

**VERNACULAR RADIO AND HEALTH PROMOTION : EXAMINING  
PROGRAMMES, THE USE AND IMPACT OF VERNACULAR RADIO IN MALARIA  
CONTROL IN EMUHAYA DISTRICT, KENYA .**

**BY**

**ANDESIAH, GRACE GERTRUDE**

**K50/69672/2013**

**PRESENTED TO:**

**DR. SILAS ORIASO**

**A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF MASTERS  
OF ARTS IN COMMUNICATION STUDIES TO THE SCHOOL OF JOURNALISM  
AND COMMUNICATION STUDIES AT THE UNIVERSITY OF NAIROBI**

**NOVEMBER 2015**

**DECLARATION.**

This project report is my original work and has not been presented for the award of a degree in any other institution.

Signature: ..... Date.....

Grace Gertrude Andesiah

**K50/69672/2013**

This project report has been submitted to The University of Nairobi for examination with my approval as the supervisor.

Signature..... Date.....

Dr. Silas Oriaso

**Lecturer**

**School of Journalism and Communication Studies**

**The University of Nairobi.**

## **ACKNOWLEDGEMENT**

I thank God the Almighty, for giving me good health, sound mind and courage that has enabled me to complete this project. I am also grateful to my supervisor, Dr, Silas Oriaso for his constant academic guidance at various stages of this project especially in writing the research proposal and presentation of chapter four of this report. I would also like to express my gratitude towards my husband Martin Omido for allowing me to pursue further education and standing in for me in taking care of the children when I was not available for them and to my two sons Austin and Melvin for their understanding. My special gratitude goes to my mother, Mrs Sophia Amayoti who has a strong believe in education and for her encouragement and love all through the stages of my schooling. Last but not least, many thanks go to my siblings, classmates and friends for their continuous support, prayers and time spent together.

## **DEDICATION**

To my loving mother, Mrs Sophia Amayoti who supported me in the completion of this project, thank you and May God bless you abundantly.

## TABLE OF CONTENTS

DECLARATION.....	ii
ACKNOWLEDGEMENT.....	iii
DEDICATION.....	iv
LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
DEFINITION OF TERMS.....	xii
ACRONYMS AND ABBREVIATIONS.....	xiii
ABSTRACT.....	xiv
CHAPTER ONE: INTRODUCTION.....	1
1.0 Introduction.....	1
1.1 Background of Emuhaya District.....	2
1.2 Background of the Study.....	3
1.3 Problem Statement.....	8
1.4 Research Objectives.....	9
1.5 Research Questions.....	9
1.6 Significance of the Study.....	9
1.7 Limitation and scope of the study.....	10
1.8 Conceptual Framework.....	11
Figure 1.1 Conceptual Framework.....	11
CHAPTER TWO: LITERATURE REVIEW.....	13
1.0 Introduction.....	13
2.1. Evolution of radio.....	13
2.2 Forms and types of radio stations.....	14
2.3 Relationship between health and development.....	15

2.4 Vernacular radio and development. ....	17
2.5. Health and communication. ....	18
2.7 Vernacular radio.....	20
2.8 Role of vernacular radio.....	21
2.9 General Performance of vernacular radio in Kenya. ....	23
2.10 Vernacular radio in Emuhaya District. ....	23
2.11 Radio Ingo.....	24
2.12 Vernacular radio and fight against malaria.....	26
2.13 Theoretical Framework.....	26
2.1.12 Community Mobilization Theory. ....	29
2.2.12 Agenda Setting Theory. ....	30
2.3.12 Diffusion of Innovation.....	31
<b>CHAPTER THREE: RESEARCH METHODOLOGY. ....</b>	<b>34</b>
3.0 Introduction.....	34
3.1 Research Design.....	34
3.2 Target Population.....	34
3.3. Sample Size.....	35
3.4 Sampling Technique. ....	36
3.5 Research Instruments.....	36
3.6 Data Analysis and Presentation techniques. ....	37
3.7 Testing validity of Research Instruments. ....	37
<b>CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION. ....</b>	<b>38</b>
4.0 Introduction.....	38
4.1 Demographic information.....	38

4.1.1: Age distribution of respondents.....	38
4.1.2: Gender distribution of respondents.....	39
4.1.3: Marital status distribution of the respondents.....	40
4.1.4 Occupation distribution of Respondents.....	40
4.2 Use of radio among people in Emuhaya District.....	41
4.2.1 Radio listenership among residents of Emuhaya District.....	41
4.2.2 Radio ownership among the residents of Emuhaya District.....	42
4.2.3 Radio station listened to by the residents of Emuhaya District.....	43
4.2.4 Language of broadcast preferred by the radio listeners in Emuhaya District.....	44
4.2.5 Vernacular radio stations listen to by the residents of Emuhaya District.....	45
4.2.6 Time when radio is listened to most among the Emuhaya District residents.....	46
4.2.7 Favourite programme among the Emuhaya District residents aired on Radio Ingo....	47
4.2.8 Time when the favourite programme(s) is aired.....	48
4.2.9 Time used to listen to radio to among the people of Emuhaya District.....	49
4.3 Radio programmes regarding malaria.....	51
4.3.1 Information on radio Ingo regarding to malaria.....	51
4.3.2 Health programme / advertisement aired on Radio Ingo.....	52
4.3.3 Radio programme/advertisements aired on Radio Ingo regarding to malaria.....	53
4.3.4. Frequency of the programmes/ advertisement on malaria are aired on Radio Ingo. ..	54
4.4 Health programmes on radio and malaria control and prevention in Emuhaya District. ...	55
4.4.1 Knowledge on malaria among the people in Emuhaya District.....	55
4.4.2 Knowledge on malaria that the Emuhaya District residents know.....	56
4.4.3 Source of information about malaria among Emuhaya District residents.....	57
4.4.4. Radio Ingo participation in Malaria control and prevention in Emuhaya District. ....	58

4.4.5	Format adopted by radio to present information on malaria.....	59
4.4.6	Presence of malaria campaigns on Radio Ingo in the recent. ....	60
4.4.7	Recent malaria campaign(s) on radio. ....	61
4.5	The impact of radio programmes on malaria control in Emuhaya District. ....	62
4.5.1	Views on malaria based on belief and culture among Emuhaya District residents. ....	62
4.5.2	Listenership of health programmes to manage your health system. ....	63
4.5.3	Programmes on radio listened to, to manage health system. ....	64
4.5.4	Listenership to Program(s) on malaria aired on Radio Ingo.....	65
4.5.5	Malaria symptoms mentioned in the programs aired on radio. ....	65
4.5.6	Preventive measures against malaria mentioned in programmes aired on radio. ....	66
4.5.7	Management of malaria among the residents of Emuhaya District. ....	67
4.5.8	Community measures taken to control malaria in Emuhaya District. ....	68
4.5.9	How radio complements government’s effort in the fight against malaria. ....	69
4.5.10	Challenges faced in the fight against malaria in Emuhaya District. ....	70
4.5.11	Views on how radio can educate the listeners more on the fight against malaria. ....	71
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS.....		73
5.0	Introduction.....	73
5.1	Summary of key findings.....	73
5.1.1	Malaria programmes and vernacular radio stations in Emuhaya District.....	73
5.1.2	Malaria control and health programmes broadcast in Emuhaya District.....	74
5.1.3	Impact of radio programmes on malaria control in Emuhaya District. ....	74
5.2	Conclusion. ....	74
5.2.1	Vernacular radio stations and malaria control in Emuhaya District. ....	74
5.2.2	Health programmes addressing malaria and vernacular radio in Emuhaya District....	75



5.2.3 Impact of radio programmes on malaria control in Emuhaya District. ....	75
5.3 Recommendations.....	75
5.3.1 Recommendations for future study.....	76
5.3.2 Recommendations for policy makers.....	76
REFERENCES. ....	77
Appendix I: Research Questionnaire. ....	81
Appendix 2. Focus Group Guide. ....	85
Appendix 3: Interview Guide for Local Chief.....	86
Appendix 4: Interview Guide for Media Manager. ....	87
Appendix 5: Interview Guide for a Kenyan Registered Nurse.....	88
Appendix 6: Letter of Introduction. ....	89
Appendix 7: .Certificate of Fieldwork.....	90
Appendix 8: .Certificate of Correction.....	91

## **LIST OF TABLES**

Table 4.1 Age distribution of respondents.....	38
Table 4.2: Gender distribution of respondents.....	39
Table 4.3: Marital status distribution of the respondents.....	40
Table 4.4: Occupation distribution of Respondents.....	41
Table 4.5: Radio listeners among residents of Emuhaya District.....	42
Table 4.6: Radio ownership among the residents of Emuhaya District.....	42
Table 4.7: Frequency of the programs/ advertisement on malaria are aired on Radio Ingo.....	54
Table 4.8: Malaria awareness among the Emuhaya District residents. ....	55
Table 4.9: Format adopted by radio to present information on malaria. ....	59
Table 4.10: Listenership of health program to manage your health system. ....	63
Table 4.11: Listenership to Program(s) on malaria aired on Radio Ingo.....	65
Table 4.12: Management of malaria among the residents of Emuhaya District.....	68
Table 4.13: Radio complements government's effort in the fight against malaria.....	70

