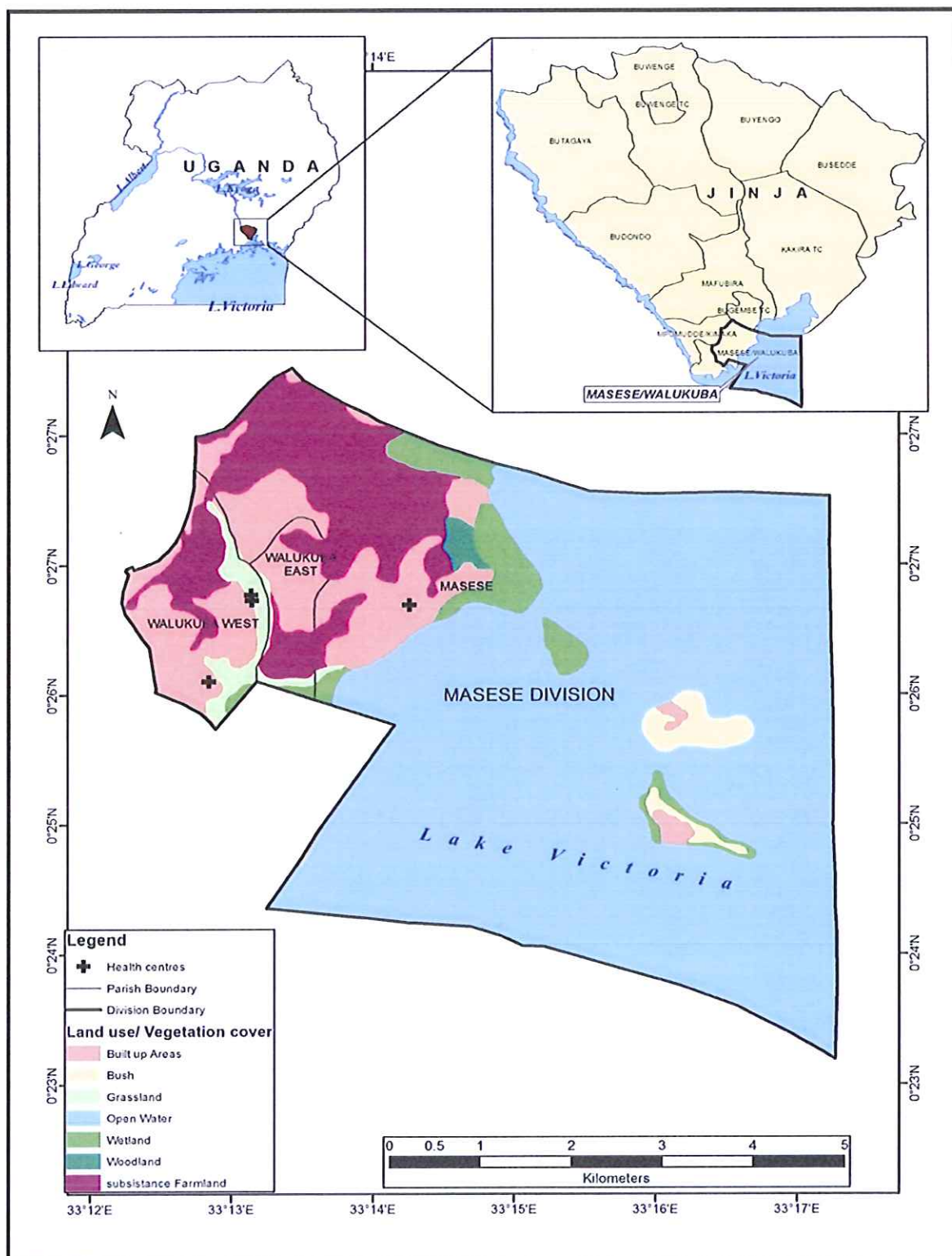


Figure 5: Figure 4 Map of the Study area.

This figure illustrates the location and the social economic activities of the study area. The vegetation consists of thickets, bush lands, woodlands and grasslands. This makes crop agriculture the dominant type of land use in the area. The area is also situated at the shores of Lake Victoria, which makes residents prone to mosquito infestations. The communities of Masese, Walukuba and Soweto are peri-urban communities with both rural and urban forms of settlement. An aerial view of Masese hill shows a highly organised and generally planned elite settlement contrary to the temporary and makeshift houses of particularly fishermen that occupy the shores of the lake and Masese III (Soweto) that is occupied by mainly the hawkers.

4.2.1 Choice of the study area

The choice of the case study was based on five (5) accounts:

Jinja district represents medium-high malaria transmission rates in Uganda (MoH, 2010). With this rate of malaria transmission, this case was sought to have greater knowledge and experience of the malaria disease burden.

The study area consists of a mixed ethnic identity. While the Basoga remain the predominant tribal group in the area, there are also many other ethnicities in the area recognised from the different languages that are spoken in the area. It should be recalled that Jinja was once the industrial hub of Uganda and many people of different tribal backgrounds came to Jinja in search of employment from the lucrative industries. Many industries were located around Walukuba and Masese and this explains the continued diversity in ethnicity among the occupants of these areas. Many of them bought land and assumed permanent settlement in the area. They have continued to stay in the area despite the collapse of industries throughout the 1980s and 90s. The diversity in ethnicity was presumed to enrich the study with divergent views and practices about the malaria disease burden.

There is simultaneous use of traditional and modern medicines in the fight against malaria. And this was envisaged to provide clear insight into the traditional and modern thinking of malaria control therapies in Uganda.

The language factor: to avoid errors that usually arise from language disparities, I chose a case study whose language I fully comprehend.

Proximity: The 3 communities neighbour each other and political administrative boundaries are almost blurred. To avoid confusion that would arise in locating boundaries, I widened the scope of the study to involve all the 3 communities.

4.2.2 Malaria situation in Jinja district.

Secondary data collected health department of Jinja district indicate that malaria is one of the most reported cases among the OPDs in hospitals and other health units. It is most prevalent in children below the age of 5 and it affects them more than any other diseases recorded in the district. Tables 5&6, illustrate the malaria cases reported among the OPDs in the financial year 2012-2013 and 2013-2014 respectively against other infectious diseases recorded in the area.

Despite several nationwide interventions to contain the malaria disease, it still stands out as the leading cause of hospital attendances in Jinja district. About 339691 malaria cases were reported in the financial year 2012-2013, and a total of 275609 cases were reported in the financial year 2013-2014. While results indicate a decline in the number of malaria cases reported by approximately 10%, when compared to other infectious diseases, malaria cases are still the highest recorded. This also implies a general decrease in all the diseases and not only malaria cases across the district. By the time of compiling these study findings, the index for 2014-15 had not yet been released to determine the consistence in the reduction of malaria cases in the district.

Table 5: Malaria cases in the financial year 2012-2013 recorded against other infectious diseases.

Data element	(0-4 Years, Male)	(0-4 Years, Female)	(5 and Over, Male)	(5 and Over, Female)	0-4 Years	5 and Over	Male	Female	Total
Diarrhea - Acute - OPD	8736	8830	5492	7533					30591
Diarrhea - Persistent - OPD	642	654	340	484					2120
Ear Nose and Throat (ENT) Conditions - OPD	1871	1917	4909	7098					15795
Ophthalmia Neonatorum - OPD	107	139							246
Other Eye Conditions - OPD	3491	3774	11313	14794					33372
Urethral Discharges - OPD	51	33	1414	1316					2814
Genital Ulcers - OPD	53	64	932	1823					2872
Sexually Transmitted Infection Due To SGBV - OPD	6	8	935	1598					2547
Other Sexually Transmitted Infections - OPD	66	76	3867	10586					14595
Urinary Tract Infections (UTI) - OPD	872	1043	8295	14754					24964
Intestinal Worms - OPD	9221	9850	14333	22362					55766
Leprosy - OPD	11	14	24	35					84
Malaria - OPD	57465	59569	86716	135941					339691
Other Types of Meningitis - OPD	123	7	15	16					161
No Pneumonia - Cough or Cold - OPD	40191	41578	57190	88701					227660
Pneumonia - OPD	6093	6192	5091	8425					25801
Skin Diseases - OPD	6278	6738	10368	13435					36819
Tuberculosis (New Smear Positive Cases) - OPD	48	69	591	525					1233
Other Tuberculosis - OPD	11	31	373	256					671
Typhoid Fever - OPD	48	58	1251	2033					3390
Tetanus (Over 28 Days Age) - OPD	1	2	8	2					13
Sleeping Sickness - OPD			3	108					111
Pelvic Inflammatory Disease (PID) - OPD				11108					11108

Table 6: Malaria cases in the financial year 2013-2014 recorded against other infectious diseases.

Data element	(0-4 Years, Male)	(0-4 Years, Female)	(5 and Over, Male)	(5 and Over, Female)	0-4 Years	5 and Over	Male	Female	Total
Diarrhea - Acute - OPD	9291	9261	5128	7144					30824
Diarrhea - Persistent - OPD	617	722	1340	847					3526
Ear Nose and Throat (ENT) Conditions - OPD	1598	1748	4760	6707					14813
Ophthalmia Neonatorum - OPD	49	52							101
Other Eye Conditions - OPD	3068	3369	10993	15294					32724
Urethral Discharges - OPD	69	50	1525	1098					2742
Genital Ulcers - OPD	18	48	1032	2353					3451
Sexually Transmitted Infection Due To SGBV - OPD	25	26	292	374					717
Other Sexually Transmitted Infections - OPD	132	144	3795	10028					14099
Urinary Tract Infections (UTI) - OPD	936	962	8284	15190					25372
Intestinal Worms - OPD	9966	11198	15811	26605					63580
Leprosy - OPD	36	28	77	123					264
Malaria - OPD	43578	46099	71830	114102					275609
Other Types of Meningitis - OPD	144	156	182	408					890
No Pneumonia - Cough or Cold - OPD	36838	39537	54794	87960					219129
Pneumonia - OPD	5123	5355	4280	7207					21965
Skin Diseases - OPD	5739	6045	9014	11509					32307
Tuberculosis (New Smear Positive Cases) - OPD	6	21	599	459					1085
Other Tuberculosis - OPD	12	9	758	546					1325
Typhoid Fever - OPD	63	52	1586	2299					4000
Tetanus (Over 28 Days Age) - OPD	1	1	24	12					38
Sleeping Sickness - OPD				110					110
Pelvic Inflammatory Disease (PID) - OPD				10641					10641

4.3 Daily life experience of living with malaria in the Target communities.

4.3.1 Knowledge about malaria.

To generate adequate and reliable data about the socio-cultural essences of malaria control therapies, it was important to first understand the extent to which study participants expressed knowledge of core concepts of the study. The malaria disease burden is widely known and recognised as a major threat to health if the patient does not receive adequate and timely health care intervention. Across the 3 target communities, the majority of study participants knew that malaria is caused by mosquitoes. Such participants had *Neem* trees planted in the compounds to act as mosquito repellents. Few misconceptions about the causes of malaria were recorded during the study. Some respondents indicated that malaria disease burden is most prevalent during harvesting periods. They mentioned maize, beans and mangoes as the main cause of malaria and the situation gets compounded during the rainy season. Another small section of the study participants lacked knowledge of the difference between the causes and prevention strategies for malaria. They indicated that malaria is only transmitted when one does not sleep under a net. While they knew that sleeping under an insecticide treated mosquito net would protect against mosquito bites, they did not express any knowledge that mosquitoes cause malaria. However, much as they could not distinguish between preventive and causal factors of malaria, this category of respondents still expressed some knowledge about malaria.

4.3.2 Malaria signs and symptoms

Study participants expressed sound knowledge of the signs and symptoms of malaria. The most frequent signs and symptoms mentioned by study participants included headache, high body temperature, vomiting, joint pain, general body weakness, shivering, diarrhoea, running nose, cough, loss of appetite, dizziness, yellow eyes, dehydration, sour mouth. Most of the signs and symptoms mentioned were for fever, an

indication that participants are yet to distinguish between fever and mild or non complicated malaria. But this could also be blamed on the national malaria policy and treatment guidelines by the Ugandan ministry of health. The introduction of home-based management of malaria by the ministry of health required all patients to receive appropriate treatment with artemether lumefantrine, specifically coartem upon experiencing any signs of fever. This similar mode of treatment for fever and malaria is one reason participants were not able to separate the two distinct health problems. Nevertheless, every participant at least mentioned one sign of malaria that is recognised by the World Health Organisation and the Ugandan ministry of health.

The study also discovered poor knowledge about the signs and symptoms of severe/complicated malaria among participants. In all the 3 target communities, none of the respondents mentioned any signs and symptoms of severe malaria.

4.3.3 Primary interventions to malaria case management.

Study findings indicate a lack of swift and timely response to malaria signs and symptoms. As already reported, malaria signs and symptoms are regarded much the same way as those of fever and often neglected in their early stages. My observations show that children are the most vulnerable and they do not receive adequate and timely health care when affected with mild malaria. During the study, I observed many children with, fever, rapid breathing, irritability, drowsiness, chills, flu among others, yet they were not receiving any health intervention.

While some conditions could be attributed to poor nutrition especially in the shanty suburbs, the possibility that they were not receiving adequate health care also added to their state of vulnerability. When asked whether they render any health support to children in this state, some parents mentioned that it was a kind of natural state that every child goes through and they did not have to give them medicine or take them to hospital for treatment. Other parents noted that they bathe themselves and the children with traditional medicines whenever such signs and symptoms surface.

The majority of respondents mentioned the use of paracetamol locally known as “panadol” as the immediate, primary intervention to suspected malaria cases. In fact some of the respondents who mentioned the use of traditional medicine also intimated they would rather use it synonymously with panadol to quicken the relief process. Panadol is a pain relief pharmaceutical product for headaches, joint pain, back pain, fever among others.

Above all, the study observed that self medication with either traditional or modern medicines or both, dominates the primary health care interventions within the study area. Medicinal plants such as *Ekigaji, Moringa, Kafunya, Mufuwanduzi, Namuvu, the Neem, pawapaws, oranges, and mango trees were in compounds of most of the respondents*. No single respondent mentioned consulting a traditional healer or a health practitioner but reported to respond to suspected malaria cases themselves through self medication and when situations become severe, they seek medical help from the health facilities in the area.

4.3.4 Knowledge of Traditional herbal medicines for malaria Control

Treatment with herbal medicines is one of the most common health practices in Uganda. Regardless of one’s socio-economic status or education background, majority of Ugandans continue to be guided by the cultural and religious aspects of their lives. Traditionalism still shapes people’s understanding of diseases and the desired response to contain it. Some communities will even consider traditional medicine as their first line treatment for malaria as opposed to western/ modern medicines. Traditional medicines are used to treat malaria by at least 80% of people living in malaria endemic parts of Africa. Findings from this study portray a similar situation about traditional herbal medicines for malaria control. Results indicate greater knowledge and acceptance of traditional herbal medicines for treating malaria in Uganda. Majority of the study participants agreed that they have some knowledge about traditional medicines for malaria. Each of the study participants could mention one or more categories of plant or tree species commonly used for malaria control. The most frequently mentioned species included kigaji or kikaka (Aloe Vera), Neem tree, Lubirizi/ mululuza (bitter leaf),

Bukaala (blackjack), Namuvu (chenopodia), Ovacado leaves, Mufuwanduzi, Kafunya, Mango leaves, Moringa, Kalaza/Nalongo among others.

A part from these tree and plants species, respondents also noted that all edible shrubs and plants with a bitter/sour taste are potentially useful in controlling malaria.

While many respondents agreed to having knowledge about THMs, there was still a small section of respondents who denied having any knowledge about the traditional herbal medicine for malaria control. These were mainly the young people and those who have not spent a lot of time with their elders. Some respondents who claimed that the use of herbal medicine in the treatment of ailments is a practice of the poor and the uneducated or simply members of the lower strata, seemed not to have knowledge about the THMs. The great majority of respondents who expressed knowledge about traditional herbal medicines had actually practiced or used the medicine in the prevention and control of malaria.

While the use and practice of traditional medicines for malaria was widely acknowledged in the 3 target communities, majority of participants indicated that they use it for relief rather than curative purposes. In case a patient did not show signs of recovering from the symptoms of malaria or fever, they would rush them to the nearest health facility. This group of respondents do not use modern medicines until the patient's situation worsens. They claimed that mixing medicines (traditional herbs and modern drugs) was dangerous to the life of the patient and they would rather stick to one form of treatment.

Despite the large number of participants who fall under this category of users (herbal medicine for relief), there were still segments of the population who had never used modern medicine in the treatment of malaria. This category of respondents had been using traditional herbal medicines for treatment of various ailments, not only malaria. They believe traditional medicine is more efficient and therefore much reliable in a local setting than modern medicines. Mr. Solomon Wambi (real name withheld), a seasonal labourer in Soweto community planted in his compound a variety of medicinal plants

used in the treatment of various diseases. For the case of malaria, he uses a mixture of Nalongo, lubirizi and Kalaza and with his family, they never seek malaria treatment from modern health centres. He further noted that the mixture of Nalongo and Kalaza produces a very sour solution and highly suspects that “quinine” the all time recommended drug for severe malaria is got from a mixture of the 2 plant species. Another respondent intimated that traditional herbal medicine is so effective in containing malaria and that he has never taken his children to any health facility whenever affected by malaria. The practice of traditional herbal medicines in the 3 target communities is fully explored in the section of coping with malaria

4.3.5 Knowledge of modern/western malaria control Therapies.

The invention of ACTs and more specifically AL drugs followed a decline in the efficiency of monotherapy drugs as first line treatment of malaria in Uganda. Consequently in 2006, ACTs particularly of AL category drugs were made available in all public health units. The different categories of AL drugs on the Ugandan markets include coartem, Doucotexin and Artefan. While Doucotexin and Artefan are not commonly found especially in public hospitals, the former (coartem) is widely acknowledged and distributed in all major public hospitals and health units. The brand name “coartem” as locally known across the country is more less a household name among the study population. Ironically, the gross awareness of this drug doesn’t match with its availability and accessibility among the study population. Despite efforts to make these drugs available and accessible in all public hospitals and health units, the popularity of Artemether Lumefantrine drugs has remained low in the country. The village health teams have also not done much to sensitize locals about the availability and use of these highly effective drugs in the fight against malaria.

While the use of coartem was popular among participants in Masese, Walukuba and Soweto, study findings indicate very low levels of knowledge of other ACTs such as Doucotexin, and Artefan as the recommended first line treatment for mild malaria. Asked about their knowledge of any modern malaria control therapies, study participants always mentioned the conventional drug resistant antimalarials like chloroquine and

fansida. There was also great knowledge about quinine (oral and injectables), a conventional highly effective drug used in the control of severe malaria. Almost all study participants expressed knowledge of coartem as the recommended first line combined therapy against non-complicated malaria. On the contrary, there was scanty knowledge about other ACTs used in the treatment of non complicated malaria in Uganda. Some participants mentioned panadol as their preferred treatment for non complicated malaria cases.

Study findings revealed that coartem is the most recognised and widely known combined therapy among the participants. Majority of the respondents expressed knowledge of coartem in deep contrast to only 7 respondents who were able to at least mention one other category of ACTs. In general however, there was wide knowledge of drug resistant monotherapy drugs as opposed to combined therapies. Even with the ever increasing malaria parasite resistance to chloroquine and other monotherapy drugs, the study found out that these drugs are still being used in the prevention and control of malaria in the target communities. Over half of the respondents noted that chloroquine is still their preferred choice, although some of them would prefer Artesunate in cases of severe malaria. Quinine, the recommended treatment for severe malaria is also widely known and a relatively large number of respondents expressed knowledge about the medicine. Artesunate the new preferred drug in treating severe malaria was still relatively new to many respondents and most of them still mentioned Quinine.

To deepen my understanding of the existing antimalarial drugs, I visited a few private drug shops and one public health centre within the study area.

I found out that chloroquine monotherapy was actually banned by the government and no longer distributed and sold in both private and public health centres centrally to earlier primary data gathered from respondents who intimated that they use chloroquine for treatment of mild malaria. Other monotherapy drugs like fansida, quinine, were in stock in both public and private health units and are still prescribed by doctors and pharmacists for treatment of mild and severe malaria cases. Artesunate was also available in Jinja Regional Referral hospital.