## LIST OF FIGURES.

Figure 1.1: Conceptual Framework. ....	11
Figure 4.1: Radio station listened to by the residents of Emuhaya District.....	43
Figure 4.2: Language of broadcast preferred by the radio listeners in Emuhaya District. ....	44
Figure 4.3: Vernacular radio station listened to by the residents of Emuhaya District. ....	45
Figure 4.4: Time when radio is listened to most among the Emuhaya District residents.....	47
Figure 4.5: Favourite program among the Emuhaya District residents aired on Radio Ingo. ....	48
Figure 4.6: Time when the favourite program(s) is aired. ....	49
Figure 4.7: Time used to listen radio to among the people of Emuhaya District. ....	50
Figure 4.8: Information on Radio Ingo regarding to malaria.....	51
Figure 4.9: Health program/ advertisement aired on Radio Ingo. ....	52
Figure 4.10: Radio program/advertisements aired on Radio Ingo regarding to malaria. ....	53
Figure 4.11: Information about malaria that the Emuhaya District residents know.....	56
Figure 4.12: Source of information about malaria among Emuhaya District residents.....	57
Figure 4.13: Radio Ingo participation in Malaria control and prevention in Emuhaya District..	58
Figure 4.14: Presence of malaria campaigns on Radio Ingo in the recent past. ....	60
Figure 4.15: Recent malaria campaign(s) on radio.....	61
Figure 4.16: Views on malaria based on belief and culture.....	62
Figure 4.17: Program on radio listened to, to manage health systems. ....	64
Figure 4.18: Symptoms of malaria mentioned in the programs aired on radio. ....	66
Figure 4.19: Preventive measures against malaria mentioned in programs aired on Radio. ....	67
Figure 4.20: Community measures taken to control malaria among the residents of Emuhaya District.....	69
Figure 4.21: Challenges faced in the fight against malaria in Emuhaya District. ....	71
Figure 4.22: Views on how radio can educate the listeners more on the fight against malaria....	72

## **DEFINITION OF TERMS**

Awareness – This has been used to refer to the state or condition of having knowledge or information about something.

Broadcast – This refers to the distribution of audio and/or video content to a dispersed audience via any electrical mass media.

Campaign – This is a systematic aggressive activities for some specific purpose.

Communication – this refers to an act of transferring information from one place to another.

Dissemination – It is the act of spreading something, especially information widely.

Malaria – This refers to a disease caused by plasmodium parasite transmitted by the bite of infected mosquito.

Transmission –This has been used to refer to the action or process of transmitting something.

Vernacular – This refers to the language or dialect spoken by the ordinary people in a particular country or region.

## **ACRONYMS AND ABBREVIATIONS**

A.C.R - African Communication Research

CCK- Communication Commission of Kenya

ICE - Information, Communication and Education.

KBC - Kenya Broadcasting Corporation.

KNBS - Kenya National Bureau of Statistics

KNMS - Kenyan National Malaria Strategy

M&E - Monitoring and Evaluation

MCK - Media Council of Kenya

MOH - Ministry of Health.

MSC - Most Significant Change.

NPR - National Public Radio.

OSIEA - Open Society Institute of Eastern Africa.

PAR - Participatory action Research.

PLA - Participatory Learning Action.

PSI - Population Service International.

RMS - Royal Media Services.

RBM - Roll Back Malaria.

SPSS - Statistical Package for Social Sciences.

UAM - Unite Against Malaria.

UNDP - United Nations Development Programme.

UNESCO - United nations Educational, Scientific and Cultural Organization

UNICEF - United Nations Children's Fund.

## **ABSTRACT**

This study investigated vernacular radio and health promotion: exploring the programmes, the use and impact of vernacular radio in the control of malaria in Emuhaya District, Kenya. The study had three specific objectives: to establish if there are programmes dealing with malaria specifically on vernacular radio stations broadcasted in Emuhaya District, to examine the extent to which health related programmes on radio are used in the prevention and control of malaria in Emuhaya District and to establish the impact of radio programmes on malaria control in Emuhaya District. The study sought to find out if mass media and specifically vernacular radio has been used to disseminate information on malaria control to the people apart from interpersonal communication. The primary data was obtained using questionnaires, interview guides and focus group guides which were administered to a sample size of 384 people, 3 focus groups and 4 key informants. The data was analyzed by the use of descriptive statistics and presented using tables, bar graphs and pie charts and in prose-form. The qualitative data was thematically analyzed by classifying major issues covered and recurrent themes and later presented as a narrative. The findings of the study were: there were several vernacular radio stations broadcast in Emuhaya District that have health programmes addressing malaria control; these health programmes specifically give information on the causes, effects, symptoms and preventive measures against malaria and that there is a close relationship between malaria attacks, its prevention and the messages presented on vernacular radio stations broadcast in Emuhaya District. Based on the results of the findings, the study concluded that there are health programmes broadcast on vernacular radio and that they are very effective, complementary and capable of making a great impact on the populace in the fight against malaria. Therefore, the study strongly recommends that the stakeholders in the Ministry of Health and media owners should work closely together and using radio, more so vernacular radio; incorporate the communities in the fight against malaria in Emuhaya District and beyond.

## **CHAPTER ONE: INTRODUCTION.**

### **1.0 Introduction.**

The development of any country as based on the observations and experiences of developed countries is a result of an inter-play between various issues and social institutions. Some of these issues include economic growth of a nation, technological advancement, improved health care systems, agricultural development and standard education among many other issues. The proper integration of these issues would lead to the course of development. As a result, the scholars of communication and other disciplines have all pointed out mass media and communication as a general important social agent of development.

Currently, one of the major challenges facing African countries and other third world countries in general is how to combat the malaria menace. It is regarded as a killer disease and therefore a threat to development. To promote the use and uptake of malaria prevention strategies, mass media has been used to sensitise the general public on the effectiveness and long term benefits of malaria control. These mass media campaign messages have been aired mainly through national radio and television stations.

This study focused on influence of vernacular radio in the fight against malaria in Kenya. The radio management, having certification from the Communication Authority of Kenya, have been encouraged to come up with various ways of communicating different messages to different communities through local language to effectively deliver the desired information and impart knowledge for clear understanding of the audience. The question the researcher asked is whether the audience actually know about the fight of malaria through the programmes or advertising campaigns carried out on radio. If so the study established which ways would be most impactful on prevention of malaria using the vernacular radio stations.

## **1.1 Background of Emuhaya District**

Emuhaya District is a rural district mainly occupied by the Luhya community and specifically those speaking Anyore dialect. It is located in Western Province of Kenya, created in 2007 having been hived off the former Vihiga District which initially occupied an area of 563km.

It is sub-divided into two administrative divisions namely Luanda and Emuhaya. The greater Vihiga area is located on the fringes of the Rift valley in the Lake Victoria basin and lies between 1300m and 1500m above sea level, generally sloping from west to east. The terrain is characterized by occasional hills and valleys with a few streams flowing from North East to the South East, draining into Lake Victoria. The climate of the area is equatorial with rainfall fairly distributed all over the year. The pattern is bimodal with an average annual precipitation of about 1900mm. The soils in the area are well drained and fertile with good potential for crops like tea, coffee, beans and maize (Kipsat et al, 2001).

Emuhaya District lies in the lower midland zone, which consists of mainly red loamy sand soils derived from sediments and basement rocks. It supports sugarcane, maize, beans and sorghum production. Despite having favorable climate and soils, the area is not self-sufficient in food production.

Emuhaya District is densely populated and currently holds a population of approximately 240,000 people. The average population density is estimated at 975 people per kilometer squared, as a result it one of the most densely populated area in the country. This has led to serious sub-division of agricultural land into uneconomical units and this has lead to environmental degradation. The high population density and subsequent sub-division of land along inheritance lines has resulted in diminished farm sizes that limit the amount of land for production. One of the challenges facing the district is the persistent and increasing levels of poverty. It is estimated that about 60% of Emuhaya population lives below the poverty line. Poverty here is more prevalent in the urban areas than in the rural with corresponding poverty ratios of 78% and 58% respectively. For example, 60% of division residents are impoverished



and therefore suffer from food insecurity. The area has fair surface and ground water resources due to adequate and fairly distributed rainfall. (Kenya national Bureau of Statistics, 2012)

In general, Emuhaya District faces water problems due to lack of deliberate efforts to invest in the development of available water resources such as sinking of shallow wells and the protection of springs. This condition is exacerbated by low health standards and poor sanitation (Bunyore Community Development Organization, 2010).

The district is served by several FM stations which broadcast in English, Kiswahili and local language. The vernacular radio stations include: Mulembe FM, Anyole FM, Bukha FM, Radio Ingo FM, West FM and Equator FM (CAK).

## **1.2 Background of the Study.**

At the moment, one of the major preoccupations and challenges of African countries and the Third World countries in general is how to combat the menace of malaria. The disease is not only endemic; it is equally regarded as a killer disease. For instance, the current report of the World Health Organisation (WHO) shows that malaria kills 3,000 children every day in Africa. Worse still, the record further shows that 41% of the world's population lives in areas where malaria is transmitted which translates to 350-500 million cases of malaria each year the world over. It indicates that 1 million death cases occur every year in the world ([www.malaria.com](http://www.malaria.com)). The same record equally shows that, 10% of all children of the developing countries die of malaria every year.

The World Health Organisation (WHO), the United Nations Children's Fund (UNICEF), and the United Nations Development Programme (UNDP) and; the World Bank in the realisation of using communications for the prevention of malaria, launched a public awareness campaign in Washington D.C. in 2006 at the headquarters of World Bank for the prevention of malaria ([www.worldbank.org](http://www.worldbank.org)). This awareness campaign was a complementary effort along a global effort tagged "Unite against Malaria" (UAM). Held on the 26th October, 2006 at the instance of 28 African Ambassadors, the most spectacular and the major activity of the event was

the invitation of South African singer - Yvonne Chaka Chaka - the woman known as the Princess of Africa for stage performance on the dangers of malaria and how to prevent it in Africa. The public awareness campaign was followed up by television and radio messages that were broadcast throughout Africa by African soccer stars and entertainers. In this regard, Ivorian Chelsea striker, Didier Drogba and Marseill's Wilson Oruma of Nigeria were used for the broadcast. The major message of these soccer stars was to warn against the dangers of the disease and urge parents and communities to protect young children from malaria ([www.worldbank.org](http://www.worldbank.org)).

Malaria ranks high among the major infectious diseases undermining health and socio-economic development in Africa. Malaria occurrence in tropical and sub-tropical developing countries has become a paradox in these regions because the disease has defied sophisticated technological initiatives for its control (Tonui et al, 2013). A lot of effort has been taken to prevent and control malaria globally and specifically in nations that fall in the tropical region such as Kenya. This has been identified as a major obstacle towards achieving several of the health related Millennium Development Goals. Despite substantial progress in malaria control over the past decade, malaria continues to be Kenya's leading cause of death. Kenya's National Malaria Control Strategy calls for reducing deaths and disability from malaria to two-thirds of their 2007-2008 levels by 2017. Malaria is the leading cause of morbidity and mortality in Kenya. This is because 25 million out of a population of 34 million Kenyans are at risk of malaria. This accounts for 30-50% of all outpatient attendance and 20% of all admissions to health facilities. An estimated 170 million working days are lost to the disease each year (MOH 2001). Malaria is also estimated to cause 20% of all deaths in children under five (MOH 2006). The most vulnerable group to malaria infections are pregnant women and children under 5 years of age.

In collaboration with partners, the government has developed a 10-year Kenyan National Malaria Strategy (KNMS) 2009-2017 which was launched 4th November 2009. The goal of the National Malaria Strategy is to reduce morbidity and mortality associated with malaria by 30% by 2009 and to maintain it to 2017 (Kemri, 2015)

MEASURE Evaluation, an USAID Global Health Bureau's primary vehicle for supporting improvements in monitoring and evaluation in population, health and nutrition worldwide, helped Kenya's Division of Malaria Control develop a national monitoring and evaluation (M&E) plan to reach this goal, and continues to provide technical support. It has also brought national media attention to malaria control efforts.

Health communication has developed over the last twenty-five years as a vibrant and important field of study concerned with the powerful roles performed by human and mediated communication in health care delivery and health promotion. Within the health communication field, communication is conceptualized as the central social process in the provision of health care delivery and the promotion of public health. The centrality of the process of communication is based upon the pervasive roles communication performs in creating, gathering, and sharing "health information (Jackson & Duffy, Eds, 1998). Health information is the most important resource in health care and health promotion because it is essential in guiding strategic health behaviors, treatments, and decisions (Kreps, 1988). Through communication, health promotion specialists can develop persuasive messages to be communicated through salient channels that will target the relevant audience. This can help in communicating health information that influences their health knowledge, attitude and behavior.

In as much as communication is perceived as a powerful process in health care, the dynamics of communication in health contexts are also very complex, the communication channels used are numerous, and the influences of communication on health outcomes are powerful. Health communication examines many different levels and channels of communication to suit different contexts. Some of the primary levels include intrapersonal, interpersonal, group, organizational and societal. The channels include face to face, telephony, mass media and generally ICT. The settings for health communication inquiry are also quite diverse. They include all of the settings where health information is generated and exchanged, such as homes, offices, schools, clinics, and hospitals. The field of health communication is moving towards a sophisticated multidimensional agenda for applied health communication research that will examine the role of communication in health care at multiple communication levels, in multiple communication

contexts, evaluate the use of multiple communication channels, and assess the influences of communication on multiple health outcomes (Jackson & Duffy, Eds, 1998).

Population surveys show that mass media are the leading source of information about important health issues, such as weight control, HIV/Aids, drug abuse, asthma, family planning and mammography (Chapman 1995). The specific roles played by mass media in the society vary from one society to another. However the common characteristics of media purpose in society remain that of news and information provision, entertainment and social mobilization among other key processes. Radio is one of the key mass communication medium. As a channel of communication, it has long been identified by development communication scholars as the most efficient and effective channel of mass communication, principally because it has the widest reach even in the remote areas. Since the 1960s, United Nations Educational, Scientific and Cultural Organization (UNESCO) have been stressing the importance of radio broadcasting in community education, especially in the rural society (Moemeka, 1994).

Radio remains the most powerful, and yet the cheapest, mass medium for reaching large numbers of people in isolated areas. It is cheap to purchase and therefore is the one mass medium with which rural and slum communities are familiar; it is versatile and anyone - literate or illiterate can learn from it. (Moemeka, 1994). Thanks to the revolution of the transistor, even the remotest villages have access to rural radio, which builds on the oral tradition of rural populations. Although men own the majority of radio receivers, women can listen to programs at home in the evenings when the main chores of the day are finished.

Radio is an important tool for the rapid diffusion of important messages on new agricultural production ideas and techniques as well as on health, nutrition, family planning and other social and cultural issues. Combined with other media, it can be used for training and the transfer of technologies. Finally, radio is a tool that can be used to develop community cohesion and solidarity. Community involvement is fundamental for the successful use of radio with rural populations. Radio programs are most effective when produced with audience participation, in local languages and with consideration for cultural traditions. Successful features include live public shows, quizzes and village debates. As a mass medium, it could easily improve social

mobilization, social orientation and attitude change among the people in Emuhaya District. Remedy to malaria fight should not be left to scientists and health workers only but it should include socio-cultural and communication perspectives.

Media messages have been used in Kenya to promote the fight against malaria in an effort to impact on malaria prevention. Malaria risk and disease burden is inequitably distributed at both country and household level because of poor housing, lack of education and access to health services, creating a vicious cycle of enhanced vulnerability to malaria due to increased exposure, high household medical costs and reduced ability to pay for treatment. Decisions for prevention or treatment are made depending on the economic ability of the household, perceived susceptibility and assessment of consequences. Furthermore, malaria transmission is facilitated by environmental degradation, poor drainage and clearing of vegetation that accommodates the mosquito species (WHO, 2014).

As a first step, therefore, it is necessary to establish how much local people understand about malaria as a problem, establish their socio-economic background and create awareness that will encourage new malaria prevention behaviours. Many methods have been put in place to try and create this awareness through community mobilization, interpersonal communication and national radio to disseminate key malaria prevention messages. However it this has not yielded a hundred percent achievement. Malaria still remains a national disaster. The government of Kenya has put so much effort in the fight against malaria for instance, the campaign named “Mbu Nje, Sisi Ndani” (mosquitoes out, all of us in) campaign was launched in September 2009. It adopted an integrated approach with radio as the major source of information, complemented by interpersonal communications through community-based organisations and other contracted agencies (PSI, 2012).

However, the government’s approach has not been tenable. This is as a result of many upcoming challenges in the different societies. There are changes even in the governance issues as a result of devolution government. This creates a potential in coming up with new ways of fighting malaria which can involve the devolution of mass media that would give people information and even get suggestions from them on which activities can be involved. The latest entrants are vernacular radio that can as well be used to disseminate health policies in regard to the fight

against malaria. Many actors in the health sector may not have realised the potential of vernacular radio in distributing and empowering people especially in the rural areas with information regarding to the control of malaria.

### **1.3 Problem Statement.**

Over the last 10 years, Kenya has made progress in malaria control. However, the country is still far from defeating the disease. Compromising the fight against malaria are factors such as poor knowledge of the disease and the lack of diagnostic equipment in health facilities. Also: people are not taking preventive measures seriously - such as sleeping under insecticide treated nets. Many women are also not taking anti-malarial drugs during pregnancy.

A review of data has revealed that there is currently less investment in malaria fight than in the past. Kenya lost more than 30,000 people from malaria in 2014 (World Malaria Report 2014). Across many malaria-endemic areas in rural Kenya, health systems are weak, infrastructure is poor, and poverty is widespread. Traditionally, the communication gap between managers of health services, health workers at the periphery, and the patient population they serve has been a barrier to efficient service delivery. This gap, however, has the potential to be bridged through the rapid expansion of radio coverage and availability of local language radio stations.

To roll back malaria, the Government must invest more in new initiatives and tools for fighting it even as it makes use of emerging epidemiological knowledge of the disease. Despite realization that radio can be used to communicate health information in regard to the fight against malaria, only a small percentage – 5% has been used. According to a survey carried by The Media Council of Kenya (2012 report) in the program line up, only 5% is given to health matters. There has been lack of continuous/sustained messaging about malaria in the past; longest campaign lasts 3 - 6 months, not long enough to produce lasting change in attitudes and behaviour. Using local terminologies for fever and malaria is important, and taking into consideration low literacy levels in some communities (Ministry of Health, 2013). It is against this background that this study is set to specifically examine the use and impact of vernacular radio in preventing and reducing malaria disease in Kenya and specifically in Emuhaya District.