4.3.6 Coping with malaria.

The idea of falling sick and coping with the sickness/illness can be both distressing and traumatising. Traditional ways of coping in many Ugandan rural and peri-urban areas are characterized by, and based upon, high levels of mutual support not only by the patient's kinsmen, but also the entire neighborhood and community. The word "healing" that is mostly inclined to traditional treatment with both herbs and spiritual forces is used in this study to denote both individual and collective healing mostly at the family level. Some practices described in the study have an emphasis on healing individuals from their illnesses while others focus on the healing of the entire family. Yet in many instances, as already described, aspects of healing among individual patients, family or entire community are intertwined and addressed much similarly. As evidenced in this thesis, traditional ways of coping usually extend beyond the world of the living and require consultation and reconciliation with the spiritual world. This also implies that different individuals and segments may hold different beliefs on the appropriateness and application of traditional approaches of disease control.

We have already discussed in the preceding chapters that the response to malaria disease is usually not as swift as the case with other incurable diseases like HIV/AIDs and this puts many malaria patients in such a complex situation of living with this rather neglected yet highly dangerous tropical disease.

In this section, two modes of data collection were employed, that is one modelled on the ethnographic idea of participant observation, and another on narratives from the experiencers of the malaria disease burden themselves. In an effort to understand the experiences in their fullness, I have directly quoted several scenarios that are poised to depict the exact picture of everyday life experiences of living and coping with malaria in the relatively remote and low income zones of Ugandan societies. To protect their identity, I have used different names to refer to these respondents.

It should be understood that throughout history, humanity has responded quite differently to diseases and illnesses; there seems to be no standard progression of disease among patients. Whilst, some of the conditions of coping with malaria presented in this study may crosscut life experiences of different patients, many still, are unique to particular individual patients. I have chosen to portray the situation as experienced by a given patient irrespective of the overlapping expressions; after all, it is such invariant expressions that make the study more consistent and valid.

These narratives depict the daily lives of these people. When faced with illness, worries come in, and of course plans to cure the illness and thereafter the prevention of future occurrence of the disease follow. Some try out the native medicine, and if they feel better, they remain satisfied believing that the herbs have truly worked. Others may start with the local herbs then after sometime; seek the modern treatment from health facilities. Some of the respondents sought the modern medication without trying out the local herbs because they lacked knowledge about the efficacy of these herbs and how to prepare these herbs. Those who used local herbs asserted that they still rely on the knowledge passed on from elders. Below are some narratives of how the diverse/multicultural target population respond to the malaria disease burden.

a) Dreams and illnesses: Separating cognitive from causal relations

Chapter three overwhelmingly discussed the concept of disease and how it is approached particularly in African societies. Edward Taylor may downplay the “principle of association of ideas”, arguing that humanity has simply failed to distinguish cognitive relations from causal relations. But Evans Pritchard and Bronislaw Malinowski adopt a different stunt, demystifying the psychological contextualisation of magic and recognising that the associations are social and only occur when evoked in specific ritual situations. In the same chapter, I portrayed my experience of the cognitive and causal relation as double edged. We cannot completely eliminate the psychological meaning of the situation, the same way we cannot deny the causal relations that have gradually emerged and become part of everyday practices of certain societies. Human bodies are

physical bodies, comprising of both bio-energetic and bio magnetic fields. It is part of the physical setup of human beings to communicate with the environment and ideas conceived through dreams may not necessarily be psychological but they are rather socially construed. The following excerpt gives us the local interpretation of the principle of association of ideas as experienced by some of the study participants.

Namusoga, as she is locally known is 56 years old and a single mother of three children she fends for her living through charcoal vending at the Masese landing site. She had a dream last night in which she was feasting and merrymaking with family and friends. A lot of meat was served and drinks were in plenty, she said. When she woke up she was worried because such dreams indicate that something bad would happen either to her or any member of her relations. The following day, she set off to work following her normal routine. She was however not the usual jolly Namusoga known for her jokes and always dancing to the local music played by a music vendor at the nearby kiosk. She felt sleepy, weak and dizzy. She was visibly not feeling well. Her major worry was the dream she had last night and she feared that the worst was yet to come. She requested her friend to look after her business as she rested in her kiosk. At around 3:00pm, she had a fever and was shivering unceasingly, surely the dream was being fulfilled she thought. She was unwell as she said; *“omubiri ghonaghona mumenefumenefu, ndhi nga mukube waidho, omutwe ghona gunuma.”* Meaning “the whole body is painful and I feel like I have been beaten the whole body” A friend suggested buying for her some painkillers to relieve the pain.

Action taken

The following day, she did not go to work. She instructed her sister to prepare herbs of olubirizi, kapanga, kafunya, neem, ekigajji and orange leaves. She boiled some and others were mixed for her to bath. She drunk these herbs and the following day she felt a bit relieved of pain than the previous day. A friend however advised her to seek medical help besides taking the local herbs. She listened and went for a medical check-up. It was discovered she had malaria. She was given anti-malaria drugs and some painkillers. It was then that she intimated to us about her fears of the sickness and its association with

the dream she had. But results from the laboratory had proved her wrong; she then thought the sickness was due to the long hours she spends under sunshine, and the maize of the new season she had eaten the previous three days.

When we look at this scenario; the lady felt eating maize of a new season, and spending long hours under sun shine would cause malaria. She therefore vowed not to spend long hours under sunshine, and also minimise on the maize she eats at the onset of the harvest season.

From this excerpt, we see the principle of association of ideas take centre stage in Namusoga's experience of living/coping with malaria. Dreams are powerful agents of communication in the Busoga tradition and they are never treated casually. It is commonly held that dreams that involve feasting usually lead a negative ending to one self, family or community and Namusoga's dream was in line with this common belief among the Basoga. According to Namusoga, she became ill; as a result of the dream she had the previous night. The point here is the dream did not lead to her illness but signalled that something wrong was going to happen. We also learn that dreams are culturally relative and one may need to be part of a given culture to be able to interpret dreams.

b) Symbolism and the interpretation of disease.

The principle of association of ideas can further be explored using the magical experience of symbols. Symbolism is one of the most important sources of knowing. Throughout history, traditional healers and herbalists have relied on nature and earthly symbols to learn many things about healing and treatment with traditional medicines. The scientific explanation to these social realities is that human souls and spirits are sometimes manifested in plants and animals respectively and this is the reason animals are able to communicate different realities about human beings. It is for this particular reason that birds and animal sacrifices are made in almost every processes of healing.

In ethnography, we contend that different aspects of culture can influence people's ways of living, directing them to do what they feel is right. To illustrate the influence of

symbols and their magical art of prediction of events, I will adopt the experience of Kasakya, a munyole by tribe and hailing from Budumba. He resides in one of the densely populated areas of Kibugambata. He is married with two children. There are two big trees in his compound. One night he heard a voice of an owl and he got up as it is the custom amongst his people to scare off the owl by throwing towards it a lit piece of wood. This is accompanied by words; *twala ebisirani byo awandi, nkulinaku buzibu ki mwojjo*; meaning take away your bad omen; what grudge do I have with you?" The next morning at about 6:30 am, one of his children started crying endlessly. Kasakya was worried; he got out of the house with much anger and had thoughts and feelings of cutting down the trees that attract such birds into the compound.

His wife was also worried; she was afraid something wrong would happen to her daughter. While cleaning the vomit waste, she yelled at the children indicating clearly a voice of a worried and concerned mother who was wondering what could have happened to her daughter. Her husband meanwhile was seen gathering leaves of different plants such as kafunya, eibombo, and Namuvu. He ordered his wife to pound and mix these herbs into water for bathing their unwell daughter. She did what she was instructed making sure no one could step into the water poured away.

Burning Feathers of different kinds

Burning feathers of different birds to control Okwesika and Nyonyi (coldness) "convulsions and seizures", is what happened at the Kasakya's home. This was done after bathing the baby with the local herbs. The child stopped crying and the body cooled. The father got a sigh of relief; he exclaimed; *haa, bano abantu babaire bakwita mwana wange; mazima bamusindikire bulwaiire bwe nyonyi; "e yawee" tobona omwana yesika? Naye mukisa musa mmaitee obulezi bwa kyo.*

Meaning "ha, these people were aiming at killing my child; in fact they have sent him the disease of the birds; "locally called "yawee" (Nyonyi). "Are you not seeing the child having seizures and convulsions"? He asked. Lucky enough I know the solution to this problem". At about 3:00pm, the temperature rose, fever set in and the child was crying

unceasingly. At 4:00pm, she began having seizures, and convulsions, He then instructed the wife to go into the house and prepare a piece of broken pot to place the feathers; he had a collection of feathers brought from the village because he knew his children were prone to “receive diseases”¹ sent by his enemies. At 7:30 pm, the mother sat on the mat and while carrying the baby she was covered by a bed sheet. The father placed the feathers on the piece of the broken pot “*olujo*”. The burning piece of charcoal was placed on the feathers. The mother and child were covered making sure no smoke would escape. This induced sweating and for about 15 minutes, they uncovered them. The child was sweating, the temperature had cooled.

However, the child’s situation was not good the following day. His neighbour advised him to boil leaves of neem tree, mango leaves, orange leaves, olubirizi, kafunya, and Namuvu. The contents were covered; the mother and child were advised to sit as they had done during the burning of feathers. The contents were uncovered and that they inhaled the steam for the hot contents. She sweat profusely and the child was heard sneezing and crying. The vapour would surely cure her, the father exclaimed. Other contents were put in the bottle for her to drink a tea spoonful twice a day.

Kasakya’s experience of managing malaria was purely traditional and was greatly influenced by his strong belief in magic and other socially constructed relations in which human kind is fully embedded.

c) Meeting the two cats and falling sick

Symbolism can also be illustrated using the experience of the two cats at the cross roads. Among the target population, cats are regarded with negativity and are usually associated with demons and other sorts of evil. They usually carry negative message and people do not want to associate with them. Nebanda is a munyole hailing from Buswale, Butaleja district. He is 49 years old, married with five children. He is a casual labourer at

¹ Receiving diseases was a loose word implicating that each disease occurrence among the banyole was sent by someone not in good terms with you. It could be sent either through an owl or through a dream. After the dreaming or seeing the owl, one would get the disease sent to him by his/her enemies.

BIDICO oil refinery industry located in Masese. He treks from home to work daily. In the evenings, he usually gathers with friends to enjoy the local brew and “*kill off the day*²” at *Dadi’s pub* with friends. On this particular day, while returning home, he met two cats at the cross roads. He felt like he was losing hair off his head. He developed goose pimples and his heart beat increased. He thought something bad would happen to him or one of his family members. Being a Wednesday, a day known to be of bad omen and misfortune among his kinsmen, he feared for his life and that of his family³. He continued on his way home but declined to share that incident with anyone at home not even his dear expectant wife.

After two weeks, things seemed to be well and the daily routine of life continued. However early one day, he woke up as usual to go for duty, but his wife informed him that she was not feeling well. She felt lower abdominal pains, fever, nausea, backache and general body pains. He intimated “when my expectant wife complained of not feeling well, I just remembered the day I met two cats at the cross roads. Among our people it is a sign that something bad would happen. I now realized that it had come true today.”

He was worried, hurried off to the work place to seek a day off so that he could seek a solution for his wife. Meanwhile he instructed her to bath in the herbs he had brought from his relative nearby. He on the return bathed with the same herbs and regretted why he had not done so on the night he met the cats at the cross roads. This is because according to their custom, when one meets such an incident, there was a special herb that he must use to cleanse off those bad omens before entering the house. Nebanda had not done this so he was worried and he knew and this was the source of all the illness his wife was feeling.

Action taken

² “Kill off the day” means the gatherings they have every day to drink the local gin together. It is a loose word to mean passing time together.

³ Felt like he was losing hair from the head; and loosing energy from his body, all indications culturally that something wrong would happen

The following day, Nebanda went to one of his kin, staying at the neighbourhood and explained to her the problems of his expectant wife. This lady never hesitated. She hurried off towards a thicket besides the road. She collected Olubirizi, *Namuvu*, leaves of *omusambya*, *ebirowa*, *eibombo*, *akambula* and *kafunya* for Nebanda to take home. He was instructed to pound these herbs and put the contents in a basin for the wife to bath. Some other contents made of olubiri, namuvu, eibombo were prepared for her to drink. Nebanda's wife felt well for just two days. The following day, she started vomiting and she became pale and weak. The man explained that these herbs would help cure the sickness, give the wife more strength and help to cleanse her for the bad omens aimed at hurting her.

However after two days, the conditions of Nebanda's wife worsened, she started vomiting, was pale and generally weak because she had even lost appetite. Nebanda was confused, he kept ringing the village people to seek some advice and seek for more herbal collections that would help cure the illness. It was at that moment that his neighbour, a Village Health Team (VHT) member got concerned; he instructed Nebanda to take his wife to hospital or else he would face arrest by the police, or even lose his wife to death. The VHT gave him a referral letter which was marked as a passport to help him not wait for long at the hospital. Blood test for malaria, and haemoglobin estimation and other confidential tests were done.

The laboratory results revealed that Nebanda's wife had severe malaria. She was admitted and put on malaria treatment for four days. After discharge, Nebanda explained that he thought his wife was bewitched because of the cats he had met at the cross roads. He thanked the VHT who helped take his wife to hospital.

When we look at this narrative, we realize that Nebanda's mind dashed to thoughts of witchcraft and bad omen probably by someone who did not wish him well.

It was however noted that he was accommodative, and accepted the advice of the VHT. He was health educated about the dangers of malaria most especially to expectant mothers. He was given a treated mosquito net and advised to always seek professional

medical help whenever he is faced with such situations in his family. He was grateful for the services he received and vowed to always seek medical help from the hospital besides taking the herbs whenever he or any of his family members was unwell.

d) Malaria due to witchcraft

We have already seen in chapter three that in most of African societies, illnesses are associated with witchcraft. There is a reason as to why someone falls sick and witchcraft is always the explanation. The situation is even more exacerbated among the Azande, where every death is associated to witchcraft and means to avenge it are sought along the same line. The following excerpt presents an interesting narrative of mixed conceptions about the cause of the child's illness. Matovu, is a teacher by profession and has four children. One of the children called balondemu is ever sickly. The onset of the disease is mild always, then it progresses until he begins urinating blood like urine while the whole body becomes pale. The father said; "*tidhi kyatuka kumwana wange; oba bamusamba, oba bamuloga nze niwe titwidhi*" meaning I do not know what happened to my son, I do not know whether he was kicked by friends while playing or he was bitwitched. He asserted that the illness always begins with high body temperatures, then urinating yellowish urine and eventually the child becomes weak. In managing the illness, he prepares a collection of *enkakale* to cure the yellowish eyes, and to clear "the blood like urine". He also prepares a solution of emubwa, (a clay like mould dissolved in water to help cure the blood like urine).

He however recalls one incident when his son fell sick, he tried out his herbal collections but the child was not improving. His colleagues who had come to check on the sick child advised him to take the child to the hospital. He took the boy to Jinja Regional Referral Hospital, where he was diagnosed with severe malaria associated with the enlargement of the spleen. He was managed well. Matovu contented that he had delayed to administer the herbs on time so the disease condition worsened. In this narrative you may realise that though the boy's father had mixed conceptions about the cause of illness, he still managed to treat it locally. Such thoughts of witchcraft come in because some

disease conditions are not the normal ones we are used to he said; so you may think it is witchcraft yet it is an onset of omusudha or any other illness.

e) Malaria among the twins and its linkage with forces of ancestral spirits.

The birth of twins is regarded by many as a huge blessing. Twins are seen as a special omen issued by the higher sky god. Among the Basoga, the birth of twin children presents a number of cultural meanings and it is therefore punctuated by rituals and other ceremonies to extend gratitude for the gift of twins. Ceremonies extend beyond the couple and their kinsmen to involve the entire community who sing traditional songs and praises to their gods. The community will praise the parents by singing of a number of songs during their initiation rites that praise both the mother and father. These songs by the community members are intended to let everyone know that Isabirye (father of twins) and Nabirye (mother of twins) from their own village have given birth to twins, and everyone must celebrate because it is a sign that the gods are happy. Twins are regarded to enjoy close relationship with ancestors and they enjoy a lot of privilege from their parents over other children. They are believed to connect directly with the ancestors and they are not supposed to be mistreated, lest they invoke the wrath of ancestors to punish the family and entire community.

Sickness among the twins presents the most frightening moment for the parents. The connectedness of diseases and evil ancestral forces is borne whenever a twin falls sick and remedies are sought in the direction of appeasing the gods to quell any misfortunes that usually lead to ill health. Isabirye Salongo is a Musoga residing in Soweto I. He is a married man aged 44 years. The youngest children aged 4 months are twins. One night one of the twins was crying continuously. This was a sign that she was surely not feeling well. The father was heard at about mid-night calling out this child's name, asking her questions. *"Babirye, obaire ki, ani alikwetta. Bakuleke, ye anhi akuniziza? Waama sirikawo; abo abenda okutwala obwire buno babi. Bana mumuleke.*

Meaning; "Babirye what is wrong, who has annoyed you? Who are those who want to take you at this time of the night? They are wicked people. They want to take you at this

time, let them leave you alone.” After about one hour, the child calmed down and the night was back to normal.

In the morning we were curious and anxious wanting to know who Mr. Isabirye was talking to. After exchanging the greetings and showing empathy, I asked him who he was talking to. He laughed loudly calling me a modern man who did not know tradition. After calming down, he explained that according to their culture, a child most especially a “*twin*” cannot cry unceasingly without a cause. In this case, he thought the ancestors wanted the child and so the crying signalled her intentions of not wanting to join them. Talking to them cooled the situation as the child went back to sleep peacefully” he asserted. The other interesting aspect however was that the fevers were still on and the child looked pale and weak. We all kept on wondering to see what Isabirye was to do next.

Action taken

The child still felt weak, and the fevers were still high. He instructed the wife to collect herbs called *Mufuwanduzi*, and *Namuvu* and to squeeze the herbs and bath the baby with these herbs. Other contents were given to the baby to drink. A piece of *Mufuwanduzi* was tied around the waist. This piece of the *Mufuwanduzi* herb was to protect her from future occurrences of the disease.

The child was also bathed in warm water, and then a cloth was soaked in cold water to massage her. This is called tipped sponging in medical terms. It was actually a first aid treatment to help reduce the body temperature of the baby and it surely worked thus increasing the chances of survival of this child. The child stabilised and looked to be fine as the mother continued to administer the herbal contents. After one week, the child’s condition worsened. She was weak, pale and had fevers, with high temperature. The child was taken to Walukuba Health Centre three on instruction of one of the Village Health team member.

A blood slide to check for malaria was done. The child was diagnosed with severe malaria and anaemia. The malaria parasites had destroyed the red blood cells. She was

admitted for three days; it was interesting however that the herb tied around the waist was not tempered with. The mother explained that it was a protection against the disease called “nyonyi/okwekanga/okuzinduka⁴”. The child was diagnosed with severe malaria and low haemoglobin content. In other word she was anaemic. She was given first aid treatment then referred to the children’s ward of Jinja Regional Referral Hospital; commonly known as Nalufenya. The man was hesitant to go to this place as he explained; *“I wish I had money, I would not go to that hospital; I do not know why the ancestors are testing me like this; that place is always congested and more than two babies share the same small mattress; you are at most times asked to buy syringes, and medicines; it is like taking my child towards a grave”* he said.

During the treatment, the mother was asked to mention the causes of malaria. It was good to note that she knew it was spread by a mosquito, and is associated with vomiting, flue and high fever. She actually called it omusudha. She however could not mention signs of severe malaria.

However, she even knew how to prevent (Omusudha) malaria as she contended that it was through sleeping under a treated mosquito net. She also mentioned that herbs such as Mufuwanduzi help to prevent future occurrences of the disease. She also said burning dry pieces of the Christmas tree helped to repel off mosquitoes from the home.

⁴ Nyonyi /okwekanga, okuzinduka, is convulsion associated with severe malaria that child may present with.



Figure 6: Isabirye's wife with her daughter Babirye; on the wrist is tied a herb called Mufuwanduzi; the same is tied around the waist. These are to prevent her from getting infected with the illness called nyonyi

f) Malaria as a result of punishment by ancestral spirits

It has been discussed in chapter three that ancestral spirits can also be sources of illness. Many traditional African cultures believe that there is life after death and that the “dead are not dead” since their spirits continue to linger on earth. The practice of appeasing the dead through traditional rituals and sacrifices is thought to bring about fortune and good health. As Ember notes, “when they communicate to the ancestors most people believe that ancestors bring some sort of fortune, prestige and the continuity of their descent group as strongly as the living” (Ember, 1985: 265). Ancestors can equally bring about illness, bad luck and other kinds of misfortunes whenever there is a communication breakdown or disobedience to their demands. There is a common belief that ancestors possess the ultimate powers to punish those individuals who break the tradition and act contrary to their demands and it becomes essential for the living to conduct rituals in honour of the dead.