#### **1.4 Research Objectives.**

The general objective of the study was to explore programs, the use and impact of vernacular radio in malaria control in Emuhaya District in Kenya. This study aimed at achieving the following objectives:

- i. To establish if there are programmes dealing with malaria specifically on vernacular radio stations broadcast in Emuhaya District.
- ii. To examine the extent to which health related programmes broadcast on radio are used in the prevention and control of malaria in Emuhaya District.
- iii. To establish the impact of radio programmes on malaria control in Emuhaya District.

#### **1.5 Research Questions.**

In order for the study to fulfil the research objectives, the study focused on the following research questions:

- i) Are there health programmes addressing malaria broadcast on vernacular radio stations in Emuhaya District?
- ii) How do health programmes on radio complement the efforts of various international agencies as well as government at all levels in preventing and reducing the scourge of malaria in Emuhaya District?
- iii) To what extent do people listen to health related messages on vernacular radio for the purpose of improving their health conditions especially in relation to malaria and other diseases?

#### **1.6 Significance of the Study.**

Malaria is a disease with multi-dimensional implications. It affects the health of the nation, the economy, the socio-cultural life and the overall development. Hence, this research is very significant because it is a contribution towards the use of radio communication in the prevention being waged against malaria across Kenya and the world at large.

This research is also very significant in that it can serve as a veritable source of information for policy makers in Kenya and across African continent on how radio can be used to reach people on malaria prevention.

To the academics with special interest in health communication, this dissertation is also very significant because it can serve as a good platform of research effort on other issues within the confines of health communication.

### **1.7 Limitation and scope of the study.**

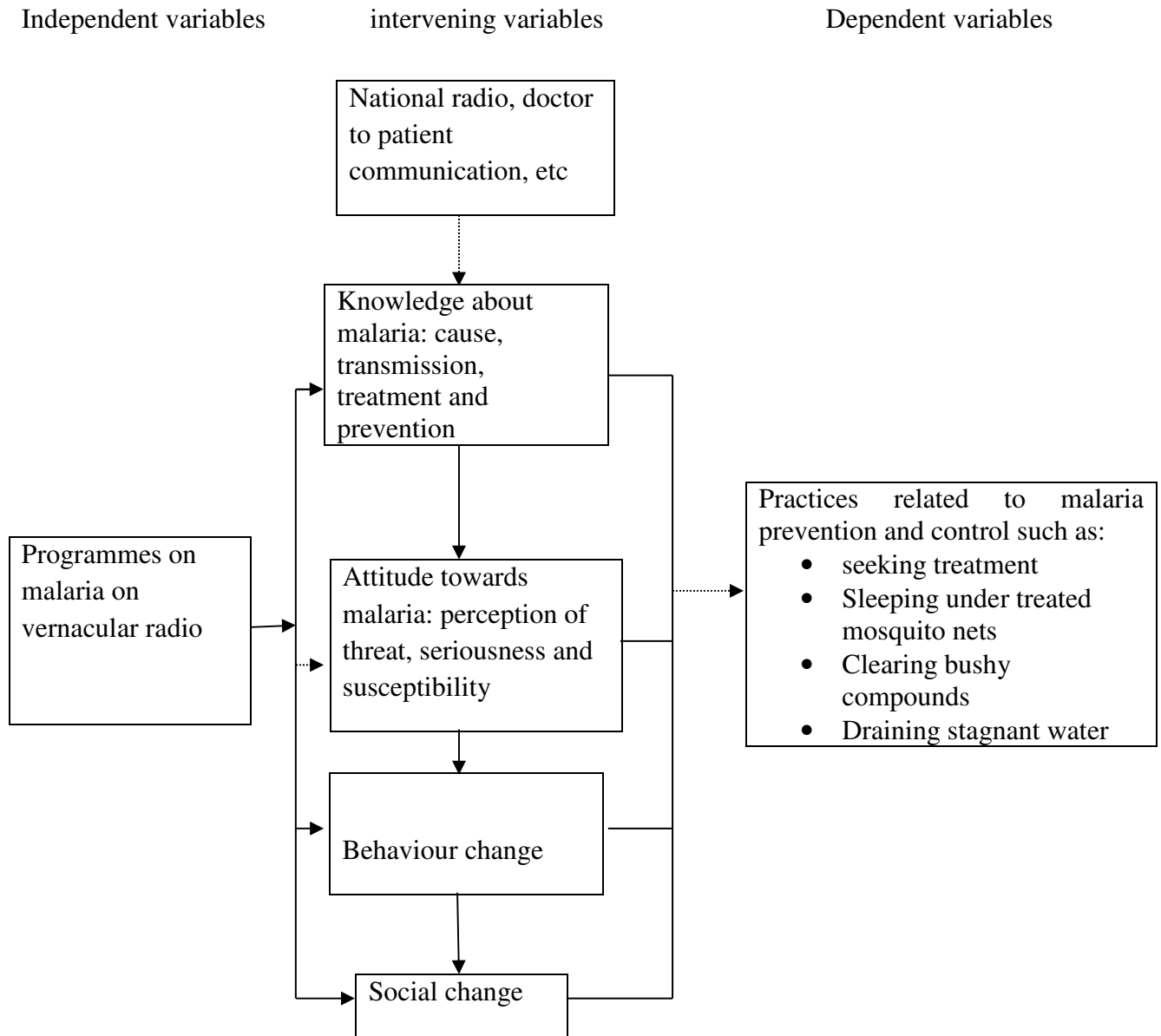
The study gathered data from people in Emuhaya District which is in Western province. The region lies in the tropics and borders the Lake Victoria region making it very prone to Malaria. It comprises of 2 divisions, namely Luanda and Emuhaya, 8 locations and 23 sub-locations. The district has a populace of approximately 240,000 (Kenya National Bureau of Statistics 2007). The research was confined to a few people in the district; due to constraints of time and this being an academic research not all the populace can be interviewed.

The study focused on the vernacular radio stations broadcast in Emuhaya District rather than other radio stations available in the district. It was also limited to the use of radio in controlling malaria in the region rather than other ways of curing and preventing malaria. This however did not affect the validity and reliability of the research; the findings presented an accurate measure of result.



## 1.8 Conceptual Framework.

**Figure 1.1 Conceptual Framework.**



Source: Researcher 2015.

The main concern of this study was to help see how vernacular radio can be used more to help in curbing malaria in Emuhaya district. For this to be achieved, there were concepts to be considered as shown in the framework. The researcher established the programs that are there on

malaria on vernacular radio. This will show the role of communication of health concepts in helping the people in the fight against malaria. The knowledge about malaria among the populace is also key since this helps in understanding the challenge at hand. In addition their attitude towards malaria can also help in understanding their behaviour and how to campaign for behaviour change in the fight against malaria.

Based on the above conceptual framework, there are theories that helped to justify it. The Agenda Setting Theory is relevant through it; the media can justify the establishment of specific programs and their frequency on radio with a target of influencing the audience to join in the fight against malaria.

In ensuring that the knowledge on malaria is widespread and that new ideas are brought in to the lime light, the Diffusion of Innovations Theory becomes applicable. This creates a foundation of communicating any new ideas to the society in as far as the fight against malaria is concerned.

The Community Mobilization theory calls for the involvement of the community in decision making and coming up with new innovation in dealing with issues affecting them. In the fight against malaria, this offers a platform for helping people change the attitudes towards the scourge and participate in fighting it.

## **CHAPTER TWO: LITERATURE REVIEW.**

### **1.0 Introduction.**

This chapter summarises the information from other researchers who have carried out their research on influence of vernacular radio on the fight against malaria. The study specifically covers the theoretical discussions, conceptual framework and research gap.

### **2.1. Evolution of radio.**

Radio like any other technology, did not just appear as a complete system. Two centuries of discoveries, theories and scientific principles seemingly disparate areas preceded it (Regal, 2005).

Radio full relied on electricity control, that ability to create, use and control electricity was crucial to development of radio. In 1890's, elements necessary to birth radio were present: electricity, telegraph and telephone. Many people contributed to the conception of radio. It grew from a clumsy, temperamental form of wireless, telegraph to a system that is easy to use that it has disappeared to users as technology.

In the twentieth century, people appreciated that radio could be used as an agent of social change: both positive and negative.

Radio was simple at the beginning. The very idea of broadcasting sound from one area to another was a marvel in itself, uncomplicated by endless types of frequencies, transmitters, programs, stations and more (McLeish, 2005).

Radio was the first electro-magnetic communications medium of the twentieth century. From the beginning, news events played an important role in the development of radio. Radio's ability to get listeners instantly to distant venues, as well as its extreme portability, has helped it to maintain its popularity despite competition from other forms of media.

It was not until the Second World War that radio truly became a news medium as world events have created a high demand for news. After World War II though, television became the primary

entertainment medium. As a result, radio had to become more localized alongside having new music formats, in order to maintain its audience. Radio news also became much more locally focused.

New technology helped radio news get out into the local community. The ability to cover local news, to take listeners directly to the scene of the action, improved with the development of magnetic tape recorders and the increased miniaturization spurred by the discovery of the transistors. Today, radio seems almost an afterthought in our media rich society.

## **2.2 Forms and types of radio stations.**

Today, radio is much more sophisticated. Technology has transformed radio broadcasting again and again. There are currently four types of radio stations, all with different types of signals and purposes and legal statuses name: national radio, regional local radio, satellite radio and internet radio (Mcleish, 2005)

National Radio- These are stations that broadcast nationwide, such as NPR - National Public Radio. Rather than broadcast over a single station, NPR offers different stations across the country, reaching 80% of radio listeners.

Regional and Local Radio -These are stations that broadcast to listeners in smaller areas, from within a community to across counties depending on the transmission signal. These are usually broadcast over AM or FM frequencies.

Satellite Radio- These are stations that broadcast by satellite signal rather than an antenna, allowing it to reach a wider area. The sound quality is also higher. You need a subscription to listen to satellite radio stations such as Sirius XM radio.

Internet Radio-These are stations that stream audio via the internet rather than through a traditional signal. Internet radio is more accurately referred to as webcasting. Pirate radio is now decreasing because many groups and individuals who want to create their own stations can do so legally on the internet.

Pirate Radio -These are stations that are not regulated. These free stations are usually illegal due to the station's format, content, or the location where the signal is broadcast or received. A group of men famously launched a pirate radio station in a boat off of the coast of Britain in the 1960s, where they were out of the reach of British radio regulations.

There are two basic forms of radio: Amplitude Modulation - A.M. and Frequency Modulated – F.M. Amplitude modulation, or AM radio is one of the oldest forms of wireless broadcasting. With AM, an audio signal rapidly modifies the strength of radio waves in a process called modulation; an AM receiver decodes the modulation back into sound. With the introduction of the transistor in the 1960s, pocket-sized AM radios became a reality for the first time. Although AM's coding scheme is simple, its sound quality is only fair, and it is vulnerable to electrical noise. FM, which was developed in the 1930s, relies on the modulation of the radio signal's frequency and not its strength. The higher radio frequencies used for FM as well as the modulation scheme give it much better sound quality with less noise than AM (Frost,2010).

### **2.3 Relationship between health and development.**

Moemeka (2000) defines development as a positive change (for better) from conditions (social, political, cultural and human) that are no longer considered good enough for the goals of a society to those that are more likely to meet these goals and aspirations. Development is a multifaceted concept, which should be inspired by a common denominator, and this, in the final analysis is the beneficiary of development namely human beings.

The crucial relationship between health and development is becoming of great concern. However, while the importance of this relationship may be obvious, scholars are still debating about the nature of it, and different assumptions on this crucial relationship have an impact on the developmental agenda of international organizations and their modus operandi at country level. Is good health a consequence or a pre-requisite of country development?

Development is a natural facet of human behavior but it needs to be appreciated thus there are adverse consequences resulting from the process of development. It is generally understood as

the process of improving the quality of human life and this has aspects of economic development (Jeyaratnam, 2009).

Economic development is linked with health. There is an intimate two-way relationship between health and development. The health of a given nation as a whole, and particularly the health of the workforce is crucial for development. It is for this reason that health status of a given population is linked to the income as a whole as a measure of development. Therefore, the economic status of a nation is a reflection of development life expectancy and could be considered as an indicator of health.

The story of health and development is one of constant change, change that includes increased global wealth, increased economic activity and exchanges , substantial gains in the life expectancy, eradication of diseases ones considered intractable (Johnson,2011).

The relationship between health and economic development can generally be measured by assessing the overall impact of health-related issues like mortality rate, infant mortality rate, fertility, diseases and overall health issues in relation to their impact on human productivity. Human capital is a key factor in economic development, and any economy that lacks proper supply of this vital component will suffer from the effects. A correlation between health and economic development can well be seen in the undeveloped countries with inadequate health care systems.

These countries are characterized by a lack of basic health amenities like good hospitals and competent health care therefore affecting the ability of the citizens to produce at an optimal level. When remote areas lack good medicines for even simple diseases like malaria it affects the level of its output, because those afflicted with the disease must miss work while they try to deal with its devastating effects. As a result the link between health and economic development in such areas is due to the poor economy and resultant poverty in which the citizens do not have the funds to gain access to competent health care, leading to possible needless deaths from completely curable diseases such as malaria.

## **2.4 Vernacular radio and development.**

Radio remains the most dominant mass media form of communication and with the widest geographical reach and audience as compared to the other forms. In overall, radio still enjoys a renaissance and numbers of small local stations have exploded over the time due to democratization and market liberalization and also due to more affordable technologies. Radio has proven to be an essential developmental tool, particularly with the rise of community and local radios, which have facilitated a far more participatory and horizontal type of communication than before.

To identify which types of stations that are best for reaching and empowering the poor depends on the context. Vernacular radio stations, when truly community oriented, can have some impressive results. However they can be appropriated by negative political forces and, at worst, can turn into 'hate radio'. Although a country's media may be liberalized, this does not mean that there are not enormous pressures on freedom of press and great economic challenges faced by broadcasters. Which types of stations are best for reaching and empowering the poor depends on the context. According to Anam (2013), although vernacular radio stations world over are the ideal platforms on which the marginalized, rural and peri-urban populations can access information that in turn shape the key agenda in the society, there is need for further studies to be conducted on the subject with the view of promoting the effectiveness of vernacular radios in Kenya

Moemeka (1994) and McAnany (1973) present five strategies for exploiting radio in development: open broadcasting; instructional radio; rural radio forum; radio schools; and radio and animation. Open broadcasting involves the airing of development messages to an unorganized audience; instructional radio relies on cooperation and guided listening; rural radio forum uses radio programs to initiate group discussions on specific topics; radio school is used for rural community education; and radio and animation is a radio participation group aimed at training leaders to promote community dialogue on development issues (Boafo, 2000; Moemeka, 1994).

Studies of all five strategies, however, reveal that in implementing them, broadcasters focus on two objectives, namely, audience participation in generating radio programming content and community management of radio forums or stations (Berrigan, 1981; Ilboudo, 2003; Librero, 1985, 2004; Servaes, 2008).

## **2.5. Health and communication.**

Health communication operates within a very complex environment in which encouraging and supporting people to adopt healthy behaviours and policy makers and professional to introduce new policies and practices are never easy tasks (Schiavo, 2014). Health education in itself has limited impact on the listeners. Its mode of communication should be deeply considered to achieve the desired outcome. In finding out the factors that influence the effectiveness of health communication in Kenya, Kungu (2013) states the factors as: media use, source likeableness, youth attitude, risk perception and social cultural ties. On media use he held the view that the liberalization of the media which has led to a significant increase in the number of mass media outlets could have fragmented their audiences.

Health education is carried out at three main levels, individual, group and general public through mass media of communication. The selection of the method should be on the lines of cultural patterns and the customs in the community (Basavanthappa, 2006).

Currently, with a more favourable policy and regulatory framework for vernacular radios in Kenya and a clear understanding of the special roles and responsibilities of vernacular radio in society by all stakeholders, it can be argued that community radio in Kenya is poised to elevate development initiative through an all-inclusive and participatory approach to public communication. The ultimate goal is changing the lives and circumstances of the people by ensuring that health communication is effectively done.

Health communication encompasses the study and the use of communication strategies to inform and influence individual's and community's decisions that enhance health. It links the domains of communication and health and is increasingly recognized as a necessary element or efforts to improve personal and public health (Healthy People 2010 Guidelines). Health communication



can contribute to all aspects of disease prevention and health promotion and its relevant in a number of contexts which include: health professionals-patient relations, individual's exposure to search for health information and adherence to clinical recommendations, the construction of public health messages, campaigns and images of health in mass media and the culture at large and the education of consumers on how to gain access to the public health care systems.

As conceptualised by experts and professional health communicators, health communication strategies are applicable at both individual and community levels (Healthy People, 2010). For individuals, effective health communication can help raise awareness of health risk and solutions provide the motivation and skills needed to reduce those risks, help them find support from other people in similar situations and assist in making complex choices such affect or reinforces. Also, health communication can increase demand for appropriate health services and decrease demand for inappropriate health services. It can equally make available information to as selecting health plans, care providers and treatments.

At the level of community however, health communication can be used to influence the public agenda, advocate policies and programmes, promote positive changes in socio-economic and physical environments, improve the delivery of public health and health care services, and encourages social norms that benefit health and quality of life. It is important to note that the practice of health communication over the years has contributed to health promotion and disease prevention in several areas. Health communication contributes in the area of improving interpersonal and group interactions in clinical situations, the training of health professionals and patients in effective communications (Davies et al, 1996).

Another area of utility of health communication is the dissemination of health messages through public education campaigns that surely change the social climate to encourage healthy behaviour, create awareness, change attitudes and motivate individuals to adopt recommended behaviour (Thomas, 2006).

The campaigns traditionally have relied on mass communication such as public service announcements on billboards, radio and television and educational messages in printed materials such as pamphlets to deliver health messages. For better application of health communication in

the process of fighting against various public health issues like malaria and many others, certain attributes are very essential as identified (Healthy People 2010 Guidelines).

Most radio stations are owned by a few media companies in Kenya. They are KBC, Nation Media Group, Standard Media Group, Radio Africa Group, Royal Media Service, Media-Max Communication Group etc. As of June 2011, 96 licensed FM radio stations were on air, 46 of them are based in Nairobi. The majority of them are privately owned commercial stations, which are part of large media enterprises. Six stations are run by the state-owned Kenyan Broadcasting Cooperation (KBC). There are nine community stations in the country (Media Council of Kenya, 2012).

The number of vernacular radio stations has risen considerably since the first station, Kameme, was set up in 2000. Today there is a large variety of commercial, state-run and community based local language stations on air (Media Council of Kenya, 2012).