Societies with strong cultural value systems will always assent that when an individual fails to do something that has been done before by his fore fathers, then that person is a deviant and must be punished by the spirits of his very angry ancestors. We must understand that societies are built on strong value systems where societal behaviour is regarded with utmost reverence. These cultural control mechanisms always define and refine order in society and must be adhered to by all. Whilst understanding the wrath of ancestor in situations of deviance, for different reasons, some people will still not pay homage to their forefathers. To illustrate this persistent belief system, I will adopt the experience of Jurugo, a 56 year old gentleman hailing from the West Nile region. He is married with six children and he relocated to Jinja to work at the Nyanza Textile Industries (NYTIL). His day begins at 6:30 Am in the morning when he sets off for duty across the Nile River.

On one Wednesday, he did not come back on his bicycle as he usually does. He was brought by a Boda Boda motorist because he was not feeling well. He felt dizzy, had joint pains and weak as he said "I feel dizzy, I see the world rotating, and even the trees are moving. I feel pain all over my body and I feel like a person who has been beaten terribly. Even my joints and bones are painful." These were descriptions of how he felt. One may wonder what was going on in his mind, because he was worried; thinking of what had gone wrong, what the cause of the pains could be as he said, "I do not know what is wrong, but I have taken long without visiting my ancestral home. They think I do not want to visit them; even if I call them; they do not understand and they think I am just stubborn yet in reality I have no money to spend on that long journey" I did not attend four burial ceremonies." He felt the home people could be talking awful words about his delay to visit them and this could be the cause of the dizziness and general body pains he was feeling. He had not attended four burial ceremonies. According to his custom, this was a true sign of alienation from his kinsmen.

He therefore deserved the punishment thus the feeling of joint pains, dizziness and general body pains were all signs of being punished by his ancestors.

During that night he gathered his children and wife and while still lying on the bed, with some difficulty and pain told them of his intentions to return to his ancestral home. He felt these pains would no longer attack him if he was amongst his kinsmen.

What he did

The other interesting aspect of Jurugo's narrative is that he had fevers, joints pains and chills; all indicative of a malaria infection. He however drove his thoughts first to the village, he asserted; "these could be signs of another disease but I have also taken long without visiting my people." He collected leaves of tress namely, the mango, pawpaw, oranges called (neem), the real Neem tree leaves, mixed with the Lubirizi leaves, and pounded these leaves in a motor before boiling. He drunk the water formed after boiling the pounded contents.

It was after this that he began feeling better. All efforts by the wife to take him to hospital were futile. He only took some panadol after a long persuasion by the wife.

It seems the herbs had some medicinal content that helps to treat malaria like symptoms, because after two days, the gentleman was feeling better and ready to resume his duties at his work place. He never had thoughts of malaria and he knew he was a strong man who cannot be put down by "simple malaria"⁵. The thoughts on his mind were that his ancestors were punishing him.

In conclusion to this narrative, you may realize that Mr. Jurugo was probably suffering from malaria, but because he never had a medical check-up as it is often among people of his age, he never got any chance to know what he was suffering from. We may as well note that his thoughts rushed to the village, thinking he felt ill because he had taken long without going to the village. The food for thought is that when faced with an illness, one will look for the probable causes, seek treatment for this illness and of course think of remedies of not falling sick in the future.

⁵ Simple malaria is a loose translation indicating that malaria is not a serious disease to make one bed ridden

As for Jurugo, he went back on his feet determined to save enough money that would aid his travels back to the village, to appease his ancestors. Remember he had intimated to us that it was because his ancestors were angry with him that he felt all the general body weakness.

g) Okusumika: Mixing human blood in herbal medicine to heal malaria symptoms.

Loosely translated, “Okusumika” is the practice of cutting one’s forehead with a razorblade to allow blood flow and reduce on the headaches. To illustrate this practice, I will use the experience of Otim who felt unwell and his thoughts dashed to things he had been eating. I have already indicated in the theoretical framework that some people think the malaria disease burden is rampant during harvest season. They thus attribute it to things like maize, mangoes, beans and other seasonal foods and plants. My interaction with Otim, a resident of Soweto also depicted similar experience that malaria cases are recorded highest during harvest periods. But we cannot rule out the possibility that the timing of our interaction particularly with Otim could have also influenced his response. The interview was conducted in June, which usually marks the onset the harvesting season. Otim resides in Kibugambata; a highly congested area of Soweto. One day Otim was not feeling well as he said: *“Ebiliibila akuwan kere, akoik da eriebi, araibo emayebe lo anyamit eong bian, amatarit adere obar. A pak ya abu eong eyam emudungha dodo a wola da ejai,”* meaning I feel general body pain, even my stomach is aching, I wonder if it could be due to the mangoes I ate yesterday, I also took some local gin this morning. The previous day I ate some roasted maize. All these worries and thoughts point to one aspect. He was looking for possible causes to the illness he was feeling.

He felt eating items such as the mangoes, the roasted maize at the beginning of the harvest season were all the causes of his illness. He collected mango leaves, orange leaves, and Neem tree leaves and boiled. He drunk the contents and at night other herbs were boiled. He sat on the mat covered himself with a bed sheet then they slid the

covered saucepan towards him he opened the lid and inhaled the steam from these contents and he felt better. The following day, he still had severe headache, he called his elder brother residing in Masese II and informed him of his condition. The brother came with some small brown bottle and a new razorblade. He instructed him to sit on the stool and made three sharp cuts on the forehead. He let the blood drip into the herbal contents of the bottle.

When asked about the procedure, his elder brother explained that their ancestors used to do the same thing whenever they felt severe headache. The bleeding helped to reduce headaches. The bakene also do the same procedure and it is called *Okusumika*. It helps reduce severe headache. After doing the above procedures he felt better. In conclusion to the above narrative, Otim felt well and he trusted the efficacy of the herbs and the procedure to reduce the headache.

When headache is so strong, unbearable, the veins of the head show more on the head. It is when the elders would think the person had so much blood so they had to drain off some blood to reduce the headache. Two or three incisions were made on the visible veins at the sides of the head. They would prepare a sharp instrument like a razor blade; they would insert a burn piece of bark cloth or dry leaves of maize; these were used to warm the bottle. When the cut was made, the warm bottle with the hot back cloth or the dry maize leaves was placed on the cut. The hot or warm temperature would aid the flow of blood into the bottle. After sometime, the patient would feel relieved, and the pain would subsidize.

The cutting of the visible veins of the head would release blood thus helping in relieving terrible headache. Terrible headache was an indication that the individuals had a lot of blood which was causing the pain, so draining off some would relieve the pain. When Otim severe headache; his brother told him that he had too much blood so some blood had to be drained off to relieve the pain. The piece of bark cloth or the dry maize leaves never had any healing effect. It was however believed that the warmth of the bottle would help to drain the blood.

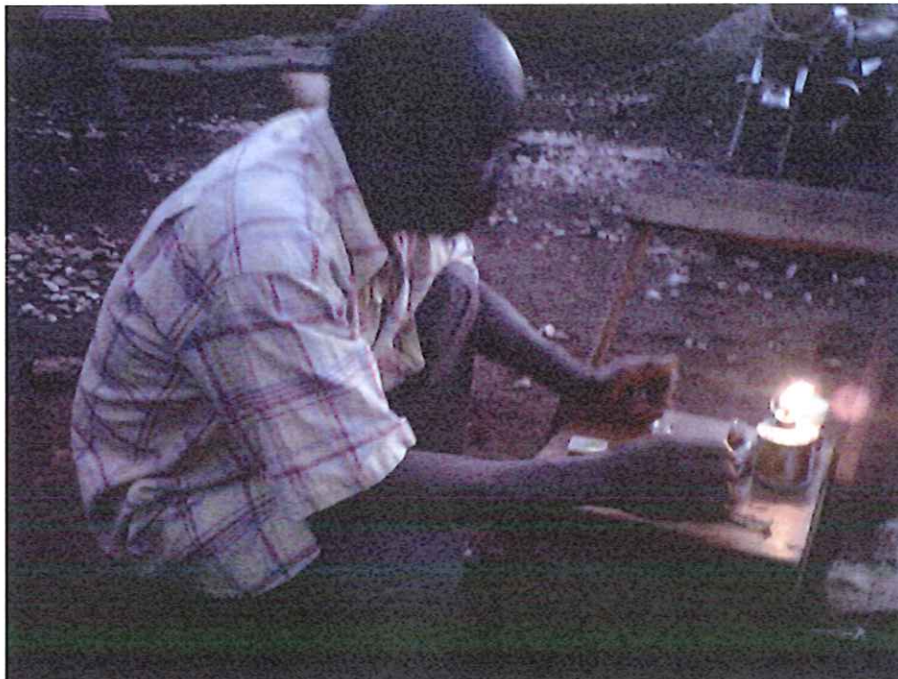


Figure 7: Otims' brother inserting the burning leaves of maize into the bottle.



Figure 8: The warm bottle being inserted on the cut (incised) spot



Figure 9: Used bottles, inside is the mixture of ash and blood

He however felt the illness was due to probably the local brew he took, the maize or the mangoes because it was a new season. After three days, his situation was not much better; he bought more (Panadol) pain killers but was advised by the wife to seek medical help from Walukuba Health Centre IV. He was a bit hesitant because he felt there was a lot of waiting at the health Centre and probably the drugs were not there. With much persuasion, he went to the health Centre and was he was diagnosed with malaria. He was given anti malarial drugs and advised to take enough fluids.

He followed the instructions but he never completed the dosage because he felt he was much better because of the local herbs.

h) Tipped sponging to lower body temperature of malaria patients.

The study discovered that tipped sponging is one of frequently used means of lowering the patient's body temperature. It's a local health care practice that is neither attached to the traditional nor moderns forms of treatment. Yet it is generally accepted and practiced frequently as a primary response to the malaria disease burden. High body temperature causes a lot of unrelentness, ruthlessness and a feeling of frustration to both children and adults, as well as patients and patient attendants. As already seen in this chapter,

high body temperature is one of those early discomfoting signs that one could be contracted with malaria and tipped sponging presents quick relief in such situations.

To illustrate this mode of coping with malaria, I will use the experience of Akello and her sick child called Jimmy. She is a Langi by tribe aged 33 years, hailing from Amuru district, northern Uganda. She is a single mother who fends for her living by sorting grains such as maize, groundnuts and beans from Kazimungi, a semi-industrial centre in Jinja town. She is a single mother of three. Her youngest son called James is one year old. Her day usually begins at 6:30 am when she wakes up to prepare some tea for herself and the kids before they set off to school while she also goes for her duties.

Today however, this daily routine did not take place. At night the whole neighbourhood heard “Jimmy” as he is always called cry all night. In the morning, Akello did not send her children to school and the normal routine did not take place. She was not jolly, did not even turn on her radio to listen to morning programs of the local stations.

She was restless, shouted and yelled out rudely to the other children to stop playing and shouting for her. The fact is those kids were not shouting but it seems it was the frustration of the crying jimmy that made her do this

Jimmy kept crying, refused to breastfeed, was restless and did not want to be covered with any cloth. We observed Akello soak a cloth in cold water then use it to wipe the naked jimmy. This is called tipped sponging in the medical terms. While doing this, jimmy vomited and continued crying. Akello was restless as she said; ***“I gave this child panadol two days back and the body seemed to cool but I wonder what is wrong. Let me just take him to the hospital.”*** At about 8:30 am, Akello set off to a nearby kiosk and shortly came back with a new exercise book. After dressing up Jimmy, she yelled out instructions to the other two kids then set off with jimmy on the back. She went to Walukuba Health Centre IV, where blood was taken off and laboratory results confirmed she had malaria.

The unrestlessness, the yelling and sign of frustration were all indicators that Jimmy was not probably feeling well. The tipped sponging, the vomiting and continuous crying

were all indicators that Jimmy was ill. Later at about 1:00 pm, Akello came back with some items in the hand but looked tired. When we talked to her, she said, her baby was sick and that is why she was restless, frustrated and acted similar to a confused person. She really had a lot of worries because as a single mother, she knew that when illness strikes, it means spending money, not going for work and thinking anything such as death can strike at anytime. She was equally frustrated by the long waiting time at the health facility as she said. *“If I had enough money, I would have gone to a private clinic”*. It can be clearly seen that no one wants a loved one to be unwell. Being a single mother, she had to act quickly to have her diagnosed and treated.

She was given anti malarial drugs; (Coartem) a dosage for three days. She had to schedule when to take the child for treatment and this affected her work schedule.

As a measure of controlling the future occurrence, she asserts that the child and all other family members should sleep under a treated mosquito net. She was instructed to clear all stagnant water in her compound, advised to slash the bush around her house and to keep hygiene. In this narrative we can see that Akello knew her son was unwell and the only solution was to have her checked by medical experts. She also did what she was instructed to do. She had knowledge of the signs of onset of malaria, and because of her lack of knowledge of the traditional medicines; she went to the health facility for treatment.

We also realize that our economic, cultural and educational background can influence the things we do. Akello took Jimmy to hospital because she did not have any knowledge of using indigenous medicine to treat any illness. She also knew the health Centre was not far away from her home so she had to use it.

i) Playing in the rain and its association with malaria

Playing in the rain is a common practice in many rural areas in Uganda. It is usually a cheerful moment for especially children to play in the rain. Yet it also puts them at risk of contracting fever and other malarious symptoms.

Adopting Emukule's experience, we reveal the interconnectedness between playing in the rain and the malaria disease burden. It might have been missed in the causes of malaria, but playing in the rain may have adverse effects that could result into someone contracting the disease. A resident of Masese II, Emukule usually begins his day at 7: 30 am after taking some breakfast. This morning things did not go on as usual as he kept at home the whole day. This made us wonder but we kept observing to see what had gone wrong. He was not the usual jovial Emukule, well known for his strong laughter. He kept on answering back greetings from neighbours hastily. He was restless, and you could clearly see a worried man, seated with one hand supporting the cheek.

After about 30 minutes, he asked for his jacket signalling that he was feeling "*cold*" on a hot day. He sat on the stool for another 20 minutes before requesting for a mat so that he could rest under the mango tree besides the house.

He was covered with a blanket and no one dared to disturb him. The whole compound was in a cheerless mode with calmness. It was clear that Mr. Emukule was unwell and every member was unhappy because of the situation.

The action

Emukule was worried, he thought of possible causes of his being unwell. He said that he walked in the rain the previous two days. This could have been the cause of the sickness. He instructed his wife to look for the leaves of the neem tree. She cleaned and boiled the leaves. She gave him a cup to drink. Another collection of mango tree leaves, leaves of oranges, and lubirizi were mixed with the leaves of neem and boiled. When it reached boiling point, she covered the contents, prepared her husband and covered him with a blanket. She then put the saucepan with its contents besides him and covered him. She removed the cover of the saucepan, allowing the steam of the boiled contents hover over him. He sneezed, and began sweating. She uncovered him, hoping to do the same procedure in the evening. After three days of this treatment, Emukule was back on his feet. He asserted that this was the same medication his ancestors used because there were no hospitals.

In the same way basing on the knowledge about its efficacy and preparation passed onto him by his elders, he uses the same whenever he experiences signs of coldness, joint pains and general body weakness. **He said he did not prefer the modern medicine because there is a lot of waiting in the hospitals and in any case, you are again instructed to buy some of the medicines.**

He felt the sickness was due to the rains and the coldness. He resorted to putting on jackets whenever he was doing his business. He avoided being rained on and advised his children to do the same so as to avoid being sick. We also observed him shouting at his children who were playing in the rain to come back to the house.



Figure 10: Children of Emukule playing in rain. He yelled at them to stop playing in the rain because they risked falling sick.

Similar to Emukule's fate is the experience of Komuhimbo. She lost her grandmother and had to travel to the village as tradition demands to attend the burial of her relative. During the funeral it rained heavily for two days. As tradition demands, the relatives had

to make sure all burial arrangements were in order. This meant walking in rain and staying in the cold. After the burial she had to travel back to Jinja to resume her duties and business. After one week she felt sickly, lost appetite and was having nausea.

As a “modern”⁶ person, she went to a clinic to have a blood check up. She was worried; and wondered what would have caused the sickness. After the blood checkups, she was told she had malaria. Her thoughts dashed to the situation she was in during the burial of her grandmother. The rains and cold weather could have surely caused the sickness. She was wondering, asking herself, “what could be the cause of the malaria”, could it be the rains, the long journey, the fatigue or the change of water I was using.

Komuhimbo sought for medical help from one of the private health units in Jinja town because she had an insurance card. Besides she felt there were a lot of inconveniences like long waiting hours and lack of some drugs in the public hospitals. She was given medication and after finishing treatment she purchased a heavy jacket to avoid being rained on. She also became cautious of the cold weather. She started avoiding walking in rain. This would prevent her from being ill.

Nabirye a resident of Masese II also shared the same experience of contracting fever whenever it rained. She is a widow and fends for herself by selling a small kiosk put up by her son. When asked what she does if faced with any illness, she asserted that the common illness that disturbs her whenever it rains, or on the onset of the harvest season was “*omusudha*”⁷. She said; “*omubiri ghona ghona guluma, me ghayokyerera, ate nga nempewo eriku*”; meaning the whole body aches, and it becomes hot. When she experiences such symptoms, she goes off behind her house where a lubirizi plant and neem tree stand. She plucks off some leaves from these trees, pounds them then drinks some little. She contended that whenever such symptoms arise, she prepares the herbs

⁶ Modern in this regard is showing that unlike the other people in our research, she sought a medical checkup besides having her worries indicating that her sickness was not only due to fatigue, rains or drinking water. She wanted to know what it was medically.

⁷ Omusudha is a flue like illness associated with fever. In reality some related it to malaria

and takes. she takes at least a cup of these contents in two days. She also explained that the neem tree acts as a mosquito repellent, because mosquitoes cause omusujja.

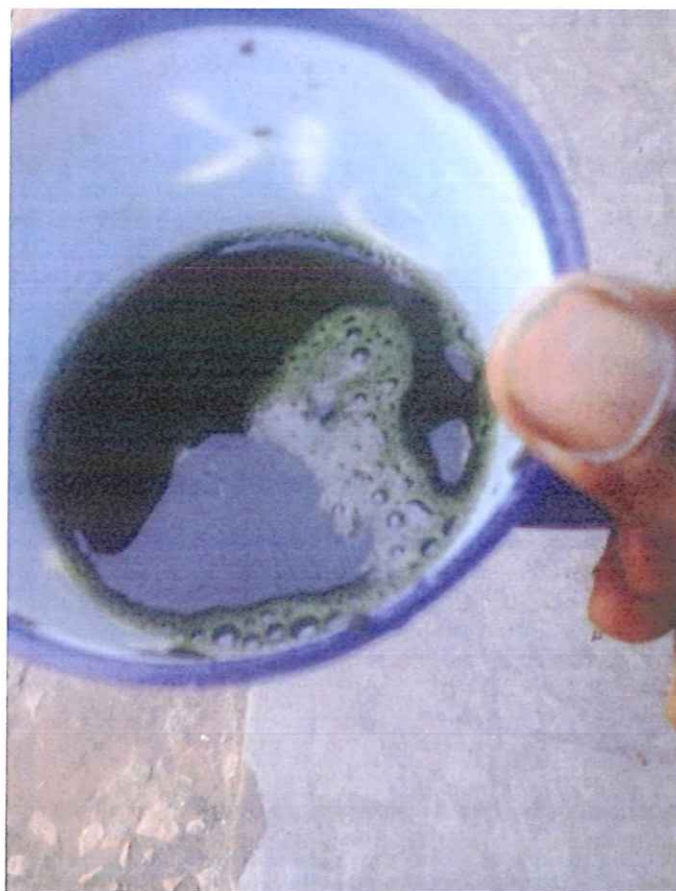


Figure 11: olubirizi plant and its extract

When asked how she acquired the knowledge on how to prepare these herbs; she laughed then slowly she explained that she received the knowledge from her parents but she also used to escort her grandmother to collection a variety of herbs to cure, headache, diarrhoea, and to cool the body temperature.