The vernacular radios are especially popular in rural areas, with a majority of listeners being older than 30 years. In the Central and in the Lake Region three local language stations rank among the five top stations; in the Nairobi region it is one out of five. Countrywide, five of the ten most popular Kenyan radio stations broadcast in vernacular languages.

Editors and owners of vernacular radio stations emphasize the fact that local language programs play an essential role for the development and participation of rural communities, in which a significant number of people do not communicate in Kiswahili or English (Media Council of Kenya, 2012).

## **2.7 Vernacular radio.**

A vernacular or vernacular language is the native language or native dialect of a specific population, especially as distinguished from a literary, national or standard language, or a lingua franca used in the region or state inhabited by that population (Oxford Dictionary).

Vernacular radio is a type of radio service that offers a model of radio broadcasting beyond commercial and public service. Its broadcasting serves specific geographic communities and communities' interests. The content chosen to be broadcast is largely popular the specific community and relevant to the local/specific audience but which may often be overlooked by commercial or mass-media broadcasters. Most of the vernacular radio stations are operated, owned, and driven by the communities they serve. They are meant to be non-profitable and should provide a mechanism for facilitating individuals, groups, and communities to tell their own diverse stories, to share experiences, and in a media rich world to become active creators and contributors of media (Walters et al, 2011).

The emergence of local language usage as a central component of Community/vernacular radio is an outcome of the liberalized market that has shifted broadcasters' attention to the rural audiences as the large. For instance, rural populations are always a focal point in terms of government policy making and in the highlighting of activities carried out by the Non-Governmental Organizations (NGOs) and any organization that is concerned with improving the living standards and conditions of the under-privileged (Times of Zambia).

Vernacular radio using local language in its broadcasts should carry more local content that is relevant to their target population. It gives its listeners a sense of the world they live in. They get information and news on what is happening within their locality, country and the world at large. In addition, it gives the people who are otherwise excluded from other forms of mainstream media such as print media, a channel to express their voices and a role to play in public discourse.

## **2.8 Role of vernacular radio.**

In many parts of the world today, vernacular radio stations acts as a vehicle for the community and voluntary sector, civil society, agencies, NGOs and citizens to work in partnership to promote specific community development. By the core aims and objectives of this model of broadcasting, these stations often serve their listeners by offering a variety of content that is not necessarily provided by the larger commercial radio stations.

Vernacular radio stations can play a significant role at the grass roots level for rural development. For instance, issues of poverty, agriculture, health, gender inequality, education, social problems among others could be the focus for programming. It can also be used to address issues focusing on the environment and tourism. For instance, using the Most Significant Change (MSC) process, (Walters et al, 2011) assessed the impact of vernacular radio in Indonesia and concluded that effective radio activities can make a significant change in a community's life. The MSC methodology has its origins in community health development debates. It has recently been applied to vernacular radio impact evaluation. By the MSC process, community members provide feedback in the form of stories describing the desirable change in their life as a result of the activities of the radio. In studying the place of vernacular radio in packaging and disseminating health messages Mupusi (2013) poises that the mass media plays a crucial function in disseminating information as well as providing feedback and educating the masses.

Through media skills training and access to the airwaves, a vernacular radio can facilitate a number of capacity building activities. The exchange of information, networking of groups, the provision of skills and training and these undoubtedly, are the key elements of developing a community. It can also facilitates the promotion of awareness of community groups and facilities in the area as well as providing the avenue for the empowerment of these groups to use radio to promote themselves and to speak directly to the community and other stakeholders concerned. For its proximate location to its clients a vernacular radio serves a local community of its interest. It has an advantage of being accessible to the community in terms of ownership, decision making and programme output.

In majority of cases, programming is produced by the community, with focus on local concerns and issues. Unlike in the case of the mainstream media, rather than merely talking about the community, the people themselves make suggestions in regard to programs. This strengthens local culture with the recognition that this is their station; it becomes a forum for a wide diversity of local opinions and views (Sterling et al, 2007) provided evidence that female community radio listeners are given a voice with which to respond to programming and to create programming content. The authors estimated the cost of excluding women from ICT for development and explored how community radio represents an opportunity for inclusion. By employing the

principles of Participatory Action Research (PAR), the authors found that women will be more likely to benefit from technology-mediated opportunities for development if they themselves produce information that contributes to their advancement, rather than simply consuming information provided by others (Sterling et al, 2007).

## **2.9 General Performance of vernacular radio in Kenya.**

The vernacular radio station in Kenya generally broadcast 24 hours a day. From 24.00 until 5.00 there is a music-only program. The dominant format throughout the day is the call-in show. Every station runs 4 – 6 call-in shows per day with the breakfast-show mostly being the most popular one. It usually includes prayers, a newspaper review, news-bulletins and topical discussions with one or two studio guests and a minimum of ten callers. Most of the radio stations run hourly news briefs and major news bulletins at 7.00, 9.00, 13.00, 16.00, 19.00 and 21.00. The major news bulletins are 15 - 20 minutes long and usually consist of 6 to 9 news items. The Royal Media Services (RMS) stations run their news from one central news desk. All stations broadcast the same national news accompanied by two or three regional news items at the end of each newscast. Coro FM, run by the Kenyan Broadcasting Cooperation, also runs news from the central KBC news desk (Media Council of Kenya, 2012).

The news content predominantly covers the topical issues of education (teachers ´strike) and ICC (confirmation of charges hearings), followed by accidents/disasters, issues of law and order, general politics and sports. The talk-shows mainly cover lifestyle and family issues, followed by topical political and religious issues. All stations run agricultural programs targeting farmers in the country (Media Council of Kenya, 2012).

## **2.10 Vernacular radio in Emuhaya District.**

Vernacular radio has been a new phenomenon in Kenya and continues to develop among diverse communities. There are many vernacular stations currently in operation targeting various publics, the regulatory and policy environment following amendments to the Kenyan *Communication Act 2012* which will enable the formation of more vernacular radio stations that

will enable more groups which were previously marginalised by mainstream commercial media to access pertinent information and participate in articulating their aspiration to the authorities.

Since May 1982 when the first vernacular radio station in Kenya went on air, there have been substantial policies as well structural developments on the vernacular radio scene in the country. A recent report by Open Society Institute of Eastern Africa (OSIEA) on vernacular radio sustainability in Kenya, observed that the content of most vernacular radio stations already adhere to the important development issues such as agriculture, HIV, health matters, the environment and income generating projects. The report further pointed out that most vernacular radio stations use newspapers, television stations and other stations as source of international, national and local news (Fairbain & Rukaria, 2009). This puts the radio station at an advantage among their targets audiences since they will get the news anyway from the mainstream media.

According to the Communications Commission of Kenya (CCK), there are 30 stations broadcasting in languages other than English and Kiswahili. Eleven of them are run by Royal Media Services (RMS); KBC runs five vernacular stations and seven vernacular regional services. CCK says, more local language stations are awaiting licenses (Media Council of Kenya, 2012).

Currently, Emuhaya District receives transmission from six vernacular stations. The stations transmit using luhya as a language. They include: Anyole Fm frequency 101.2 owned by Honourable Otichilo. It targets adults above 18 years, Vuka Fm frequency 95.5 is owned by Royal Media. It targets adults above 18 years. Equator Fm frequency 98.1 owned by Maseno University. It targets adults above 18 years. Radio Ingo Fm frequency 100.5 owned by Kenya Broadcasting Corporation. It targets the youth ( 18-35 years). Mulembe Fm frequency 97.9 owned by Royal Media. It targets adults above 18 years. West Fm frequency 94.9 owned by Honourable Wetangula. It targets population is the youth (18 years).

### **2.11 Radio Ingo.**

Radio Ingo (Ingo Fm) is a 24 hour Luhya vernacular radio station that broadcasts in dialects that cut across all Luhya tribe. It covers and is clearly received in the following counties: Kakamega,

Bungoma, Vihiga, Busia, Trans Nzoia and Siaya. It's also received in other parts of Nyanza, Rift Valley and Eastern Uganda.

Radio Ingo programming addresses issues on education, entertainment, news and information, business, culture, women, children, & sports. This has made its ratings high in both genders as the feedback is high from both men and women and different age groups. Radio Ingo means "the station for everyone at home". The tag: Ing'ining'ini Ye Mwitala means 'The Star of the Homestead'. Since inception the station has continued receiving positive feedback from its listeners. The programming include: Mumabwibwi show (5am-10am). The dawn show features Bukha Nende Radio Ingo (wake up with Radio Ingo), Amaandiche or newspaper review, Kabole (listeners comments on current issues and debate), Oparanga shi (what's on your mind?). Khalabana show [Monday - Friday 10:00am -1:00pm] the morning show starts with wikase (be determined), Owasena Imbale (the pebble crusher), Obuteshi (lets cook), Olwikho( talks of relatives). Manya Africa- (Saturday 10- 1pm) – the show deals with african music across the continent plus a segment lwembwa nawina( who sang the song?) Bachesi bataru- fri 8-10pm) - a stand-up comedy show. Meant to entertain the audience. Tsiafuma- Saturday 8-12am. The show features golden oldies of all times. Webale – Sunday 8-12am. It gives thanks to listeners for listening to our station. Wisese (monday-friday 1.0pm-4pm) the program is segmented into: Obutunduli (bone marrow), Huraka Butsa (artist gossip), Omuyweri (the artiste of the day) and Saba Ekhwinulile (ask i sample out for you). Yuka yuka show [4:00pm – 8:00pm] the show starts with Ohonjire Oriena (how have you faired on?), Mwikama (shelter either profitable or loose), Okhwalikha (prepare supper), Emilukha. Khushiteru (8:00pm – 12:00 midnight). It contains Obwimilili( leadership), Sebula Weingo (bid the home mate goodnight), Akeshikhulundu(domestic or family issue). Kamabeka- Sunday (1- 4pm) it deals with talents and county profiles- knowing luhya land. Obunulu bwa jumapili( 10-1pm). It's a gospel show that suits the day. Wednesday 8.02pm drama( Amasanganjira). Friday 2.30 pm poems ( Amanulu). Sunday 2.02pm narratives ( Tsingano). Current affairs ( Mwitala) weekdays- 7.30 pm. Disability ( Obulema)- Wednesday 7.15pm. Business programs (Obukhala) weekdays 7.15 pm. Health programs (Obulamumu) Monday 8.02 pm. Sports (Emibayo) daily. Gender program( Bwakani) Saturday 5.45pm. Environment program (Libaa) Tuesday 8.02 pm.

## **2.12 Vernacular radio and fight against malaria.**

In the fight against malaria, given the situation that it remains a threat to Kenya as a country, there is need for reliable, up-to-date, locally relevant information in the local languages.

Due to the limitation of face to face communication to teach families how to manage, control and prevent malaria, national and local malaria programmes try to reach people through the radio. However, information regarding the timings of radio messages for the target audience is lacking (Malaria Weekly, 2012). ICTs which include radio can be used in the control of malaria by facilitating health education and communication and in the training of health professional and the community at large. Health communication and education remain one of key components in malaria control and prevention (Mboera, Makundi & Kitua, 2007). In his study, a comparative study of Mbaitu and Musyi vernacular radio stations on their role in dissemination of HIV/Aids messages, Makau (2009), recommends that, among other things, there is a need media for owners and policy makers in Kenya to work more closely to re-establish the role of radio by taking measures aimed at improving programming to make the medium more useful in development communication.

Erdman and Kain (2007), argue that people tend to assume that ICT is only internet. It is much more. Information on malaria control can be communicated through various means such as posters, newspapers, community audio towers, radio or even the links between radio and email, dances, films and videos. Community and health providers must understand the problem of malaria in its relevant aspects to be aware of the options on effective areas of communication on malaria control and prevention.

## **2.13 Theoretical Framework.**

Health communication allows health messages to be used in education and avoidance of ill health. This takes place at many levels and involves holistic approach to health promotion. Theories are used to inform the ground work for health promotion but they are usually given less attention (if any at all) during the implementation programmes (Kobetz et al, 2005).



Health communication has undergone changes through the years. There have been shifts in paradigms that have helped in communicating health messages in the best way possible to achieve its set objectives.

The linear model of communication is an early communication model that visualizes the transfer of information as an act being done to the receiver by the sender. Their initial models consisted of three primary parts: sender, channel, and receiver. In health communication, the communication was perceived to be a transmission of knowledge of experts to the educated as the mass media was perceived to be the instrument to be used. This communication strategy aimed at individual change in attitudes and behavior with the assumption that media messages had a powerful impact in underdeveloped societies (Servaes, 2005).

However, critics suggest that the top-down flow of communication did not bring the process of communication to its fullest since it lacked an in depth knowledge of the challenges people face in different circumstances. Without knowledge of the audience and their participation, campaigns with health messages would be unsuccessful. The field of development communication later accommodated a focus on local dialogue and local change where participatory approaches and interactive solutions are based on interpersonal communication (Lie, 2008).

Behavior change paradigm came in after linear paradigm. Behavior change communication is premised on the belief that urgency of the pandemic necessitates a high focus on the individual behavior, and it thus tries to encourage people to make informed choices (Deane, 2002). It involves promoting particular behavior or social norms via communication interventions (Tufte & Mefalopoulos, 2009). Critics have however, noted that behavior change does not occur in isolation. It often happens within a framework of various factors such as individual motivation, local community support and availability of resource agencies within reach. The media-based communication health campaigns are characterized by one-way flow of communication and prevention where the target audience is not involved in any process of decision making, ownership or sharing of ideas. It is clear that instead of top-down behavior change communication, more participatory approaches are needed.

Media advocacy is another approach that strategized the use of the mass media to advance social or public policy initiatives (Wallack et al, 1993). Its goals are to stimulate debate and promote responsible portrayal and coverage of health issues. It rejects the idea that media can be of only anti-social messages and proposes to include socially relevant themes in entertainment. It advocates that social conditions should be the target of interventions. It adopts a participatory approach that emphasizes on the need of communities to gain control and power to transform the environment. Media advocacy assumes that media largely shapes public debate and therefore can lead to social and political intervention. It views mass media as agenda setters.

Participatory communication associated with Paulo Freire was soon employed as an approach in health communication. Critical thinking can be developed by democratic participation and therefore active participation in the hearts of many areas of development (Freire, 1983). It is further acknowledged as a means of program implementation where the dialogical processes of communication were associated with community empowerment, social mobilization advocacy and giving voice to the society and marginalized communities (African Communication Research, 2012).

The current paradigm in use in health communication is the convergence approach. This involves bringing together of different approaches to inform and strategize on the way forward. This is with an intention of mapping out trends and direction that attest to the richness and complexity of the health communication and development field. Not with standing persistent differences among theories and approaches, several points of convergence can give possible directions: the need of political will – avoidance of power fights, a tool-kit conception of strategies-how to improve quality of life, integration of top-down, bottom-up approaches, integration of multi-media and interpersonal communication and personal and environment approaches should be integrated.

Based on the above background, this research will relate to certain theories in mass communication that are very relevant to this study. Relating them to study would add more flesh and substance to the research. These theories include: Community Mobilization theory, Agenda Setting Theory and Diffusion of Innovation.

### **2.1.12 Community Mobilization Theory.**

Community Mobilization usually involves collaboration among health workers and communities in activities seeking to ‘empower’ them or ‘build their capacity’ to exercise greater agency over their well-being, through increasing their opportunities for meaningful social participation and building enabling partnerships with supportive outsiders (Rifkin and Pridmore, 2001).

Community mobilization has domains which include: shared concerns, critical consciousness, organizational structures/networks, leadership (individual and/or institutional), collective activities/actions, and social cohesion.

Shared concerns: Participants are able to identify concerns that are shared in the community. Most commonly these relate to infrastructure and safety: primarily access to water, electricity, housing, and crime. Malaria should be made a shared concern among the members of the community using the vernacular radio stations that are widely spread.

Critical consciousness: “One person cannot solve this [problem] alone”. Participants should acknowledge that communities that work together have a better chance of resolving problems. Malaria being a menace in Emuhaya District, there is need for collective effort in fighting it.

Leadership & Organizational Structure: this is by guided by the common belief that because they are our leaders, if I have problems I go to them. There are several well established formal organizations in the villages that community members universally recognise including the CDF, chiefs and their representative such as members of county assembly, members of parliament, senators and governors. These structures that are in place to address community level problems such as malaria.

Collective Action: there is need to have supportive community activities that are of “action to solve shared concerns”. Most examples of collective “action” should revolve around contentious issues or gaining goods and services that government should provide and also included community responsibilities to support one another.

Social Cohesion and Control: it is we expected that there should be broad reports of collective village identities and community cohesion. A sense of shared responsibility should always be common around social justice, goods or services but social needs in the face of hardship.

However, the theory does not address the issue of the possibility of the members of the target population and/ community not having the required technical knowledge or experience, and may need to understand some theory or past practice in order to see what the organization is trying to do. Some may need new skills in order to participate fully. This is addressed by the Diffusion of Innovations theory by Everret Rogers. The issue of urgency is also not addressed by the community participation theory where there is a likelihood of a participatory process taking longer than expected. A diverse group always takes longer to make decisions and come up with conclusions than does an individual or small group. It could take so long that an opportunity is missed, or that valuable time is lost that could be spent addressing the problem at hand. This is addressed by the Agenda setting theory by McCombs and Shaw.

### **2.2.12 Agenda Setting Theory.**

Zhu& Blood, (1970), McCombs and Shaw (1972) posit that agenda setting is the process whereby the news media lead the public in assigning relative importance to various public issues. In this situation, the media agenda influences the public agenda not by saying "this issue is important" in an overt way but by giving more space and time to that issue and by giving it more prominent space and time (Griffin, 2012).

Agenda setting may be categorized into three distinct but related themes that examine the link between public agenda setting—issues portrayed in the media and the public's priorities, policy agenda setting—media coverage and its influence on the legislative agenda of policymaking bodies, and media agenda setting—antecedents such as institutional roles and processes that are influential in the selection of issues and content covered in the media (Kosicki, 1993).

The application of agenda-setting has a potential to offer high versatility in health promotion. The field of health education places a significant focus on intrapersonal, interpersonal,

organizational and community-change process theories. However, agenda-setting represents a theoretical basis that offers cross-level analysis (Finnegan & Viswanath, 2002), cutting across all levels of health education responsibilities. Researching health promotion agenda-setting practices provides health education practitioners and policy-makers the potential to improve health promotion and public health performance in the twenty-first century. This is well applicable in the fight against malaria by making information on malaria the top agenda especially in the vernacular radio station.