In summary, this narrative depicts two similar malaria situations that were approached differently because of the divergent social and economic situations of the experiencers. Because of his strong connection and belief in the practices of his ancestors, Emukule is pleased to take on the health care practices of his ancestors and he is glad they work for him. On the other hand, Faced with similar causes and conditions, Kyomuhimbo rushes to the health centre and she becomes healed.

j) Mixing traditional and modern medicine for malaria control

Nantume is 86 years old and stays with her son at Mairo Mbili village. She is a Mugwere by tribe. She has had two operations due to hernia; one in 2001 and the other was in 2005. She was always cautious of her health and thus had a restricted diet following the doctor's instructions. She had been well for a long time and was happy as she chatted with her grandchildren. Her son "exchanges greetings" with her each morning before setting off to work⁸. On ordinary days, after exchanging greetings, he sets off to work. On this particular morning however, the old woman did not feel well. She complained of headache and strange things happening to her as she said; *tindi kusa be, omwoyo guyuga gulyotti gutaka kuvamu; amaiso nomutwe byonna bitujja butujji; omutwe guyuga nomubiri gwonaaa gulyoti muntu mukube. Abantu mubyeru balikwizanga okuntwala*" meaning am not feeling well, my heart is painful rotating like it wants to pop out of the body; my eyes are painful; my head is rotating ; the whole body is aching and some people dressed in white are coming for me."

⁸ Exchanging greetings means the morning greetings to know how the each other slept and how they were feeling. It is a sign of responsibility to a kinsman or any other person

After listening to her story, he remained squatting; shaking his head wondering what this could be. He realized his mother was unwell so he cancelled his duties of the day. It was a calm mood, children were sent away and it was only neighbours seen drifting into the house to greet her and wish her well. Her son was wondering what the cause of the illness would be.

He bought some painkillers (Panadol) for her to swallow, at about ten in the morning; she was bathed by the granddaughter; given some breakfast and taken to the hospital. She was treated clinically for malaria and given hypertensive drugs as well.

When they arrived back home, she asked her daughter in-law to collect leaves of olubiri (lubirizi in lusoga), namuvu and kafunya. She requested her to boil these herbs and prepare them for her to drink.

She started feeling better and after two days her son resumed his duties. She continued bathing the local herbs, and drinking the herbal contents. Her son was however more strict on taking medicines given by the medical personnel at the hospital. She therefore had “mixed” treatment that is the herbal and modern medicines.

When we look at the above narrative, there were not thoughts of witchcraft from the son of Nantume; but when we look at the signs of illness, Nantume felt there were some people dressed in white coming for her. Her son said they were illusions, but she felt it was ancestors calling onto her. That is why she had to bath using the herbs and also prepare some for drinking. When we look at this narrative we certainly see that a modern individual, Nantume’s son sought modern medication probably because of his level of education and having stayed in town for a long time. The mother however had the cultural perspective believing that the herbs would work better. The mixed treatment therefore was due to mixed intentions and probably the trust that both medications would help.

k) Consultation with elders.

The cultural importance of elders is the platform upon which strong societal values are built and preserved. Whilst the role of elders is diminishing in many western societies

because of the co-figurative transformation of their societies (where the young and the old have to learn the new social order side by side, their indisputable wealth of knowledge is still treasured in many societies in Africa. In Uganda, like elsewhere in Africa, elders are respected and trusted as mediators, facilitators and vast reservoirs of knowledge and wisdom. The next narrative is of Namulondo who is a teacher by profession working at Kisima primary school. She felt unwell while pregnant. She began feeling unwell in the last trimester of the pregnancy. It was a first pregnancy so was anxious and always consulted some elderly women in case she felt unwell. In this particular month, Namulondo was unwell, felt weak, and had chills and flu. She took some paracetamol to relieve the pains. The situation however worsened; her eyes were yellowish, and she felt fatigued.

When she consulted an elder, she was informed that she had developed an illness called *enkaka*. The elderly lady promised to collect herbs and prepare some medicine for her. The herbs were from a plant called *enkakale*. She was instructed to mix the roots of this herb in milk then drink the contents. She drank this medicine for a week. After one week her situation was not all that good. Another elderly lady advised her to pick flowers of *omusambya*, boil and drink the contents. "These contents from Omusambya helped clear the yellowish eyes and I felt a bit better", she said.

Due to her condition of pregnancy, she was advised by her fellow teachers to seek modern treatment. She went to Mpumudde Health Centre IV because this was where she was receiving antenatal services. Her blood sample was taken to the laboratory; the blood slide revealed that she had severe malaria.

She was admitted for four days while on malaria treatment. When we look at this scenario, we realize Namulondo works in an environment highly infested with mosquitoes.

When she felt unwell we would probably all expect her to seek treatment from the health facility. She however consulted the elderly women thinking it was a reaction of the pregnancy that had changed her eyes to yellow.

She was advised to sleep under a treated mosquito net, put on long clothes while at the island. She was also advised to spray her house two hours before sleeping with mosquito repellents. Namulondo was also advised to always seek medical help from the hospital besides relying on the herbs.

While Namulondo was not cured by the herbs prepared by the elders, it is evident from her excerpt that she felt some relief after using the herbs. The experience points to the intergenerational and interdependent nature of African societies, where human being has got a role to play in the sustainable maintenance of their families and larger community as well.

I) Education and the loss of ancient values and customs.

This scenario is of Bakumbaine, a fourteen year old orphan staying with his grandmother. He studies at Bupadhengo primary school. When he fell sick at school, he was given some medications. We however did not get the details of the medication because she had no documents. After three days the boy's situation worsened so he was discharged from school to seek medical treatment while at home. He was pale, bleeding through the nose and his eyes were yellowish. At Jinja regional referral hospital, a malaria test was done but was negative; his haemoglobin estimation was low so he was admitted and transfused with compatible blood.

One aspect we have to remember however is what happened at home when the boy was brought from school. Due to fear of being reprimanded, by hospital personnel, the grandmother had refused to talk of the local medications she had given Bakumbaine for two days. With much persuasion, she accepted to share with us what she did. She was advised by a colleague to prepare roots of enkakale, pound and boil then mix with milk for the boy to drink. She contended that the medication surely cleared the yellow colour from the eyes. She also conceded that it was the medication her parents had showed her when she was a child. It treated illness related to omusudha (malaria) and enkaka.

“It is because of education that these herbs are losing meaning”, she said. The boy was also treated “clinically⁹” and was thus put on malaria treatment. She was advised to always seek medical help because she had kept the boy on herbal treatment for two days yet he was bleeding through the nose. He thus developed anaemia.



Figure 12: Bakumbaine beign checked for Malaria and Haemoglobin estimation at a private facility

Being a widow she asserted that she was unable to foot medical bills at the hospital and besides, there are no drugs often at the public health facility. She therefore had to devise ways of managing her grandson. That is why she had to prepare the look herb to treat the paleness and the yellowish eyes. It was undoubtedly the intervention of the Non Governmental organization, supporting the boy with school fees that he was taken to Jinja Regional Referral Hospital and thereafter to the private health facility, where he was managed for anaemia and malaria.

When we look at the above scenario, Kyakuwaire never delayed at home. She rushed to hospital because she was afraid the worst would happen to her daughter. Besides, she was alone in the house with the children because the husband works in Busia.

⁹ Clinically is treatment based on symptoms and general appearance of the patient. This is when laboratory results are negative yet the patient showed all indications that he/she would be suffering from malaria.

Kagoda is a mother of seven and resides in Danida, when interviewed for this study she had a lot to tell. She narrated to us the incidence of her nine year old boy. She explained that whenever any of her children felt unwell, she prepares a collection of lubirizi, namuvu, kafunya, and Mufuwanduzi. She boils these herbs and uses a spoon to give the sick child some to drink. She narrates that *“omusudha guyinza okuletera omwana okuwola ebigere, awo omanha nti obulwaire obwe enyonyi bulimu, obonanhga mwana kuwanika maiso, nakwesika. Olina okufumbirawo obulezi obwo, obundi wamunaza, obundi obufumba bwatokota, webiika nomwana mwiisuka, me omuka ogwo gwabajamu”*. Meaning the illness may present with cold feet, then convulsions come in, so I prepare a collection of herbs, use some to bath the sick child, some to drink then a collection is boiled, I cover myself with the child using a bed sheet then uncover the saucepan allowing the steam to hover over us. The child would begin sweating, and sneezing, within a few moments the child would become well.

She asserted that these herbs have worked for her for a long time. She was quick to add that the onset of the new harvest season, and the rainy seasons, bring a lot of omusudha, so she is always alert not to allow children to play in the rains and not to a lot of new harvest items. Plants such as Numuvu, ekigaji are clearly seen in her small backyard garden. She asserted that she learnt this practise from her parents and besides, it is according to her culture.

Similarly, Wambi Solomon, a seasonal labourer in soweto asserted that he has been using traditional medicine to treat different illnesses including malaria since he was a child. He contends that whenever he felt joint pains, general body weakness, he boils herbs such as Nalongo, kalaza, Kigaji, mufuwanduzi and lubirizi. He then drinks atleast a small content both in the morning and evening. When the children experience diarrhae, I instruct my wife to prepare a collection of mufuwanduzi, namuvu, and lubirizi. Some contents are used to bath the child while some are given to them to drink. I do not use modern medicine, he explained.



Figure 13: Kigagi/kikaka plant

m) Mukwadanga's experience of managing malaria

Mukwadhangha is a retired civil servant residing in walukaba east. His compound is full of trees such as moringa, neem, mangoes, oranges, pawpaws, and Ovacados. Plants such as Numuvu and ekigaji are planted in the flower garden. One may not notice that these are medicinal plants untill you listen to the narratives of this old man. He asserts that any type of illness brings forth unrest in the family, and things are not usually fine until a any member of the family becomes well.

He conceals that whenever he feels any joint pains, fevers, or general body weakness, he instructs the housemaid to boil a collection of the leaves of mangos, oranges, neem tree, olubirizi, namuvu, moringa and ekigaji. These are put in a three litter jerrycan, each morning he takes a half cup of these contents. Within three days these condions disappear and he feels well again. He assertted that some of the plants such as the neem tree planted in the compound help to repel the mosquitos that are abundant in the area. Mr. Mukwadhangha contenteded that the medicines work for his family and he rarely seeks modern medication.

n) Self medication with either traditional or modern medicine for malaria control.

In all the above cases, we see very high levels of unregulated drug prescription by the patients and their attendants themselves. They diagnose and prescribe medicines for themselves especially in the early stages of illness. It has already been seen that self medication is one of the major hazards of Uganda's healthcare. The introduction of home-based management of malaria symptoms through home delivery of AL-coartem drugs has afforded increased levels of self-medication and this has only exacerbated the burden of disease especially in the rural areas of the country. The ultimate impact of this approach is the inappropriate use of drugs, which is in itself a health hazard (Birungi, 1994).

Kateme, the 23 year old and mother of two resides in Kibugambata village. Her nine month old baby boy began feeling unwell, restless and crying unceasingly. He also had some breathing difficulties probably due to the cold "flue". The body was hot and she said, indicating that his body temperature was high. Her husband gave her two thousand shillings to buy some medication from a nearby drug shop. She asserts that they gave her some tablets and she could only identify panadol. She claimed the child became well for the next two days. In reality she probably meant that the symptoms decreased. This is because, on the fourth day, the difficulty in breathing worsened". She further claimed "my friend advised me to pound onions and use it to massage the chest of the child. The condition was not good so I went to consult the owner of the drug shop. When she assessed the child; she advised me to take the child to Nalufenya for further management. At that moment I was crying and confused because I did not have money. It was a good Samaritan, a white (muzungu) who assisted and gave me ten thousand shillings to purchase the medicine and a blood giving set".

A blood sample was taken by the laboratory personnel. The child was anaemic and had severe malaria. The nurses were mad at her because she had taken long to bring the child to hospital.

Basing on this narrative and all the others discussed in this study, we learn that self medication as a primary intervention is the leading cause of severe malaria. There is no swift intervention given to patients until the situation deteriorates into several malaria.

4.3.7 Other traditional ways/methods of controlling malaria.

Most of the data collected under this category relates to the methods that inhibit mosquitoes from breeding and spreading. These methods do not cure or contain the disease when one has already contracted it, but they help in preventing mosquito bites by either killing or reducing the number of mosquito infective sites. Respondents mentioned a variety of measures/mechanisms that are used in repelling and guarding against mosquitoes bites. Majority of them reported burning different plant and tree species at night to generate smoke and instantly repel the mosquitoes. Other methods involved maintaining general cleanliness around homesteads that is; clearing bushes, digging garbage pits, clearing stagnant water among others. Table 8 indicates the other traditional ways/methods used in the prevention and control of malaria in the 3 target communities.

Table 7: Other traditional ways of controlling malaria.

Other practices	Method of use
Neem tree	Pick/cut any part of the tree, leave it to dry and burn it at night to smoke away mosquitoes.
Cyprus tree (locally known as Christmas tree)	You burn the branches in the house and mosquitoes will be smoked out instantly. Others noted that the branches have to be dried before burning them inside the house.
Clearing the compound (getting rid of bushes around the house, draining all stagnant water, clearing rubbish around and maintaining general cleanliness)	

Cold cloth	Wet a piece of cloth and pass it around the body. It helps cool down the temperature.
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The study also revealed many other concerns and worries associated with using traditional medicine for malaria control and these include:

- The medicine is not prescribed in correct dosages and this puts many lives of users at risk. Because of inexistence of universal administration procedures, many patients lose trust in traditional herbal medicines. Joyce Mulekete stated, “I do not use traditional herbal medicine because it has got no specific procedure of administration (dosage); they keep on confusing me whenever it comes to measuring the dozes and so I just give up.
I am not interested in using traditional medicine anymore.” Solomon Wambi also noted that while traditional herbal medicines may cure malaria, it requires the patients to take it regularly for an unprecedented period of time. It is this lack of a standard formula of prescription that deters most patients from using traditional herbs for malaria control.
- Three respondents complained that some of the herbal medicines like Kigagi spoil the liver and other body organs. They had however not experienced the problem themselves but just heard about it from friends. Other herbal medicines like Nalongo and Kalaza can cause the patient to vomit constantly if taken without food, which is in itself a health risk.
- The use of traditional herbal medicine is at times viewed as a practice of witchcraft. While one may want to use the medicine to cure particular ailments, they also fear that neighbours may view their actions as witchcraft. Sarah, one of the respondents in Masese noted that she no longer uses traditional medicine for fear that her neighbour may think she is practicing witchcraft.
- Traditional medicine is used for relief purposes. It does not cure/kill the malaria parasite but provides relief as the patient prepares to visit the health facility to receive treatment with effective modern medicines.
- It does not lead to any side effects.

- The medicine is given freely by nature and can be accessed easily by everyone. This seemed to influence the preference for use of THM against AL medicines.
- No logical explanation to the practices of traditional herbal medicine and healing.

Despite the high efficacy rates, the study also revealed many other concerns and worries associated with using artemether lumefantrine drugs in controlling malaria. Respondents intimated that ACTs lead to a number of side effects such as;

- Dizziness especially when the patient takes the medicine before meals.
- It is very sour
- ACTs, particularly coartem cause instant headache, heart burn and abdominal pains
- Leads to vomiting, muscle pain, chills among others.

Laziya, a student in Walukuba, stated, “ACTs weaken the body; one is required to eat oily foods coupled with a lot of fluids. Most of us are very poor and we cannot afford such foods and drinks, so we opt for traditional herbal medicine.” Because of these concerns and worries, the study found out that most patients do not take full course treatment with ACTs. Upon experiencing any side effects, most respondents noted that they immediately stop treatment with Coartem and opt for other measures. One respondent shared her experience of using coartem for treatment of malaria, “on day one of treatment, I took the medicine as prescribed by the doctor and a few hours later, I felt the problem had been exacerbated.

I felt very weak and, vomited a lot. I did not complete the dosage and I have never sought treatment with coartem again. When I experience mild malaria, I take panadols and when it gets severe; I go to the nearby public health unit and ask for quinine injections.”

4.3.8 The dilemma of traditional and modern malaria control practices.

The study of malarial control therapies, as practiced by experiencers presents a confusing yet interesting typology between modern and traditional approaches to disease control. As already intimated in chapter three, there is always a reason as to why someone falls sick in many African societies. There is always an explanation as to why someone is suffering from a certain disease at a particular time. It could be associated with hatred; that someone through some magical means has inflicted pain and caused disease to another. There is however a clear distinction between normal and abnormal illnesses in terms of diseases signs and symptoms. Many people agree that normal illnesses are caused by things such as germs, bacteria, bad food, poor sanitation, poor living conditions or environment, among others. However, when an individual suddenly gets unbearable pains for example in the legs, it is believed that may be he stepped on some herbs which were intended to harm him. This is considered an abnormal illness. Others still believe that ancestors, evil spirits and witchcraft are the sole causes of abnormal illnesses. Consequently every abnormal illness is attributed to witchcraft and interventions are sought along that line. In this study, I observed that traditional medicines were used either in anticipation of witchcraft or simply for provision of immediate relief. Poverty, high levels of illiteracy, and belief in traditional values and customs greatly influences people's daily lives and practices.

However, there is just a thin line of difference between traditional and modern malaria control strategies among the study population. The belief that every abnormal illness is a consequence of witchcraft is the single most important cause for continued use of traditional herbs, even when the practitioners have doubts about the efficacy of traditional medicines. Interestingly, the use of traditional medicines is not exclusive to abnormal illnesses only, but normal illness as well. As elaborately seen in this study, whenever someone experienced mild malaria symptoms (generally regarded as normal), many respondents sought traditional medicines as primary intervention.

In the story of meeting the two cats, we find strong evidence to this assertion. Because they are regarded with negativity, no individual within the study area wishes to encounter them especially at the crossroads. For Nebanda, his pregnant wife's situation was primarily due to the two cats he met at the cross. She felt abdominal pain, fever, nausea, back pain and general body weakness, all indicative of malaria fever. According to their custom, when one meets such an incident, there was a special herb that he must use to cleanse off the bad omens before entering the house, explained Nebanda. He regretted why he did not cleanse off the bad omen on the night he met the cats at the cross roads and he was convinced that his wife was victim of the incident. The following day, Nebanda went to one of his kin, staying at the neighbourhood. He explained to her the problems of his expectant wife. This lady never hesitated. She hurried off towards a thicket besides the road. She collected *Olubirizi*, *namuvu*, leaves of *omusambya*, *ebirowa*, *eibombo*, *akambula* and *kafunya* for Nebanda to take home. He was instructed to pound these herbs and put the contents in a basin for the wife to bath. Some other contents made of *olubiri*, *namuvu*, *eibombo* were prepared for her to drink. The man explained that these herbs would help cure the sickness, give the wife more strength and help to cleanse her for the bad omens aimed at hurting her. Nebanda's wife felt well just for two days. In this excerpt we learn that Nebanda's wife presented signs of mild malaria, conditions they would regard normal but still used traditional medicines to treat them.

Unfortunately, her situation further deteriorated and showed signs of severe malaria. She started vomiting and she became pale and weak. Nebanda was confused, he kept ringing the village people to seek some advice and seek for more herbal collections that would help cure the illness. This affirms the earlier assertion that whether in normal or abnormal situation of illness, some people will still seek treatment traditional medicines because of the illusions and self belief they hold for certain situations.

It was at that moment that Nebanda's neighbour, a Village Health Team (VHT) member got concerned and instructed him to take his wife to hospital or else he would face arrest by the police, or even lose his wife to death. The VHT gave him a referral letter which

was marked as a passport to help him not wait for long at the hospital. Blood test for malaria, and haemoglobin estimation and other confidential tests were done and revealed that Nebanda's wife had severe malaria.

This further implies that there is no limit to the use of local medications whether in normal or abnormal cases of illness. Since severe illnesses present abnormal symptoms similar to those of witchcraft and are therefore approached traditionally, one would expect that mild illnesses with normal signs and symptoms would attract western clinically proven medicines. However, this study has evidenced the use of traditional approach across all situations of illness irrespective of the impact it has on the disease.

However, because of the uncertain nature of their practices, majority of patients and their attendants resort to modern medicine in situations of severe illness as seen in the above case scenarios. When the lady's situation got worse, they rushed her to the hospital and she recovered from her illnesses that had for long been regarded as witchcraft. At this point, we experience a sharp contradiction between traditional and modern approach to malaria control therapies. Patients will use traditional herbs to quell any misfortunes that could be leading to their illness. Under normal circumstances, they are poised to continue with the use of the herbs or even consult traditional healers for divine interventions, but the majority return to modern medicines whenever they experience severe malaria. In this respect, modern medicine is being used to heal witchcraft. Traditional herbs on the other side are being used to manage minor illnesses that are often regarded "normal" and not connected to witchcraft. In the most simplistic sense, events turn around, and modern medicine is seen healing the "purported" witchcraft, while traditional herbs are used to treat normal illnesses.

In other cases, there is co-current use of traditional and modern medicines to heal illnesses. Because of the continued belief that every illness has an explanation the most common of which is witchcraft, there is always a desire to try out traditional native medicines. Since its efficacy is doubted, many people often compliment traditional herbal medicine with modern medicine. This is done co-currently and it is hard to

determine which medicine was efficacious in healing a particular disease. This situation can best be illustrated using the case of Natume, an 86 year old living at Mailo Mbiri. She was not feeling well and her son bought some painkillers (Panadol) for her to swallow, at about 10 o'clock in the morning. She was later taken to the hospital where She was treated clinically for malaria and given hypertensive drugs as well.

When they arrived back home, she asked her daughter in-law to collect leaves of olubiri (lubirizi in lusoga), namuvu and kafunya. She requested her to boil these herbs and prepare them for her to drink. She started feeling better and after two days her son resumed his duties. She continued bathing the local herbs, and drinking the herbal contents. Her son was however more strict on taking medicines given by the medical personnel at the hospital. She therefore had "mixed" treatment with herbal and modern medicines.

Such situations only reveal the unrealistic nature of our communities, engulfed in extreme poverty and ignorance. These are the communities that have persistently inclined to upholding their values amidst unwavering forces of globalization and technological advancement. In Uganda, the belief in witchcraft is culturally cultivated, to the extent that every social happening of negative nature is blamed on forces of witchcraft. This is similar to Taylor's assertion that many unsuccessful diagnoses and treatment of natural illnesses are often misconstrued to be results of strong and efficacious magic (Tambiah, 1990). Witchcraft in all Ugandan societies offers the opportunity to blame others for one's misfortune, sickness or death. It is easy to argue that most people will blame the evil forces of witchcraft for every death in their communities even in situations that the medical cause of sickness or death is well known to the public. The implication is that traditional African societies have less or no regard for natural causes of illness and death. Natural causes of death such as accidents diseases, war, old age, are well recognized, yet in every case even among some who call themselves Christians, no satisfaction is felt unless an act of sorcery or the ill will of a particular individual is invoked to explain why this natural cause produced death at that particular time.

4.3.9 The choice of malaria control therapies: (Establishing linkage with the historical and other socio-economic and political situation of the study area.

The preceding discussion portrays mixed responses as regards the choice of malaria control therapies. The study therefore found it imperative to establish the forces that inform this divergent situation. In this section, data was gathered mainly from the narratives of the patients themselves. Yet in other instances, data was collected through participant observation.

a) Tradition/Culture

The choice of malaria control therapies cannot be understood outside the general tradition and practices of the Basoga. It also mirrors the unique properties of the diverse multi-cultural groups that live within the target area. By reflecting on our past experiences, we identify situations that continue to guide our daily life practices. Looking closely at all the narratives presented in this study, we realise that some will choose traditional medicine for the single most important aspect of connecting with the past. Adopting the case of Namulondo, a teacher by profession with a modest source of income, we get to understand that the use of traditional medicines is culturally rooted and deeply cultivated in the mindset of the users. Despite her situation and ability to seek western mode of treatment, she sought the help of an elderly uneducated lady. She supplemented her assertion through such analogies like *“What an old man sees while seated, a young one cannot see while standing.”* And *“what the black spot of an old man’s eyes see cannot be seen by the white spot of a young one.”* All these analogies affirm her urge to seek help from an elder. His practice simply mirrors the intergenerational and interdependent nature of African societies that builds on mutual support and respect for the elders. It indicated total adherence to the local social regulations among Basoga that are based on rules of kinship, gender, and age. The herbs administered by the elderly lady surely worked for her as the yellowish eyes and palms began clearing. It was however a short lived intervention because when her situation

worsened, she sought help from Mpumudde health Centre IV where she goes for Antenatal care.

Otim's elder brother felt having three cuts on the forehead and letting the blood drip into a small bottle with herbs would quickly cure the headache because he had observed his parents, and grandparents do the same. The herbal contents from the neem tree were used by their elders to cure diseases similar to what Otim was suffering from. Therefore tradition and culture were at work in these scenarios.

Mr. Matovu, a teacher by profession also had an interesting narrative relating to the cause of his child's illness. He has four children, and one of them called Balondemu is ever sickly. The onset of the disease is mild always, then it progresses until he begins urinating blood like urine while the whole body becomes pale. The father said; "*tidhi kyatuka kumwana wange; oba bamusamba, oba bamuloga nze niwe titwidhi*" meaning I do not know what happened to my son, I do not know whether he was kicked by friends while playing or he was bitwicked. He asserted that the illness always begins with high body temperatures, then urinating yellowish urine and eventually the child becomes weak. In managing the illness, he prepares a collection of enkakale to cure the yellowish eyes, and to clear "the blood like urine". He also prepares a solution of emubwa, (a clay like mould dissolved in water to help cure the blood like urine). Balondemu's father thought the herbs would work for his one because he had seen his parents use the same herbs and they would be okay. His knowledge about the modern medicines may have influenced his intentions to seek medical help from the hospital because his son's condition did not improve. He said, "*I know the cause of this long illness, this boy took long to inform us about the illness so the illnesses progressed and was stronger than the efficacy of the local herbs.*" His colleagues who had come to check on the sick child advised him to take the child to the hospital. He took the boy to Jinja Regional Referral Hospital, where he was diagnosed with severe malaria associated with the enlargement of the spleen. He was managed well. Mr. Matovu contended that he had delayed to administer the herbs on time so the disease condition worsened. In this narrative you may realise that though Mr. Matovu had mixed conceptions about the

cause of illness, he still managed to treat it locally. Such thoughts of witchcraft came in because some disease conditions are not the normal ones we are used to he said; so you may think it is withcraft yet it is an onset of omusujja or any other illness.

Nebanda had strong cultural beliefs that if one meets cats at cross roads, gets a bad dream or hears an owl in his compound, something bad would happen to either him/herself or any member of his family. They therefore had solutions to these problems because they had been passed on by elders. They used local herbs that could treat symptoms related to omusudha (malaria) and cleansing oneself from bad omens. Nebanda thought his wife's illness was due to the cats he met at the cross roads. This clearly shows you the strong influence of tradition and culture. He felt his wife was bewitched. "Seeing the cats at cross roads was a strong indicator that something wrong would happen to me or my family", he said. Instead of first seeking medical interventions from the health facility, he thought of remedies to cleanse his wife and himself from the bad omens just as culture and tradition demands. You then realise that it was only the influence of the Village Health team that forced him to seek medical help from the hospital.

When Kasakya heard sounds of an owl, he got up as tradition demands with a lit stick and he threw it towards the owls. They flew off and he breathed with some relief. Little did he know that one of his children would fall sick. He had to seek for a solution as soon as possible. Burning feathers of different birds to control Okwesika and Nyonyi (coldness) "convulsions and seizures", this happened at the Kasakya's home, after bathing the baby with the local herbs, the child stopped crying and the body cooled. The father got a sigh of relief; he exclaimed; *haa, bano abantu babaire bakwita mwana wange; mazima bamusindikire bulwaiire bwe nyonyi; "e yawee" tobona omwana yesika? Naye mukisa musa mmaitee obulezi bwa kyo.*

Meaning "ha, these people were aiming at killing my child; in fact they have sent him the disease of the birds; "locally called "yawee" (Nyonyi). "Are you not seeing the child having seizures and convulsions"? He asked; Lucky enough I know the solution to this problem". At about 3:00pm, the temperature rose, fever set in and the child was crying

unceasingly. At 4:00pm, she began having seizures, and convulsions, He then instructed the wife to go into the house and prepare a piece of broken pot to place the feathers; he had a collection of feathers brought from the village because he knew his children were prone to “receive diseases sent by his enemies. At 7:30 pm, the mother sat on the mat and while carrying the baby she was covered by a bed sheet. The father placed the feathers on the piece of the broken pot “olujo”. The burning piece of charcoal was placed on the feathers. The mother and child were covered making sure no smoke would escape. This induced sweating and for about 15 minutes, they uncovered them. The child was sweating, the temperature had cooled. This clearly shows how culture and tradition had strong influences to all actions of Kasakya.

Isabirye’s daughter was crying at night. His thoughts dashed to aspects such as influence of ancestral spirits; that wanted to harm the child. There is a strong belief among the Basoga that messages about illness, can be communicated through the twin and it is believed that twins have a special connection to the ancestral world. He therefore interrogated the spirits and after some time the child kept calm and slept off. Instead of thinking of illnesses such as malaria, his thoughts dashed to the influence of the ancestral spirits. It is clearly evident that he had to seek traditional herbal medicines to cure the illness and think of how to appease the spirits if he had wronged them as he interrogated them in the narratives.

In our study, we saw the influence of dreams into the daily lives of our people. Namusoga had a dream that depicted that something wrong would happen either to her or any of her relatives. When she fell sick her thoughts dashed to the dream she had; seeking medical interventions were also hinged on this belief. She prepared traditional herbal medicine because she felt this would cleanse her and heal the illness caused by the dream.

In all these cases, we realise the undisputed role of culture and tradition in informing people medical seeking behavior. They also affirm that the disease and illnesses are not limited to the suffering individual but they also become a concern of the whole family

and entire community. Among the Basoga, social and other economic and political relations are governed by rules of kinship, gender, and age. The extended nature of most of the families in Busoga also implies that many of them live with their elderly parents and other needy relatives. It was therefore not surprising to experience situations where grandparents were solely responsible for the health care and wellbeing of their sickly relatives. It also affirms the intergenerational and interdependent nature of African societies where elders still enjoy much respect and are considered reservoirs of knowledge and wisdom.

The Basoga also strongly believe in the idea that the dead are not dead. These are their dead ancestors whose spirits continue to hover around the living and are always involved in all the traditional/cultural engagements of a given family/clan. The identity of a person was and is still defined in terms of their relationship with the ancestors and the sacred plants and animals associated with their lineage and settlement. Going contrary to the ancestral rules carries many consequences ranging from developing boils, discolored skin, reddened mouth, infertility and sometimes death. It is against this backdrop that many respondents attributed malaria signs to the wrath of ancestors and remedies could be sought along the line of pleasing the dead. Among the people of the study area, the belief in both the visible and invisible worlds also implies that human wellbeing depended entirely on the ability to respond positively to the demands of the 2 different spiritual and physical worlds. While the Basoga believed that normal illnesses are caused by things such as germs, bacteria, bad food, poor sanitation or poor living conditions or environment, they also had other explanations for prolonged and non healing illnesses. Prolonged/abnormal illnesses were associated solely to evil spirits and witchcraft and they always consulted their gods to evoke such evil forces. Such reactions were evident throughout the study.

b) Economic situation

Besides the socio-cultural influences of the respondents, the level of income, standard of living, and the capability to afford the medical costs influenced many people's medical

seeking behaviour. The case of Namususwa, a mother of three residing in Masese III village provides strong evidence to this assertion. Her husband, mulondo was a boda boda cyclist who got involved in a serious motor accident and was bed ridden at the brother's home in Iganga district. When her daughter began crying unceasingly, she became worried and wondered what would have happened. She narrated "the child spent the whole day crying, I prepared some herbal medicines from Olubirizi and namuvu. I gave her to drink and used some to bath the child. I also found some panadol in the house so I gave her a half tablet. She was getting better but I now see the situation worsening". The body temperature was high; but the feet were becoming cold. An old neighbour intimated to me that the child could be suffering from nyonyi. I believe this was true because after a few moments the child started having on and off convulsions she said.

She was given more olubirizi, Mufuwanduzi, and namuvu to give to the child and still continue bathing her with these herbs. She was also given a piece of mufuwanduzi to tie on the child's wrist to protect her from future occurrences. After three days, the child's conditions worsened, the temperature was now very high, the child was drowsy, and had difficulty in breathing. Namususwa was worried and looked helpless because she had no money to spend. It was only the intervention of a neighbour that tried to solve the problem. He offered her five thousand shillings and instructed her to take the child to the children's ward of Jinja Regional Referral hospital for further management.

When she arrived at the hospital, a blood sample was taken off to check for malarial parasites and haemoglobin estimation. Laboratory results indicated that the child had severe malaria with low haemoglobin concentration. She was therefore asked to purchase a blood giving set and the intravenous anti malarial drug called Artesunate. She contends that she almost collapsed because she had no money. A good Samaritan offered her air time to call one of her brother's in-law who sent her twenty thousand shillings to cover her feeding and the medical expenses. The child was admitted for three days at the children's ward of Jinja Regional hospital.

When we look at the above narrative we realise that Namususwa thought her child fell sick of natural causes that she could not explain. She took time administering herbal medicines because she did not have money to buy modern medication and besides she felt the herbal medicine would help at least to relieve the pain. Poverty and her state of helplessness influenced her to use herbal medicines.

The case of Komuhimbo who became ill after attending the burial ceremony of her grandmother falls in this category, she had a medical insurance card, and she claimed to lack knowledge of the local herbs. She did not think of self medication either; she went to the medical Centre that accepts her insurance card. She could afford all her medical bills.

Besides believing that the traditional medication would work, the grandmother of Bakumbaine admitted that she resorted to using the herbs because she could not afford the medical bills of her son. She tried out the local herbs to clear the yellowish colour in the eyes. According to the narrative of Bakumbaine's grandmother, the herbs worked. The boy's condition was however worsened because he was bleeding through the nose continuously.

Without the aid of the NGO that pays the boy's tuition, she was stranded as she said; *"Nze nandi kozeki ki? Ndimunaku era tisobola beyi yamu idwaliro; ebintu byona byakugula bugule mukama yandi muyambiire"* Meaning; what could I have done? I am a poor lady; I could not manage footing the hospital bills, because you are asked to buy almost everything. I had left everything in God's hands. The economic situation therefore forced her to use herbs. She could not afford the cost of drugs and other items.

Mr. Isabirye had a strong feeling that there were no drugs in government facilities and the children's ward of Jinja Regional Referral hospital is ever congested. He therefore took his son to Jinja Regional Hospital because he had no alternative; he could not afford medical bills at the private medical Centre.

Kateme was given some money by her husband to buy some medicine for their sick child. The amount would have probably influenced the quantity and dosage given to the

child. The child felt well for a few days then the illness resumed. The smashed onions acted as first aid to relieve the pain but when the situation worsened, Kateme was forced to rush the child to Jinja Regional Referral Hospital. When asked to buy some drugs, she was helpless because she did not have money and she was at the hospital alone. It took the intervention of a good Samaritan who offered some money to buy what was needed. The husband only came the following afternoon but looked worried because he did not have money to cater for the growing bills.

The individual will of deciding the mode of treatment was also influenced by the economic ability to buy drugs one was asked to buy. Akello lacked knowledge of the local herbs. But the inability to seek medical care at a private medical Centre influenced her to seek and patiently wait for treatment at Walukuba Health Centre IV.

Moses, a social worker at a local NGO noted that quality antimalarials, particularly coartem are given for free in public health facilities. He however added that the medicine is out of stock most of the time, and patients have to buy it from private health units. About the prices, he stated, that "prices differ in private clinics and pharmacies, but are still not very expensive even for an average income earner. Prices range from 5000-7000/= for every dose of coartem." Joan, a student being sponsored by the same NGO stated, *if the medicine is in stock, it is given for free in public health facilities. When it is out of stock, you buy from private clinics and pharmacies. It is quite expensive; each dose of coartem costs about 6000/=*. To an ordinary person, the seemingly exorbitant prices of western/ modern malaria control medicines influence their medical seeking behaviour and many of them resort to the traditional approach.

c) Education and lack of knowledge about traditional herbal medicines

Besides the economic ability to pay the hospital bills, it is also evident that most of our respondents were influenced by the level of education and their lack of knowledge about traditional Herbal Medicines. Akello, Komuhimbo, Kyakuwaire, Nantume's son, and Namulondo all fall under this category. Nantume's son for example listened to her complaints about the strange dreams and how she felt. He decided to buy some pain

killers and thereafter took his mother to Walukuba Health Centre IV where she was given medication to treat malaria and hypertension. This is because the son felt the strange dreams were mere illusions and had no influence on the illness. He also asserted that he lacked knowledge about the traditional herbal medicines. We realise however, that his mother insisted on having double treatment that is both the modern medicine and the local herbs.

Komuhimbo lacked knowledge about the traditional herbal medicines and had never seen any of her relatives use them. She therefore sought medical help directly from the medical Centre where her insurance card is accepted. Similarly, Kyakuwaire sought medical help from the health facility because she lacked knowledge about the traditional herbal medicine. It was only the intervention and persuasion of her mother who had carried some herbs from the village that she accepted a herb to be tied on the wrist of her son. She hoped the herb would prevent future occurrence of the disease.

Akello on the other hand felt traditional medicine was for the elderly who had knowledge about traditional herbal medicines. Namulondo was expectant and almost preterm; she however did not know what to do with the yellowish eyes, and palms. She sought help from an elderly lady; a cook at her school who advised her to boil roots of enkaka, and leaves of Omusambya. Because she lacked knowledge about these herbs; she accepted the advice of this elderly lady and took the herbal medicines.

Mukalazi is a fourteen year old boy. He is in primary six at Masese Core Primary school. his father is a teacher at the same school. when he felt headache, he did not inform his parents but at mid night, it was unbearable so he informed the father about the headache. His body was hot, and he was crying of body aches , the father explained. He asked his son what he ate during day, and inquired if any one had kicked him at school. The mother soaked a cloth in cold water and massaged the whole body. The thoughts of Mukalazi's father dashed to the cause of the illness because just like any African culture, the Basoga stongly believed that no pain can come without a casue. He was therefore given some tablets (Panadol). The boy slept and he was promised by the father that he would get treatment in the morning. In the morning he felt a bit better so he set off to

school, the mother meanwhile prepared leaves of ekigaji, lubirizi and mufuwanduzi. When the boy came back from school he was asked to drink some of the contents. He sipped once and spat the whole content. He complained that the contents were so bitter so he would prefer to be taken to hospital. "This boy has no knowledge about traditional medicine" said the mother. The following morning, his mother gave him a book and asked him to go to Masese III, health Centre II.

d) Administrative or political influence

Complaints about the lack of drugs in the government hospitals; the long waiting time, and the congestion at the children's ward could have influenced those who had the will to seek treatment from the government hospitals.

The Village Health Team (VHT) member was an eye opener for Nebanda. Besides believing that bad omens were the cause of his wife's illness, he realized after long persuasion by the VHT member that his wife's illness would be properly managed at the hospital.

According to Tom, his illness was due to the food and drinks he ate. After taking the local herbs, he felt well. The persuasion of his wife to seek medical help from Walukuba medical Centre fell on deaf ears. He contended that there were no drugs at the health facility and the waiting time and congestion was too much.

Emukule, a Karimojong believed the traditional herbs worked for him. He asserted that instead of waiting at the health Centre, he would rather prepare the traditional herbs and get well. From his narrative, you may realise that Emukule was knowledgeable about malaria, as he yelled instruction to his children to stop playing in the rain because they risked getting malaria.

e) Accessibility

Walukuba Masese Division (Sub County) is multi cultural and multi lingual. The thickets and bushes around are an easy source of herbs. Most of our respondents sought this medication because it was easily accessible and they had knowledge of how to

administer it. The health Center IV is located in another parish called Walukuba. The Health Centre two in the community is not well stocked with drugs so most people are referred to either Walukuba or Jinja regional Referral hospital. Individuals like Komuhimbo, and Kyakuwaire, had the economic ability to access private treatment. The likes of Akello, Nebanda and Nantume's son "endured" the long waiting hours at the government facilities. Study findings indicate that these interventions in availing medicines to the public have only registered scanty success. The persistent drug stock outs in public health units has negated universal and timely access to quality and highly effective antimalarials. While coartem is given for free in public health units, respondents reported that the medicine is always out of stock. In such circumstances, they are required to move from one public health unit to another in anticipation that they will find the medicine. Nabirye, a 58 year old housewife in Walukuba zone noted that she only gets coartem when she visits her relatives who live in different districts. This is what she said, "I usually get free medicine when I visit my relatives in Nakaseke. There is always no medicine (coartem) in our health centre in Walukuba." Joyce, another respondent however, attributes the persistent drug stock outs in health units to patients who come from different communities seeking treatment.

She stated, "these patients are usually not planned for; they come from different areas yet they have to be treated. This is the reason drugs get finished so quickly."

f) Gender Roles

We have seen in most of our narratives that most of our study participants were women. This brings to mind the issue of gender roles among the Basoga. The responsibility of rising children solely depends on the mother. That is why mothers have to seek medical help not only for their children but even for their sick husbands. The wife of Otim for example persuaded him to seek medical help from the health Centre in their locality. Kyakuwaire and Kateme sought medical help from the Medical Centre because their husbands had provided some money for the treatment.

As a way of conclusion, these narratives all put forth strong points illustrating the way our social cultural set ups determine how we look at illnesses such as malaria. As human beings we have observed that most people show anxiety, and stress whenever faced with illness or any of the family members becomes ill.

Looking closely at all the scenarios, we realize that the common signs were; raised body temperature (hot skin), feeling chills, joint pains, headaches, lethargy, loss of appetite, flue like symptoms, vomiting, and irritability among babies, dizziness, and drowsiness. We consequently observe that some of the respondents were aware that these were signs of malaria; others felt it was due to witchcraft, and some like Jurugo thought it was punishments from the ancestors.

All these people sought some help; either from the medical professionals at the hospital or sought help and remedies for their illness by use of herbs. Others had mixed treatment; when one option failed the person resorted to another. After realizing the situation was worsening, Nebanda for example took his wife to hospital, Namulondo sought medical help after taking contents thought to cure the yellowish (Enkaka) colour of her eyes and tongue that had totally failed to cure her.

The convulsions medically associated with severe malaria were not associated to severe malaria by some of the respondents. Some respondents felt that it was a disease called Nyonyi that is why they burnt feathers to cure the disease.

Many aspects such as mosquito bites, walking in the rain, punishments from ancestors, working under sunshine, pregnancy related conditions, witchcraft were all aspects associated to the illness called omusudha- malaria. The aspect of ancestors was more emphasized by elderly respondents.

Aspects such long waiting time at the health facility, and absence of drugs drove some of these respondents to prefer herbal medication to the modern medical treatment.

The pregnant mother (Namulondo), and the grandmother of Bakumbaine thought it was due to pregnancy related illness and omusudha that caused the yellowish eyes. The norm according to tradition is to seek help from the experienced elders. The pregnant teacher

had to seek help from the elderly lady who advised her to drink a prepared solution of Enkakale.

We have also observed that actions such as tipped sponging, bathing the child in warm water, covering the sick person with a bed sheet then uncovering a steaming saucepan of boiled collections of herbs, covering a convulsing child with the mother using a bed sheet under then placing a broken piece of a pot with burning feathers, are social-cultural ways of cooling the patients temperature. In modern medicine tipped sponging and bathing the child using warm water are recommended.

4.4.10 Explicating the source of knowledge of traditional health care practices

This is the epistemological part of the study. Having understood the different categories and modes of application of traditional medicines in the daily management of malaria, my next task was to attempt to explore the source of that knowledge. The desire to understand the ways through which people come to know what they know. What is their primary source of knowledge? These are epistemological puzzles that will give rich sensation to an ethnographical study.

Constructivists hold that knowledge is created through interaction the same way critical theorists regard knowledge accumulation to be value-laden (Guba & Lincoln, 1994). According to Guba & Lincoln (1994), the epistemological question then, will be establishing the nature of relationship between the knower (in this case, the researcher) and what can be known. This study was purposefully coined to reflect the constructivist epistemology of accumulating knowledge. Constructivist epistemology examines the theory of knowledge and lays emphasis on how that knowledge is acquired. Constructivists believe that knowledge is built, or constructed through interactions and experiences as opposed to being discovered. In this case, “the investigator and the investigated are interactively linked...” (Guba & Lincoln, 1994:110). This to me is one of the weaknesses of the constructivist theory of investigation; failure to separate the researcher from the subject of research. It makes it impossible to separate theoretical and the practical life experiences and achieving objective realism is an impossibility (Mir &

Watson, 2000). Interestingly, constructivist researchers are aware of the subjective nature of their work and they employ a set of rigorous ethics to remedy the situation. Soobrayan (2003) found that a constructivist researcher “is constantly and consistently called upon to consciously and deliberately engage with the ethical, truth and political implications of his research and writing” (cited in Barillaro et al, 2003:5).

The process of casting aside our subjective interpretations and knowledge is what Clark Moustakas (1994) coined as engaging in the epoche. However, despite its value-laden approach to the nature of reality, constructivism allows researchers a lot of options as they go about their research. Aware of the differing human experiences and opinions that shape the reality, constructivists are more flexible and holistic in explicating the nature and source of knowledge.

The question of how knowledge is acquired and accumulated is one of the biggest challenges for researchers. It is possible to know what you know but almost impossible to tell how you know what you know. Many times we associate age with wisdom, implying that as an individual grows, their knowledge base widens particularly as a result of their increased experience acquired over a longer period of time. Certainly this is one of the ways of accumulating knowledge. A constructivist researcher must look at the experiences, opinions and context of research subjects in order to understand how individuals acquire knowledge.

Constructivists will therefore reject the positivist ontological paradigm that assumes the existence of reality in the world, or that assumes knowledge to be verified hypotheses established as facts or laws (Guba & Lincoln, 1994). The process of acquiring knowledge may not be different from the process of learning (see Mir & Watson, 2000; Glasersfeld 2001). According to Guba & Lincoln (2001), constructivists strongly believe that the generation of knowledge and meaning is nothing beyond social construction theories.

In conducting this study, I was quite aware that knowledge acquisition is more or less a product of social interaction and that most of the meanings attached to social phenomena are social constructions. But, my subjective knowledge didn't distract my objective judgment and in the following discussion I present a holistic portrayal of knowledge of study variables as acquired by the research participants themselves.

As I conducted the study, I increasingly became aware that it was very hard for the majority of my respondents to explain how they come to know the things they know and practice in relation to malarial control and management. Just a handful of them mentioned that they grew up watching and keenly observing their parents use traditional herbal medicine. And therefore their knowledge was a result of learning and continued interaction with their parents. Knowledge of traditional medicines accumulated over a long time is transmitted orally from generation to generation. Parents and Grandparents are the sole source of traditional knowledge and they pass on this knowledge to their sons and daughters as exhibited by most of the respondents.

"My father used to make an extract from kikaka (Aloe sp) and he always made sure that a small dose was mixed in our sauce at least 3 times a week and this always prevented us from any serious attack and up to now I do the same for my children", said one of the respondents.

However, my interaction with one of the most experienced and learned traditional healers gave me a clear understanding as to why many respondents could not answer the question of knowledge accumulation quite convincingly. It also revealed a different picture of how social constructions come about and how individual persons benefit from the process of such constructions to acquire knowledge. The following discussion is an excerpt of the in-depth interview I held with the Dr Mugezi, a traditional healer whose real name will be withheld for confidentiality and protection of identity.

4.4.10.1 Knowledge accumulation in traditional healing.

He started the discussion by guiding the study to what I initially regarded as "his subjective thought" but ended as the most resourceful approach in not only

understanding the nature of knowledge but also the different modes of acquiring such knowledge through every day life experiences of man as a member of society. According to Dr. Mugezi, the question here would be the “ability to know as opposed to having knowledge” of traditional herbal medicines and the whole process of healing. He explained that as one grows, he is being taught “how to come to know, as opposed to how to have the knowledge” and this formed a platform upon which the epistemological question of traditional herbal medicine and the general process of traditional healing was attempted.

First, he drew a dichotomy between western and traditional modes of knowing and concluded that western approach to disease diagnosis and treatment is by far different from how knowledge of illnesses and treatment is applied under the traditional perspective of disease management and control. Knowledge acquisition by trained western doctors is through diagnosis: a doctor may never tell the nature of illness and its corresponding mode of treatment until a diagnosis is carried out. On the other hand, people schooled in traditional thought will reject the western mode of knowledge accumulation as it assumes a standard progression of disease in individuals. They further argue that it is quite simplistic for the western perspective to fail to recognise that people react, or are rather affected differently, even in circumstances when they are faced with similar challenges. The most ordinary example here is reaction to a slap on the cheek which may result into physical and mental pain. Taking on a western perspective, one will be given painkillers to relieve the pain. But this may not be a solution to someone suffering from mental pain. Perhaps saying sorry can reduce the mental pain that an individual could be experiencing. Malarial signs and symptoms also manifest differently and it is wrong to assume a standard progression of disease amongst patients. In the same measure, our reaction to medication also tends to vary and assuming a single therapy as a standard measure of prevention and treatment of a given disease may simply be an oversight of other realities that surround man as a versatile and fragile member of society. Traditional approach therefore holds that “there is no standard patient and therefore no standard medicine.” Emphasis is put on individual patients in

the state in which they appear as the most important source of information and knowledge about that particular patient as opposed to generalisations associated with the western mode of treatment. But what are the knowledge forms in traditional medicine and healing and how does it come about. Below are some of the explanations that can help in understanding how the practitioners of traditional herbal medicines and the healers come to know what they know in regard to their practices.

a) Ancestral spirits

The ancestral spirits of healing are the most important source of knowledge of traditional herbal medicines and healing systems and everything else in relation to the practice of healing and treatment with traditional medicines is secondary to the powers of ancestral spirits. The way this works is through the healer becoming possessed with the spirits that then inform him or her of what to do, which medicine to use, where to find the medicine and how to prepare and prescribe it. At this point, the spirits are the sole source of knowledge of traditional healing and treatment with indigenous plants. However, after working on more than 10 people who possess the same problem, the traditional healer becomes an expert himself and will not wait to be possessed or rather wait to receive instructions from the healing spirits before he prescribes medicine to patients. This is the element of learning that is inevitable in any form of knowledge acquisition and accumulation. The healer will use the knowledge they would have acquired through experience to treat patients that come in with problems that are similar to those the healer has worked on before.

However, we should also recall that once a healer is possessed with ancestral spirits, he loses his soul and spirit; he becomes unconscious and not aware of what is taking place. The question then is how the healer gets to know what he knows and the things he does. How does he comprehend the instructions passed on by the spirits when he is possessed and unconscious? In his response, he noted that spirit possession occurs differently: A spirit can fully possess someone and in this case the person is unconscious and does not know what is going on. In this situation, the healer will rely on the people who were around to inform him what the spirits were communicating. For such healers the people

around are the intermediate source of knowledge of right medicine and healing. However, healers can still create a mutual relationship with their spirits in such a way that the spirits can only partially possess them. This process of creating a cordial relationship with spirits is referred to as “ancestralisation.” According to him, the concept of ancestralisation can only be achieved through training and development. A trained healer will be able to create a mutual relationship with the spirits, talk to them freely and they will not fully possess him as they also enjoy communicating with the healer. This relationship is necessary for the survival of both the healer and the spirits. Therefore to the traditional healer and the rest of the medicine men, the ancestral spirits of healing are their primary source of knowledge.

b) Knowledge through dreams

Knowledge accumulation in traditional medicine and healing also manifests through dreams. A healer may see a patient in a dream, wearing a light coloured shirt, with green sandals and suffering from a heart problem or swollen feet. Interestingly, when this patient decides to consult the healer (who saw him/her in a dream), he does not need to talk about himself because the healer would have already seen him in a dream. As soon as such a patient arrives, the dream manifests in what they are wearing and the healer is able to tell his problem and also prescribe right medicine for him.

I then asked him if he recognised me and my problem as I entered their premises. He still evaded giving a direct response. But, from my own observation, as I entered their premises, I saw him whisper to a colleague and as I approached them, they welcomed me and kept quiet. You could read from their faces that they were talking about me, but I could not make sense of their expressions until we reached this stage of the interview.

He however noted that for formality purposes, a healer is expected to talk to the patient who appeared in their dreams but in reality, you do not need their explanation before treating or healing them. He asserted “I do not need to know your problems before I provide you solutions...right diagnosis is not always necessary provided you know the right answer.” Many traditional healers and herbalists lack formal education but they are able to treat and heal patients. For instance, a healer may not know the position of the

heart on the human body, may not even know how it functions, but he may be able to prescribe right medicine for the heart. To compound his argument, he recalled his own experience while undergoing training in traditional herbal medicines and healing. With his medical and western training background, he was very critical and inquisitive at every stage and practice of traditional healers and herbalists to the extent that he constantly annoyed his trainers. He questioned every process and application and demanded explanation as to why things were happening the way they were. His behaviour would be interpreted to be close to spying as opposed to learning. Yet in reality he had strong belief and interest in traditional indigenous knowledge and healing practices and wanted to understand all questions related to traditional medicine and healing. At this level, one of his trainers got angry and asked him, “does disease respond to right medication or right explanation?” perhaps to ascertain the earlier assertion that right diagnosis is not always necessary provided you know the right answer. A traditional healer’s concept of care and treatment is different from western biomedical concept of care. Under the traditional thought, the philosophy of how medicines work is not important but rather, what kind of medicines will work on a particular patient is necessary.

Knowledge through dreams is not limited to traditional healers alone but also to herbalists. A herbalist may see certain herbs healing particular diseases in a dream. And when they apply such medicine to cure particular diseases as they appeared in their dreams, they work out miracles. However, such dreams are instigated by spirits. Healing spirits may manifest in dreams instructing the herbalist or a healer to get a certain herb, boil it and treat the patient. This is therefore one way through which herbalists develop knowledge of treating particular diseases using particular herbs. Ordinary people will then learn from these gifted people about what and how in regard to traditional medicine and healing.

c) Interest

To some people, knowledge about the traditional medicine is generated through their desire to know. To my key informant, this is the written format of calling. You get

passionate about something and you eventually learn how to do it. However, this interest may not be your own inner interest, but rather an interest of the spirits that indirectly enters your soul and drives you to want to practice and perform their healing duties. This is something one may not easily realise at face value, yet it is such a strong sensation that will make an individual wholly immersed into the practice of traditional medicine and healing. One may not be forced or directly experience the wrath of spirits, but spirits will create a sense of interest in that person that sees him or her express interest and desire to know about traditional medicine and this corresponds fairly with the earlier expression that everything else is secondary to the role of spirits in regards to the general knowledge acquisition and the actual process of healing and treating patients with traditional herbal medicines. The interest that is initiated into someone, may not be of immediate nature and can manifest at a later stage in someone's career.

Relating to the same, he posed a question... what aroused your interest to investigate about traditional therapies for malaria? In responding to his own question, he argued that while this could have been as a result of knowledge gap in the academics or simply personal desire to want to know about traditionalism and healing, it is also possible that there is a spiritual force that is silently driving my interest to know. This was frightening to me and I almost ended the interview. But I also understood that it takes more than just having the interest but rather a strong mind set and belief in traditional medicine and healing practices for one to become possessed. This kept me strong and I carried on the interview but the expression of my respondent repeatedly showed that there is no fire without smoke. While I may be thinking that it is entirely academic, it could simply be a means to an end; an indirect calling to spiritual healing.

In a different tone however, he noted that while spiritual healing is not limited to particular categories of people, they have time and again possessed the uneducated strata of society. To me this was a great relief given my education standards. He asserted that lately, in their communication with spirits, they have been questioning them about their interest to possess only the uneducated and not the educated members of society. He noted that the face of traditional medicine and spiritual healing would tremendously

change if spirits started possessing the educated. The blend of western training and possession of traditional indigenous knowledge can be the silver bullet to all the limitations of THMs and healing practices across all the practicing nations.

d) Knowledge through coercion

This is the invitation to know which is usually enforced through coercion. It usually happens when the person supposed to be possessed stubbornly refuses to respond to the various signs transmitted by the spirits. Coercion appears in the form of plagues, sicknesses and other rare and frightening occurrences intended to frighten someone to respond to the demands of the spirits. These will repeatedly affect the person supposed to be possessed and his family until he visits a healer for spiritual healing.

The healer will then establish whether the person is spiritually possessed and therefore the wrath of the spirits are manifesting in the problems affecting his family, or simply bewitched. If the cause is possession of ancestral spirits, he will then be immediately initiated into the process of becoming a spiritual healer which calls for numerous ritual practices and sacrifices. This process should be done in the presence of the entire community. The initiation process also marks the beginning of healing of the affected person. As rituals are performed and sacrifices made, the affected person and family immediately start healing from the previous diseases and catastrophes. The community must witness the whole process in anticipation that the person will serve them upon healing. In a generation where traditional healing is done for commercial purposes, and therefore attracting many quack healers, the participation of the community ensures that the healer is genuine and has passed through the whole process of healing. And whenever the community is excluded, the implication is that someone is fake, doing it for commercial gains or that the person's immediate family is too religious to sanction and support his spiritual healing.

Spirits have got the powers to draw the person of their interest from wherever they may be to the epicentre or place of origin of the first occupants of that family/clan for performance of spiritual rites. In other words there is no objection to the calling or

invitation by the spirits whenever you are a person of their choice. As one is coerced into becoming a healer, he is also invited to know. It is the beginning of the process of learning, experiencing and acquiring knowledge in traditional medicine and healing.

e) Symbolism

Symbolism is one of the most important sources of knowing. Throughout history, traditional healers and herbalists have relied on nature and earthly symbols to learn many facts about healing and treatment with traditional medicines. These healing symbols may appear in the form of animals, plants and birds or earthly features like the sun, moon, stars among others. Healing using these symbols occurs when there is sudden change in the behaviour of these natural and earthly features. The change may however be one of misfortune, and a healer is expected to have mastered the art of using such symbols to serve the actual purpose of their patients. For instance if one is looking for medicine that cures a particular disease and animals passes across your path/direction, it is highly likely, you will not get the right medicine for that particular disease. The situation is significantly different when that particular animal moves straight into your direction. It signifies you are taking the right path to the right medicine and here symbols are acting as a source of knowledge and healing with traditional medicine. Symbols may therefore signify both good and evil. An owl for example is one of the birds whose behaviour and character signifies different situations in the life experience of man. If it sounded relentlessly at awkward hours around someone's house, it is usually a sign that the family has lost a member, someone is critically ill or someone has died in the community. According to Dr. Mugezi, the scientific explanation to these social realities is that human souls and spirits are sometimes manifested in plants and animals respectively and this is the reason animals are able to communicate different realities about human beings. It is for this particular reason that birds and animal sacrifices are made in almost all processes of healing. They contain the human soul and because you cannot sacrifice a fellow human being, the blood of animals and birds can serve the purpose.

It is also worth noting that symbols act in different ways in the process of predicting and finding remedies to problems. To some traditional healers and herbalists, if a patient provided them with his/her full names and actual date of birth, without necessarily telling their problems, a healer will be able to get the right medicine for such a patient with the knowledge of behaviour of symbols that may be encountered in the forest. For instance, a branch may fall off a certain tree upon mention of the details of the patient. That will immediately inform the experienced healer that all the medicine required to treat that particular patient can be got from that particular tree whose branch fell off upon reciting the name and actual date of birth of the patient.

The most fascinating experience of symbolism and healing was that of a giraffe. He noted that the combination of a giraffe, and the grass or leaves of trees to which it feeds can be so informative in regards to traditional healing and treatment with traditional medicine. Because of his western training background, he is able to tell that plants can communicate to each other particularly in terms of danger or risk of extinction. He asserted that when a giraffe goes to a tree and starts to feed on its leaves to near extinction, the plant leaves can communicate to each other and produce a bitter substance that will automatically prevent the giraffe from feeding on the remaining leaves. According to him, that particular moment when the bitter substance is produced and the giraffe possess in its feeding is the exact time medicine is created. A healer is expected to observe and not to miss any moments of this process of creating the bitter substance because it takes up to five seconds when the giraffe has walked away to pluck off the remaining leaves that contain the bitter substance. Beyond this period, the leaves will get back to their normal state and will not be medicine any longer. The purpose plants do this (produce bitter substance) is to prevent animals from consuming all the leaves that would result into the plant withering away. But to a trained healer, it all symbolises medicine for treatment of particular ailments.

Of course not all traditional leaders are gifted with the attribute to interpret symbols and use them to heal patients. Yet, it is one of the most powerful sources of information in traditional healing and treatment with herbal medicines. Other traditional healers have

specialised in the use of earthing; they rely on certain positions and appearances of the stars, sun and moon to treat their patients.

f) Coincidental talks

This is another way of knowing. Knowledge is sometimes transmitted through coincidental talks. Take the example of being in a taxi and fellow passengers are discussing a problem that has for long puzzled you. Passengers talking about your exact situation and the medicinal plants that can address the situation. You will not want to interrupt their conversation but you will visibly look unsettled and wish to join the conversation. However, you will realise that you only need to be attentive or silently pull out your mobile phone and record the whole conversation. This way you will have acquired useful information through related explanations by others.

At this point, I recalled the way I got to know about this resourceful gentleman. It was a coincidental talk with my cousin and other friends in a restaurant. My cousin is very interested in African cultural studies and that particular evening, we were talking about human sacrifices for wealth and the increasing number of fake healers that have belittled the practice of traditional healing. We wondered whether the practice of traditional healing is still a strong force in African awareness and coincidentally this was part of what I was investigating for my dissertation. Fortunately, I had just finished reading J. Tambiah's book on Magic, Science and Religion. I had also read E.E Pritchard's witchcraft, oracles and magic among the Azande and other works on primitive cultures by Edward Taylor, Bronislaw Malinowski. With vast of knowledge on the subject, I obviously dominated the loose discussion and little did I know that it was a means to acquiring more knowledge about my study. It was at this point that my cousin recalled their university trip to Dr. Sekagya School of traditional medicine and indigenous knowledge. He noted that my academic arguments corresponded fairly with what the trainers and researchers at the institute discussed on their school learning visit. Since my study was related to what they offer, he advised I take time and visit the institute. It was something I took on with a lot of optimism and anxiety and immediately had an appointment with my respondent to have an interview with him whilst observing the

daily life practices at the college. To my respondent, this alone was a means to knowing; a source of knowledge about traditional medicine and healing. I learnt from him about traditional healing and treatment with herbal medicine, which was enabled by the casual talk that I had with my cousin and friends.

g) Flashes

Flashes are similar to symbols and dreams but they manifest differently in their explanation of social realities. For instance, you may be in the middle of a certain discussion you think about your mother and you immediately want to excuse yourself and make a telephone call to her. However, before you get on your feet, you receive a phone call and it is your mother calling. How that happens is sometimes not explainable, yet very useful to a traditional healer and herbalist. A healer may hesitate using particular medicines to a given patient in case he perceives negative flashes. This is perhaps to attempt to take us back to the earlier assertion that there is not standard medicine as there is no standard patient in traditional healing but rather you treat that individual patient as he presents himself and within the prevailing conditions.

At this point we have largely discussed the various ways through which spiritual healers come to know what they know about traditional healing and treatment with traditional herbal medicines. I have also intermittently pointed at herbalists in the above discussion but not in an elaborated way. The question of how an ordinary man who is not spiritually possessed comes to know about the use of traditional herbal medicines for treatment of various ailments still remains unanswered in this study. Through dialoguing and in-depth interviews, I realised that knowledge acquisition is mostly through observation and learning from elders. Parents and grandparents are the sole source of traditional knowledge and they pass on this knowledge to their sons and daughters as exhibited through dialogues held with all my respondents.

When asked how he came to know about the use of kikaka in the prevention and treatment of malaria, Mr Enos noted that, *My father used to make an extract from kikaka/kigaji (Aloe sp) and he always made sure that a small dose was always mixed in*

our sauce at least 3 times a week and this always prevented us from any serious attack and up to now I do the same for my children. But one will still want to establish how the parents and grandparents knew about these different mixtures used in the treatment of malaria. This question was only attempted by Dr. Mugezi who stated that “traditional knowledge on healing and treatment with herbal medicines is only perceived by spiritual healers and is known to the rest of the people through interaction with them.” And this is the reason people can never understand and explain their knowledge of traditional medicines and healing. As earlier mentioned, spirit possession occurs differently: it can fully possess someone and in this case the person is literally unconscious and does not know what is going on. In this situation, the healer will rely on the people who were around to inform him what the spirits were communicating. For such healers the people around are the intermediate source of knowledge of the right medicine and healing. These people will have become experts in traditional knowledge because of their role in mediating between the spirits and the healer and they will pass on this knowledge to their children. To Dr. Mugezi this is the only way people have come to know what they know about traditional medicine and healing.

4.3.10.2 The herbalists’ view of knowledge accumulation and transmission in traditional healing.

To further understand the question of knowledge accumulation and transmission in traditional healing, I found it imperative to hold an interview with herbalists to get their opinion of the problem. Similar to the popular view of the most users of these medicines, they intimated that across generations, knowledge in traditional healing has been passed on from parents and grandparents. One of the herbalists stated “My father was a herbalist, and my role was to observe all kinds of medicines he mixed while in healing various ailments. I admired his work and I developed interest in it. I always believed I would carry on with the practice in the future.” Herbalists reject the idea that knowledge accumulation is only secondary to spiritual forces that direct a healer on the type of medicines that would heal a particular disease. To them, the process of knowing is through the following:

Interest.

According to the herbalists, the process of acquiring knowledge of traditional healing begins with expression of interest to know. It is important to recall that the point of interest and coercion were also mentioned as sources of knowledge in traditional healing and treatment with herbal medicines in the earlier discussion with spiritual healers. Both spiritualists and herbalists will agree on the primary principle that knowledge about traditional healing is generated through one's desire to know. You get passionate about something and you eventually learn how to do it. The outstanding difference however is how the spiritualists look at interest in relation to acquiring knowledge. To the spiritualists, this interest may not be your own inner interest, but rather an interest of the spirits that indirectly enters your soul and drives you to want to practice and perform their healing duties. This is something one may not easily realise at face value, yet it is such a strong sensation that will make an individual wholly immersed into the practice of traditional medicine and healing. One may not be forced or directly experience the wrath of spirits, but spirits will create a sense of interest in that person that sees him or her express interest and desire to know about traditional medicine.

However, the view that everything else in relation to knowledge of traditional medicines is secondary to the powers of the spirits is strongly disregarded by the herbalists. One may just develop strong desire to know and does not owe it to spiritual forces whatsoever. As one of them stated, "It is the reason we have herbalists and spiritualists. Herbalists don't work under the shadow of spirits."

Learning:

When interest is developed, one begins to learn to do it. Traditional knowledge of healing is acquired through learning, whether formally (through attending examinable classes) or informally through observation of the practices of others. To this particular group of herbalists, knowledge accumulation was aided by both formal and informal education. Most of the herbalists interviewed for this study conceded to have had prior knowledge about healing from their parents. But they needed to blend it with formal

education to acquaint themselves particularly with preparation and administration procedures of the different medicines. This group of respondents was in class two where they learn about diseases that affect humans and the different herbal medicines that treat those diseases. They acquire knowledge on when to collect the medicine, how to collect it, mix it and dispense it. In this class they are also taught about circumstances that require referral of the patient to either spiritualists or western doctors. Prior to joining this class, herbalists must attend the elementary class (class one) where they learn about 320 types of trees and plants used in treating various diseases. The elementary class usually takes one year. Class three is a class of categories/specialists. After learning about different diseases and different medicines that heal them in class two, healers are required to specialise in one category of healing. They may choose to become traditional birth attendants, remain herbalists, become born setters, mental specialists or spiritualists. To this group of traditional healers, knowledge about traditional medicines is acquired through education. But it also requires interest and prior knowledge about traditional healing if one is to become popular at their work.



Class Two herbalists in their learning shed.



Herbalist displaying one the herbs (Kalaza) used in the treatment of malaria.

Dreams:

Pressed hard on how the parents, grandparents and the teachers got to know about these medicines, part of their responses were similar to ones earlier given by the spiritualists. Our grandparents could have had dreams about these medicines and as they tried it out, it worked for them said one of the respondents.

Curiosity:

A lot of knowledge about traditional herbal medicines was generated through curiosity by the early medicine men. Since modern allopathic medicine was nearly inexistent, a lot of effort was required by the great forefathers to find alternative ways of healing diseases. This was done through tasting of different parts of different plants and tree species. And where such plants and trees created improvements in one's health, it became medicine for that particular disease and such knowledge would be passed on to children, grandchildren across all generations.

4.3.10.3 The analogy of the human body and how it reacts to disease and treatment.

From the previous descriptions/narrations, we can easily trace the meanings of malaria control therapies in Ugandan societies. However, I will explicate it further using the analogy of the human body as illustrated in figure 14

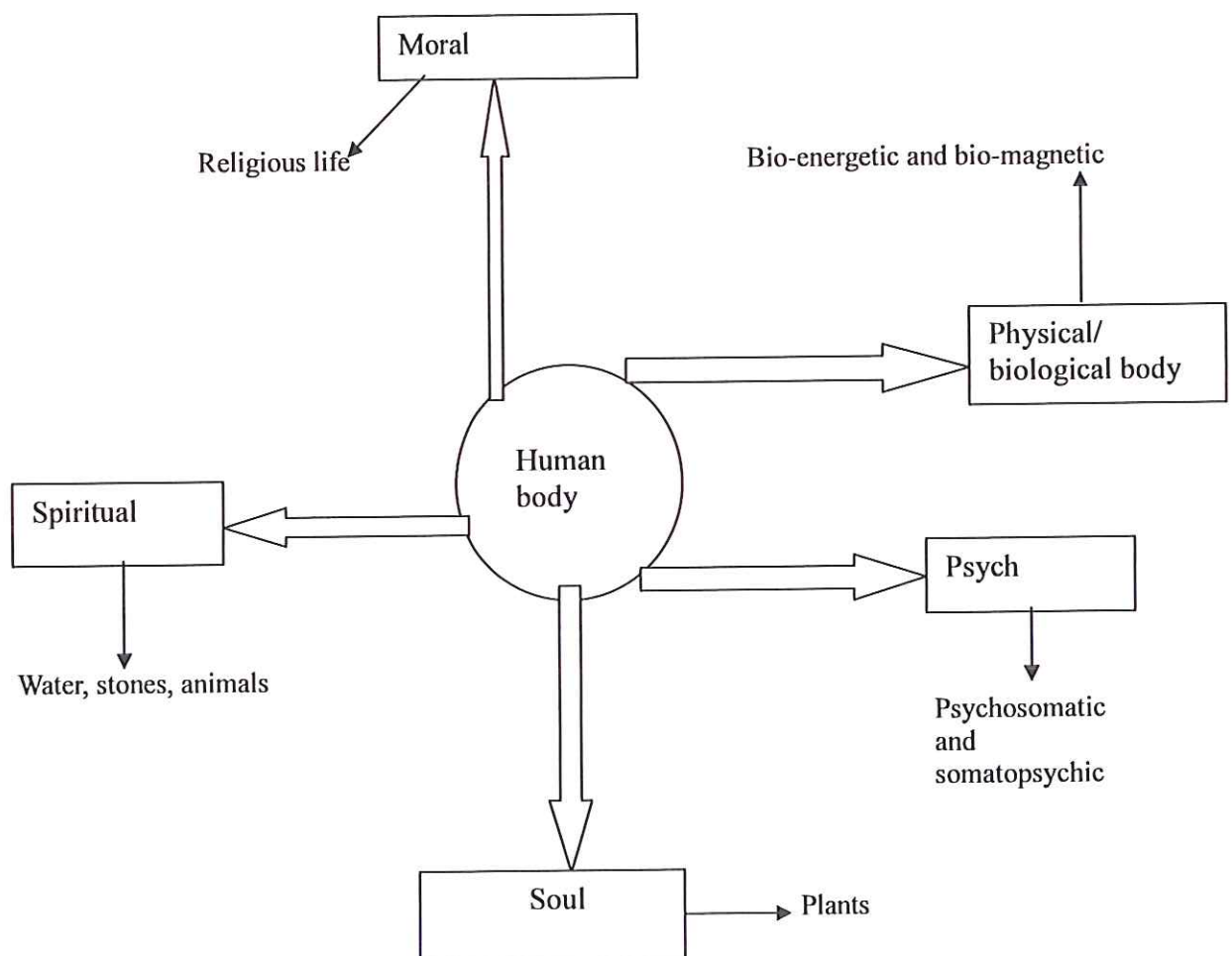


Figure 14: Composition of human body and how the different parts react to the different forms of healing.

These five categories of the human body define the existentiality of man and will help us to further explicate the socio-cultural essences of malaria control therapies from both the western and traditional perspective of disease diagnosis and treatment. According to Dr.

Mugezi (real names withheld for confidentiality and protection of identity), a renowned spiritual healer and western allopathic doctor, the human body is a physical body; it is bio-energetic and bio magnetic in setup. The bio-magnetic fields of the human body regulate all the body's processes and they interact with one another. Therefore, unlocking them offers alternatives in diagnosis and treatment of various diseases that affect the human body. On the other hand, the bio-energetic fields are meant to exchange information with the environment. All living organisms have their own distinct bio-energetic fields that cannot be exchanged. Human beings have their own bio-energetic fields, the same way the dog has its own and the cat and other animals. Therefore the cat's energetic field cannot be used as replacement for the human energetic field, the same way you cannot use that of humans in plants and animal life. Since these fields cannot be interswitched, then it is also impossible to use traditional herbal medicines and spiritual healing to patients whose bio-magnetic and bio-energetic fields are not balanced. Such situations are only attempted by trained medical personnel and not healers or herbalists

In a much related way, the moral/religious human body cannot be healed with traditional spiritual intervention. The unifying factor between religion and traditional spiritualism is belief in either of them but not both. In this regard, believers in religious life have recorded miracles of healing because of their strong belief in their religious practices. Traditional healers and their faithful will also boast of many wonders and healings because of their undoubted belief in traditionalism and its practices. Healers are known to ask their clients to maintain faith and belief, as it is the only way the ancestral spirits will hear their request and respond to them positively. This is much the same way in religious life. Believers are called upon to pray and have belief in their practices if their needs and desires are to be granted. The point here is, traditional practices will have no impact on the religious faithful because they simply do not believe in them.

Psychosomatic and somatopsychic human body.

The 2 concepts refer to the combination of the mind, the body and the soul. While psychosomatic refers to the human mind, somatopsychic is the combination of the

human soul and the body. These can be treated with western/modern allopathic medicine, but efficacy is most recorded when using traditional medicines and spiritual healing. One of the major attributes in traditional medicine and healing is the recognition and strong belief that the body, the mind and the soul are related and must be attempted holistically at all times. Western/ modern forms of treatment focus on only one aspect and this is usually the human physical body, neglecting the mind and the soul. They often look at ways of treating the human body (and in particular the affected area) even when a patient requires spiritual or moral healing. The traditional thought, strongly holds that diseases are an outcome of total human body imbalances. And therefore, a holistic restoration of harmony and balance at all levels; body, mind and spirit is required if a patient is to be healed. Disrespect and disharmony are states of imbalance that can lead to disease, said one of the key informants. Therefore, as a healer attempts to restore harmony and balance of a person, it is important that he adopts several approaches as opposed to a single approach. Thus, traditional healing is characterised by diversity as opposed to standardisation that is common with western perspective of disease diagnosis and treatment.

Traditional healing offers emotional treatment that is needed to feed the psychosomatic and somatopsychic human bodies. It offers love, nurture and compassion to the patient that reduces on depression and facilitates early recovery among patients. Elements such as drumming, massage and meditation are used to boost a person's spirit which will encourage treatment efficacy. And more, the love and compassion given the patients also gives them hope and facilitates healing. This is the socio-cultural essence of spirituality and traditional medicine which also separates it from the western perspective of disease diagnosis and treatment. Under the traditional perspective, the first treatment is one of restoration of confidence and hope. Traditional healers may ask their patients to live with them for a considerable period of time. During this period, the healer is not only monitoring the patient and establishing the cause of the problem through constant communication with ancestors, but he is also offering emotional support to the patient which may itself facilitate healing. This situation is similar with home-based treatment

with herbal medicines. The presence of one's family members, their care and support in looking for the herbs can sometimes be emotional: it is an expression of love that will enliven hope and ensure treatment efficacy.

The soul and the spiritual human bodies.

The spirit and soul of human bodies can also be attempted efficiently using the traditional perspective of treatment and healing. Unlike the bio-energetic and bio-magnetic field of human bodies which cannot be interchanged, the soul and the spirit of human bodies can easily be exchanged with plant and animals respectively. According to Dr. Mugezi, human soul and spirit are sometimes manifested in animals and plants and this is the reason animals are able to communicate different realities about human beings. To some traditional healers and herbalists, if a patient provided them with his/her full names and actual date of birth, without necessarily telling their problems, a healer will be able to get the right medicine for such a patient with the knowledge of plant life encountered in the forest. For instance, a branch may fall off a certain tree upon mention of the details of the patient. That will immediately inform the experienced healer that all the medicine required to treat that particular patient can be got from that particular tree whose branch fell off upon reciting the name and actual date of birth of the patient. The implication here is that the person's soul through unexplainable science and magic happens to manifest itself in that particular plant. An owl is yet another example of exchange of spirits between animals and human beings. Its change in behaviour and character signifies different situations in the life experience of man. If it sounded relentlessly around someone's house, it is usually a sign that the family has lost a member, someone is critically ill or someone has died in the community.

Traditional healers and herbalists have therefore found a brace in these plants and animals and have used them to heal patients. And it is for this particular reason that birds and animal sacrifices are made in almost all processes of healing. They contain the human spirit and soul and because you cannot sacrifice a fellow human being, the blood of animals and birds can well serve the purpose.

Above all, the traditional perspective of responding to disease may only be ideal primary intervention to non complicated cases and illnesses of soul and spiritual nature. It is not good in emergence situations; for instance when an individual is bleeding to death. It is also not ideal to use traditional approach in surgical diseases. These can be approached using the western perspective of disease diagnosis and treatment.

4.4 Study constraints

Investigating people's lived experiences, the use and practice of a given phenomenon for the purpose of deducing meanings is always a daunting task. The main problem here stems from descriptive versus interpretive inquiry. In much of ethnography, descriptive scientific research is sometimes compromised with the interpretive self knowledge. This dilemma arises from the fundamental principles of ethnography that allow the researcher's full involvement and participation in the programme. As Manen (1990), Creswell (2007) point out, the researcher's self awareness about a particular inquiry are inevitable and will always show up in their description of a given phenomenon. Yet, constructs and concepts entail unique attributes and meanings which need to be explicitly taken into account to ensure effective data collection and sound interpretation of divergent data. Although I possessed self beliefs and pre-suppositions about the subject matter, I did not let it impact on study findings throughout the period of study. I engaged in the study epoche and cast aside every pre-suppositions and self knowledge about the study subject such that its true meanings and essences did not seem obstructed.

While the interview guide was conceivable or rather feasible after the pretesting phase and the first data collection phase, it was also found incomplete to address the study question. Upon data analysis, I found out that some pertinent questions of the study had not been asked and they had no answers. This required me to go back to the field several times to carry out more probing and observation intended to generate enough data to address the study phenomenon in its fullness. This was not only time consuming but also much constraining financially. However, as already intimated, study findings did not solely depend on the predetermined questions enlisted in the interview guide. Instead,

much of the data was gathered through being open to the study environment, listening, observing and fully participating in the study.

I was also challenged by the respondents' high expectations across the 2 target communities throughout the period of study. The nature of my study subject induced many respondents to think that I was a medical doctor collecting data on behalf of the ministry of health. They tasked me to respond to most of their medical concerns and also recommend drugs and treatment dosage to those who were found malarious or suffering from other ailments. Other respondents hoped that at the end of the interviews, I would give some free medicine, as it's the norm with many organisations and agencies working on malaria prevention and control in Uganda. While they could not refuse to give information, it was hard for them to believe that the research was only for academic purposes.

Conducting an ethnographic study also requires a lot of resources. During this study, I experienced budgetary constraints particularly in terms of transportation and accommodation.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Over the years, the malaria disease burden has not received adequate response in comparison with other diseases such as HIV/AIDs in many communities. Yet, across the entire nation, it is the leading cause for hospital admissions among the OPDs. Malaria signs and symptoms are regarded quite similarly with those of fever and therefore not taken as a serious health problem among the study population. In the event, most of these signs and symptoms are neglected until they develop into severe malaria. My observations among the study population also indicate that children are the most vulnerable and they do not receive adequate and timely health care when affected with mild malaria. The situation is not different in adults either and this state of vulnerability is largely attributed to the unfavourable socio-economic status of individuals, ethnic traditions and other cultural dictates of many Ugandan societies. The imbalanced interaction between existing social realities and health care patterns manifests in the way people choose to seek or not to choose medical care. The continued negligence of malaria signs and symptoms at an early stage compounds the disease burden and leads to many deaths.

Amidst many challenges, recent statistics indicate a slight fall in the number of malaria cases recorded in the financial year 2012-2013 and 2013-2014 from 339691 to 275609 respectively. This positive trend may be attributed to gross awareness about the signs and symptoms of mild malaria among the study population and continued support from the government through distribution of free mosquito nets. Knowledge of signs and symptoms of a particular disease is paramount in determining the intervention strategies in any given locality. It also implies that the patient or caretaker can receive timely intervention to contain the scourge.

The World Health Organisation and the Ugandan ministry of health has been advocating for self medication with quality antimalarials (ACTs/AL) in circumstances where

patients experience feverish signs and symptoms. The national malaria control and prevention, strategies and policy issues 2007, estimates that up to 80% of the population do not receive malaria treatment from hospitals but practice self medication at their homes. During the study, I observed that the great majority of the study population actually practices self-medication whenever they experience fever or other malarious signs. Despite occupying a central role in health care practices of many Ugandans, self medication also suffers many limitations. There is general laxity on part of patients and their attendants to adhere to full course treatment as directed by physicians. Part of the underlying reasons for this negligence is poverty where a patient may not afford full dose treatment, ignorance, illiteracy and failure by health practitioners to guide patients on the right use of drugs among others. Although it is the convenient primary response to ailments, it will take much longer to yield results particularly when the above conditions still prevail.

While most of the respondents expressed knowledge of the physical signs and symptoms of malaria, there was little mention of the mental signs of the scourge. The mental signs of malaria include “fatigue, blurred vision, weakness and inability to concentrate all of which can reduce a person’s productivity level,” (Irin, Cited in Adegun et’ al, 2011: 884). Staying with and observing many malaria patients, and being an experiencer of the malaria scourge myself, I came to learn that most of these signs and symptoms cannot be easily associated or linked to malaria, and where they occur, patients may not receive appropriate antimalarial treatment. There was also little mention of the signs and symptoms of severe malaria either. Severe malaria often results into convulsions, anaemic conditions, splenomegally, hepatomegally among others (Batega, 2004; Adegun et al, 2011). Of course, an ordinary man could not distinguish these complicated clinical terms.

In addition, situation like splenomegally, hepatomegally and anaemia are not common symptoms of malaria. Yet, it is also possible for a patient to have an anaemic condition but it becomes extremely hard to relate it to malaria until a diagnosis is made. Poor knowledge about the signs and symptoms of severe/ complicated malaria coupled with

inappropriate home based management of the scourge continue to make malaria the leading public health problem in Uganda. Most deaths accruing to malaria often result from ignorance of signs of severe malaria and this has curtailed adequate and timely management of the disease.

While study participants expressed greater knowledge of the signs and symptoms of mild/non complicated malaria, there were often mixed responses about the causes of malaria. As already indicated in the study findings, most of study participants knew that malaria is caused by mosquitoes. This precisely agrees with NMCP (2012) that over 87% of Uganda's population are aware that malaria is caused by mosquitoes. These positive results are however punctuated by some misconceptions about the cause of the malaria. Some study participants were able to tell that malaria disease burden is most prevalent during harvesting period. However, they mentioned maize, beans and mangoes as the main causes of malaria and the situation is even more compounded during rainy season. In his literature review about the knowledge, attitudes and practices about malaria treatment and prevention in Uganda, Batega (2004) indicated bedbugs, poor nutrition, maize and mangoes, dirty water, raw fruits, cold environment and tsetse flies as the most frequent misconceptions about the cause of malaria in Uganda. Poor knowledge of the cause of the problem often curtails any attempts at finding solutions. Another small section of the study participants lacked knowledge of the difference between the causes and prevention strategies for malaria. They mentioned that malaria is only transmitted when one does not sleep under a net. While they knew that sleeping under an insecticide treated mosquito net would protect against mosquito bites, they did not express any knowledge that mosquitoes are the sole cause of malaria.

Concerning the malaria control therapies, while the central focus of the study was to deduce the socio-cultural essences of AL drugs alongside THM in the fight against malaria in Uganda, it also became inevitable in the course of the study to look at the other categories of antimalarials that were in place or greatly recognised by the study population. Studying AL drugs in isolation was also presumed to constrain the analysis and would produce imbalanced results, perhaps incapable of portraying the exact nature

of the essences of malaria control therapies in Uganda. Knowledge about the existence of modern quality antimalarials was ambivalent among the study population. As already seen, the different antimalarials under the category of ACTs/AL include coartem, Doucotexin, and Artefan. Ironically, of these 3 categories of AL, only Coartem is widely known and accessible by all in public and other few private health units. On the other hand, there was wide recognition and use of the ineffective monotherapy drugs for malaria control.

The gross awareness about the drug resistant monotherapies against the highly effective drugs (AL) envisages broader problems in the fight against malaria in Uganda. In many malaria endemic zones, timely access to treatment is almost a nightmare and in many instances, the available drugs are ineffective in containing the scourge.

On availability and accessibility of AL drugs, the study findings indicate that interventions to ensure universal access to quality antimalarials have only registered scanty success. The persistent drug stock outs in public health units and has negated universal and timely access to quality and highly effective antimalarials. While coartem is distributed and given for free in public health units, respondents reported that the medicine is always out of stock. This corresponds fairly with Achan et al, 2011 findings that the persistent drug stock outs of has negated universal access to malaria treatment with quality antimalarials. The new antimalarial drugs have remained far from being developed and accessed by all especially in the rural areas of the country (MMV, 2007). Study results also serve to confirm with Adoke Y and Jamal (2011) that access to ACTs is lowest in African countries with children under 5 years who are treated with ACTs on malaria diagnosis not exceeding 15%. Modern quality antimalarials are less available in private clinics, pharmacies and drug shops. Coartem was found in all private health units visited, but only a few of them had both coartem and Lonart and none of the private drug shops had the other categories of Doucotexin, and Artefan. To compound the problem, the private health units, pharmacies and drug shops, which stock AL anti-malarials often, sell them at exorbitant prices which make accessibility by the poor populace more difficult. These study results will contradict sharply with (Nanyuja et al, 2011) who

asserts that to ease accessibility, quality anti-malarial drugs were made available in private clinics and hospitals. But also confirms with (MoH, 2005) report that malaria treatment with effective drugs has not been universal, or rather too expensive for the vulnerable members of the population. This situation suggests that the introduction of quality anti-malarials has not impacted greatly, and the reliance on this single strategy may not solve the malaria disease burden in the near future.

Nevertheless, ACTs/AL drugs were found to be effective in controlling malaria than the conventional monotherapy drugs. ACTs DO NOT only relieve but kill the malaria parasite and the patient may not suffer any malaria episodes malaria for a long period of time. The study discovered that ACTs cure mild malaria much faster than any other type of medication. Even in situations where most of the respondents cannot always access the medicine, they still acknowledged that modern quality anti-malarials are very effective at controlling malaria. These results serve to suggest the same situation as portrayed by the Uganda malaria control strategic plan. In 2004, when malaria infection resistance to monotherapy drugs was as high as 77%, efficacy ratios for ACTs-artesunate+amodiaquine and artemether-lumefantrine was recorded at 99% (Uganda malaria control strategic plan, 2005/6-2009/10).

However, as portrayed in the study results, social life meets with different concerns, applications and practices that are outside the formal and well classified guidelines by governments. While the government has concentrated efforts in malaria prevention and treatment through the nationwide distribution of free insecticide treated mosquito nets, and free or subsidized ACTs, a large section of the public has not adhered to the vice. Many have used mosquito nets for their other domestic practices, while others have continued with the use of traditional medicines and healing practices to contain the malaria disease burden.

It has been established that traditional herbal medicine for malaria control plays a central role in the health care practices of many Ugandans. Study Results indicate greater knowledge and acceptance of traditional herbal medicines in the fight against malaria in

Uganda. Treatment with herbal medicines is one of the most common health care practices in Uganda (WHO, 2003). Regardless of one's socio-economic or education background, majority of Ugandans continue to be guided by the cultural dictates of their societies. Study findings also indicate that most of the respondents preferred traditional herbal medicines for much the same reasons as those suggested by Bertrand (2011). They believe traditional medicine is more efficient and much reliable in a local setting than modern medicines. Similar to Bertrand's arguments, majority respondents reported that traditional herbal medicines produce lesser side effects as compared to modern anti-malarial drugs (ACTS/AL). Tabuti's study on the use of herbal medicine in Budiope County, (2006) also indicates that there are no side effects associated with using traditional herbal medicine for malaria control.

In this study, the negligible number of respondents who reported that the use of herbs like Kigagi spoil the liver and other body systems had not actually experienced the problem themselves but just heard about it from others. In the wake of this, and also considering that they did not have alternative choices for malaria treatment, community participants opted for THM against modern medicine which also agrees with Bertrand Graz (2011) that many people continue to rely on traditional herbal medicines for primary health care, not only as a choice but also when there is limited access to other categories of medication. At this point, the question of drug efficacy did not seem to matter among this category of the study population.

The wide availability and accessibility and the fact the traditional medicines are freely given by nature greatly influenced responses and the choice of use of traditional herbal medicines in the containing the malaria disease burden. Traditional medicines may not be the absolute remedy, but is greatly used as primary intervention for malaria control because it is easy access and is affordable by the affected population (Tabuti, 2006; Anoka, 2012). The looming poverty, illiteracy and desolation propel the public to disregard modern drugs in preference for culturally grounded, easily accessible and affordable traditional herbal medicines. Batega (2004) noted that the lack of essential items like bed sheets, blankets to use in case of admission to hospitals frightens some

poor patients and majority of them resort to traditional herbal medicines for treatment. Study results also indicate that that THM is a temporary intervention to relieve pain as the patient prepares to go hospital/health unit for adequate treatment with modern medicines. The implication here is that traditional herbal medicine is used for its convenience rather than curative purposes. Herbal medicines can relieve pain or lower body temperatures but cannot kill malaria parasites from the body.

However, drawing conclusions on basis of a few theory-laden variables is to deliberately deny the voices of many other respondents who consent that traditional herbal medicines work better for them. These respondents reported using traditional herbal medicine and being cured in a very short period. In his study about the herbal medicines used in the treatment of malaria in Budiope County, Tabuti (2006) indicated that some community members preferred treatment with traditional herbal medicine because they consider them more effective than allopathic medicines. These results also correspond fairly with the national malaria control and prevention: strategies and policy issues, 2007, which suggests that most of the traditional plants used in the treatment of malaria produce positive results and could even be more reliable and effective than many anti-malarials on the current clinical market. In this study I have also shown that some people have never used modern medicines for treatment of malaria.

Contrary to western form of treatment that focuses on the affected areas, the traditional thought, strongly holds that diseases are an outcome of total human body imbalances. Therefore a holistic restoration of harmony and balance at all levels; body, mind and spirit is required if a patient is to be healed. Traditional healing is characterised by diversity as opposed to standardisation that is common with western perspective of disease diagnosis and treatment. It offers emotional treatment that is needed to feed the psychosomatic and somatopsychic human bodies. It offers love, nurture and compassion to the patient that reduces on depression and facilitates early recovery among patients. This is the socio-cultural essence of spirituality and traditional medicine which also separates it from the western perspective of disease diagnosis and treatment. The presence of one's family members, their care and support in looking for the herbs can

sometimes be emotional: it is an expression of love that will enliven hope and ensure treatment efficacy.

Traditional healing also recognises that the soul and the spirit of human bodies can easily be exchanged with plant and animal life respectively. They hold that human soul and spirit are sometimes manifested in animals and plants and this is the reason animals are able to communicate different realities about human beings. It is for this particular reason that birds and animal sacrifices are made in almost all processes of healing. They contain the human spirit and soul and because you cannot sacrifice a fellow human being, the blood of animals and birds can well serve the purpose.

However, to some respondents, the effectiveness of traditional medicines is dependent on type of plant or tree species or combination of different species used in the treatment of malaria. While this category of respondents recognised the effectiveness of herbal medicines in controlling malaria, some of them intimated that positive results depend largely on the preparation procedure (concoction) and dosage given to a patient. Ironically, throughout the study period, I never observed any standard procedures for preparing and administering traditional herbal medicine for malaria control. While most of the species appeared the same, the preparation processes varied significantly. Different concoctions could be prepared from a particular tree or plant species depending on the nature and severity of the disease. Similarly, there was no universal and socially agreeable formula for administering traditional herbal medicine. Every participant told a different story about the correct dosage of traditional medicine for malaria control. The lack of socially and medically agreeable standards for preparation and administration of traditional herbal medicine puts many lives of users at risk. Yet many herbalists and healers will continue to argue that right diagnosis is not always necessary provided you know the right answer. A traditional healer's concept of care and treatment is different from western biomedical concept of the same. Under the traditional thought, the philosophy of how medicines work is not important but rather, what kind of medicines will work on a particular patient is necessary.

Above all, as stated by the WHO (2002) the use and practice of TM is one of “uncritical enthusiasm Vs Uniformed scepticism” and it will be through additional research- social and scientific, of each and every property of the phenomenon that will bring to rest the contentious debate of the vice in the healing cycle of diseases.

5.2 Recommendations:

Looking closely at all responses and expressions, I come to an understanding that all approaches to malaria treatment in the study area have a double edge of weaknesses and strengths in containing the scourge. Study results indicate wide scale knowledge about traditional herbal medicines and monotherapy drugs for malaria control. THM is widely recognised as a primary intervention in malaria case management among the study population. Its recognition crosscuts those who have ever used the medicine, and the category of the population who had never used it but still believes it is effective in containing the disease. Despite the increasing drug resistance, monotherapy drugs like chloroquine, fansida are widely known among the study population and some respondents still regard them as their first line treatment for mild/ non complicated malaria. On the contrary, study results indicate ambivalent knowledge about the highly effective combination therapies (Doucotexin and Artefan). While coartem was widely known, there was scanty knowledge about the other categories of ACTs/AL, including Doucotexin and Artefan. This knowledge gap constrains treatment options with quality antimalarials, thereby creating a formidable challenge to the current antimalarial market. This current antimalarial market contradicts greatly with government policy on health care services where medicines are not only supposed to be affordable but also highly effective in reducing mortality and morbidity ratios. The socio-economic limitations that have already been discussed hinder the great majority of the study population from accessing the medicine in appropriate dosages. Yet, others do not continue with medication upon experiencing side effects. If the problems of availability, accessibility and affordability are properly addressed, the use of artemether-lumefantrine drugs will provide a lasting cure to the malaria disease burden.

Poor knowledge about the existing quality antimalarials, coupled with social economic challenges (poverty, illiteracy and ignorance) results into self medication and inappropriate use of drugs. To increase the knowledge and use of quality combination therapies, control efforts should aim at popularising the medicine and agitating for its appropriate use in the fight against malaria. All ineffective monotherapies should be banned and heavy penalties appended on any private health operators who dispense them. Urgent effort has to be made to ensure continued and timely supply of necessary medicines, coupled with proper sensitization of the patients on the need to take full course treatment for fever and other malarious signs and symptoms.

The use of traditional herbal medicines which are widely known and a potential make up for the limited options in modern anti-malarial market have also attracted a broad spectrum of reactions- strongly questioning its effectiveness in the fight against diseases. Traditional healers and herbalists interviewed for this study consented to not having logical/scientific explanation to most of their practices. They do not understand how their medicine works on patients and they have taken it as such. In the event, they have come up with such notions that “right diagnosis is not necessary provided you know the right answer.” Others intimated that disease does not respond to right explanation but rather right medicine. Critics of traditional medicine and healing have thus capitalised on these offenses to further disregard traditional medicine as a potential remedy to the stagnant healthcare system in the country. The lack of a rational explanation to the practices of traditional healers and herbalists is a very big gamble, perhaps more risky than the problem they are poised to address.

In the wake of this, urgent interventions need to be carried out to sensitise the public about the current quality anti-malarial market and also make the drugs available to the affected population. Since it is widely recognised among the study population, the practice of traditional medicine should also be given some relative attention. Its properties should be tested clinically, validated and recommended as complementary and alternative medicine (CAM) for non complicated malaria incidences.

Scientific research is much needed to broaden the knowledge base of traditional healers and herbalists on how medicines work and the potential risk such medicines would have on the patient if wrongly diagnosed and prescribed. This will in turn help in the identification of effective traditional healing therapies for the malaria scourge.

Medical research should also incorporate the unique and diverse local experiences of patients, and the traditional healers. This will bring about evidence-based traditional medicine- empirically proven alternative to the relatively exclusive health care system in the country. Modelled on this explanation, the integration of traditional medicine into the mainstream health system will also be an ideal and realistic attempt in the fight against diseases in many developing countries.

SUMMARY

Using an ethnographic approach, this study aimed to understand the dynamic nature of the malaria disease burden from both the western clinical perspective and the traditional cultural systems of Ugandan societies. While it attempted to understand peoples' experiences and perceptions of these two divergent treatment options, it was also open to strategic inquiry into other daily life experiences that spur or lessen the malaria disease burden. It also looks at the coping mechanisms of suffering individuals and support given to them not only by their immediate families but also the entire community.

Uganda, just like the rest of sub-Saharan Africa has been grappling with the malaria burden for many years. Several preventive and curatives measures have been adopted but have only registered scanty success. Study results indicate gross awareness about malaria signs and symptoms, the causes as well as the different preventive and curative measures of the disease. Ironically, this knowledge is not commensurate with the daily recorded deaths due to malaria. Part of the problem is the continued patient negligence of the disease in its early stages, poverty, illiteracy and an unevenly distributed healthcare system and personnel. Limited community involvement in the implementation of health programmes, coupled with culture and other religious beliefs has also significantly influenced people's medical seeking behaviour.

Study results also indicate that both approaches to malaria treatment have a double edge of weaknesses and strengths. In the wake of this, an integrated approach should be adopted to enable medical research incorporate other unique and diverse local experiences of people/patients and the traditional health practitioners.

ÖZET

Bu çalışma etnografi yaklaşımı kullanılarak, hem batı klinik bakış açısıyla hem de Ugandalı toplumların geleneksel kültürel sistemlerin bakış açısıyla sıtma hastalığının dinamik doğasını anlamak amacıyla yapılmıştır. Bu insanların deneyimlerini ve algılarını anlamaya çalışırken, bu iki farklı tedavi seçeneğini de teşvik ve sıtma hastalığı yükünü azaltmak için gerçekleştirilen uygulamaların yanı sıra diğer günlük yaşam deneyimleri içine stratejik bir soruşturma ile yaklaşmıştır. Aynı zamanda acıya bireylerin sadece kendi aileleri tarafından değil, tüm toplum tarafından verilen destek bu acıyla başa çıkma mekanizmalarından birdir.

Uganda, Sahra-altında kalan diğer Afrika ülkeler gibi uzun yıllar sıtma yükü ile mücadele etmiştir. Uzun yıllar boyunca çeşitli koruyucu ve tedavi edici önlemler alınmaya çalışılmıştır, ancak bu çabalar yetersiz kalmıştır. Yapılan çalışmalar sonucunda hastalığa karşı geliştirilen farklı önleyici ve iyileştirici tedbirlerin yanı sıra sıtma belirtileri ve semptomları hakkında farkındalık yaratmıştır. Ancak tüm bu çabalara ve farkındalığa rağmen sıtmadan dolayı nerdeyse günlük olarak kayıt edilen ölümler, sürdürülen mücadele ile doğru orantılı değildir. Bu sorunun önemli bir kısmı bireylerin hastalığın erken aşamalarında; hastalık hakkındaki bilgi yetersizliği, yoksulluk, sağlık imkanlarına ulaşmadaki dengesizlikler ve sağlık personelinin hastaları ihmal etmesi gibi nedenler sayılabilir.. Kültürel uygulamalar, dini ve diğer inançlar ile birleştiğinde sağlık programlarının uygulanmasında, sınırlı toplum katılımı da önemli ölçüde insanların “tıbbi” davranışlarını etkilemiştir.

Ayrıca araştırma sonuçlar sıtma tedavisinde ki yaklaşımların zayıf ve güçlü yanlarının olduğunu göstermektedir. Sonuç olarak bütüncül bir yaklaşımla insanlar / hastalar, geleneksel sağlık uygulayıcıları ve farklı yerel deneyimler tıbbi araştırmaları daha da etkinleştirmek için sıtmayla mücadele uygulamalarına dahil edilmelidir.

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Appendices:

1.1 Interview guide (patients other experiencers)

variable	semi-structured/open-ended questions (qualitative investigation)
Personal details	Name of interviewer..... Date of interview..... Name of the respondent..... Gender M / F..... Age..... Occupation..... Level of education..... Residence.....
Malaria diagnosis and treatment	1. How do you know someone is suffering from malaria? 2. Is there any primary care given to that patient? If yes, what are some of the primary interventions in malaria case management?
Knowledge, use and practice of traditional ways/medicines for malarial control	3. If no, how is the patient managed? 4. Have you heard of traditional herbal medicines that can treat malaria? If yes, could you list some of the most commonly used herbal medicines in malaria treatment? 5. Have you personally used traditional herbal medicines in malaria

	treatment? If yes, how did you access the medicine? 6. When did you last use herbal medicine to treat malaria? 7. How is this medicine administered? (consider preparation procedure and dosage)..... 8. How effective is this medicine in treating malaria? 9. A part from herbal medicines, what are the other traditional ways/methods of malaria control in your community? 10. How does each of the above methods work? (capture the steps taken in using each of the methods)
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	15. Have you used ACTs/AL drugs before? If yes, what category of these drugs did you use? 16. When did you last use these drugs? 17. Were you trained on how to use the medicine? If yes, how, if no how so? Do you always take full course treatment with these drugs whenever you experience malaria episodes?.....
Accessibility and efficacy of ACTs or AL drugs	18. How do you access the medicine? 19. Is the medicine affordable? 20. How effective are these drugs in treating malaria?
Experience	21. What are your perceptions, opinions and concerns about AL drugs compared to traditional medicines for malaria control?

	
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