Health Promotion Agenda-setting uses interrelationships of the media, public, and policy agenda to explore how health issues move to the forefront of policymakers' actions (Farmer & Kozel, 2005).

In relation to this study, it is very clear that this theory is very relevant. Undoubtedly, malaria has always been a major public health issue in the developing countries and specifically Kenya. Therefore, such an issue could equally be set a top agenda from the media to the general populace. More space and time can be allocated to issues related to malaria and its scourge, its causes, symptoms, effects and prevention. Information, communication and education (ICE) on the scourge of malaria can be taken as a top agenda by vernacular radio stations (as have been various done) thereby contributing immensely in the prevention and reduction of malaria infections.

### **2.3.12 Diffusion of Innovation.**

Diffusion of Innovation theory is a theory of how, why and at what rate new ideas, technology spread through cultures. Findings show that this theory was first studied by the French sociology Gabriel Tarde (1890). German and French anthropologists, Friedrich Ratzel and Leo Frobenius. However, the theory was popularized in the 1962 by Everett Rogers in his book "Diffusion of Innovation" who essentially describes the process by which: an Innovation is communicated through certain channels overtime among the members of social system (Roger, 2003, cited by M'Bayo, Kah and Tesunbi,2008).

Rogers (1962) equally describes the key element in diffusion research as:

**Innovation:** An innovation as idea, practice or object that is perceived as new by an individual or other unit of adoption. As a result of persistence of new malaria infections, new ideas and medication come up every day to help in the fight.

**Communication channels:** A communication channel is the means by which messages get from one individual to another. There are a variety of communication channels with the new entrants being vernacular radio broadcast in Emuhaya District.

**Time:** The innovation-decision period is the length of time required to pass through the innovation-decision process. Rate of adoption is the relative speed with which an innovation is adopted by members of a social system. A time frame can be established before measuring the achievement of any new effort in the fight of malaria.

**Social system:** A social system is defined as a set of interrelated units that are engaged in joint problem solving to accomplish a common goal. There is need to recognise everyone and the different roles played by each and especially the organs of authority who can be crucial in helping in the mobilization of the people and dissemination of information in regard to malaria.

From this theoretical foundation and in relation to the scourge of malaria, radio has the needed potentials in championing and diffusing any new ideas and innovation towards combating malaria. Over the years, ideas and different innovations have flourished on how to prevent or reduce the menace of malaria and observations show that radio has always been a good channel for reaching the masses.

Some of these ideas are: the use of treated insecticide bed nets, home management of malaria, artemisinin-based combination therapy, the discovery of new anti-malarial drugs from time to time which are also diffused to the members of the society. In diffusing these various innovations, health communication researchers have identified information, education and communication as basic techniques (Thomas, 2006). Radio as a channel of mass communication

would conveniently achieve this owing to its multifarious prospects in reaching far and wide as well as its portable nature.

## **CHAPTER THREE: RESEARCH METHODOLOGY.**

### **3.0 Introduction.**

This chapter summarises how this study was conducted and the techniques used to collect data on vernacular radio and health promotion: exploring programmes, the use and impact of vernacular radio in malaria control in Emuhaya District, Kenya. It includes discussion on research design, target population, sampling procedure, data collection methods, data collection and analysis techniques and ethical issues.

### **3.1 Research Design.**

A research design is the scheme, outline or plan that is used to generate answers to research problems (Dooley, 2007).

This research was conducted through a descriptive survey design (DSD) where things have been presented as they are in the field. In a descriptive design, focus was placed on the formulation of the objectives of the study, methods of data collection, sample collection, collecting the data, processing the data and reporting of findings.

This study was concerned with obtaining information by interviewing or administering questionnaires to a sample of respondents and at the same time conduct interviews using interview guides thus making it a descriptive survey. It was both quantitative and qualitative in nature. This study was carried out in Emuhaya District and involved describing factors that affect behavior change campaigns against malaria among the target population.

### **3.2 Target Population.**

Target population in statistics is the specific population about which information is desired. A population is a well-defined set of people, services, elements, events, group of things or



households that are being investigated (Ngechu, 2004). This definition ensures that population of interest is homogeneous.

The target population was composed of 384 people living in Emuhaya District aged 18 and above years classified as 18-20, 21-30, 31-40 years, and 41 and above years. The district is divided into two divisions namely Emuhaya and Luanda divisions with a population of 240,000 people. The youth form 47% of the population while the adults form 48% of the population. The target population should have some observable characteristics, to which the researcher intends to generalize the results of the study (Mugenda and Mugenda, 2003).

### 3.3. Sample Size.

The importance of selecting a representative sample through making a sampling frame. From the population frame the required number of subjects, respondents, elements or firms was selected in order to make a sample. (Ngechu, 2004).

A sample size is a selection of elements, members or units from a population. An ideal sample is one that provides a perfect representation of a population (Blaikie, 2009). The following sample size formula for infinite population was used to arrive at a representative number of respondents (Godden, 2004):

$$SS = \frac{Z^2 \cdot p(1-p)}{M^2}$$

Where: SS= Sample Size for infinite population (more than 50,000) (n)

Z = Z value (1.96 for 95% confidence level)

p = population proportion (expressed as decimal).

M = Margin of Error at 5% (0.05)

$$n = \frac{1.96^2 \times 0.48(1-0.48)}{0.05^2}$$

$$n = \frac{3.8416 \times 0.2496}{0.0025}$$

$$n = 383.5 \sim 384.$$

Therefore, the sample size was 384 respondents. This was a representation of the total population. 384 questionnaires were given to respondents; a confident level of 95% with a sampling error of 5% in either direction of reality was taken. 3 focus groups were involved using focus group guide and interview guides were used on 4 key informants in the district.

### **3.4 Sampling Technique.**

The sampling technique describes how the sampling unit, sampling frame, sampling procedures and the sample size for the study. The sampling frame describes the list of all population units from which the sample will be selected (Cooper & Schindler, 2003).

Sample of respondents was drawn from the two locations in Emuhaya District. Random sampling was used to establish the initial respondents. This is because it provided equal opportunity of selection of the respondents. The researcher also used purposive sampling specifically snowball or chain sampling was used in this study to collect data from the population. This enabled the researcher to begin with a small number and then gradually increased to the sample size as new contacts were mentioned by the respondents that were initially available. A nurse in Emuhaya District hospital, Programs' Manager of Radio Ingo and two chiefs of the two locations were the key informants since they are experts in their respective fields and therefore suitable to give input to the research.

### **3.5 Research Instruments.**

Both primary and secondary data was needed for this research. Primary data was collected by administering questionnaires. The questionnaire had both open and closed ended questions. The structured questions were used in an effort to conserve time and money as well as to facilitate in easier analysis as they were in an immediate usable form; while the unstructured questions were used to encourage the respondent to give an in-depth and felt response without feeling held back in revealing of any information. The questionnaires were administered physically by the researcher and the research assistants in a period of eight days. The use of questionnaires to collect data for this project was seen as a practical procedure to collect a large amount of data in

a fairly big geographical area in a short period of time. Furthermore, they were easily coded to facilitate data entry and due to their homogenous nature, they reduced bias.

The primary data was also collected through interviews with key informants. This was also enabled the researcher to collect in-depth responses and gave room for seeking further information. The interviews were carried out by the researcher and the research assistants using respective interview guides. A total of 4 key informants and 3 focus groups were interviewed. Despite the fact that they took more time than the questionnaires, they provided more focused information because of the flexibility they provided to the participants.

Secondary data was obtained from the review of literature from various sources including internet, journals, books and both published and unpublished reports. More information was also collected from the main broadcasting house.

### **3.6 Data Analysis and Presentation techniques.**

Data was analyzed both qualitatively and quantitatively. Quantitative data which was collected by using questionnaires was analyzed by the use of descriptive statistics and presented through percentages and frequencies. This was displayed using tables, bar graphs, pie charts and in prose-form. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through the use of Statistical Package for the Social Sciences software.

The qualitative data was thematically analyzed by classifying major issues covered and recurrent themes. The data was scrutinized to ensure accuracy and to avoid ambiguity meaning it was subjected to content analysis where the main themes emerging from the open ended questions and interview guides were identified, examined, interpreted and later presented as a narrative.

### **3.7 Testing validity of Research Instruments.**

To establish the validity of the research instruments, the researcher did a pilot testing which involved administering the questionnaires to a sample of ten respondents not in the study.

## CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION.

### 4.0 Introduction.

In this chapter, the analysed data has been presented using frequency distribution tables, pie charts, graphs, narration and discussion for qualitative description and summarized according to common themes. The analysis was based on the study objectives and research questions.

The study received 91% response from the targeted respondents, both in qualitative and quantitative data collection. Qualitatively, all the targeted interviews involved Ingo Fm station Manager, a Kenyan Registered Nurse at Emuhaya District hospital, two chief's from the two locations in Emuhaya District and 3 focus groups, found in two salons and a construction site consisting of four, five and eight participants respectively.

### 4.1 Demographic information.

The bio data from our respondents summarised their age, gender, marital status and profession.

#### 4.1.1: Age distribution of respondents.

The study sort to establish the age distribution of the research respondents. The table 4.1 below summarises the findings.

**Table 4.1 Age distribution of respondents.**

Age(Years)	Frequency	Percent	Cumulative percent
18-20	81	23	23
21-30	104	29	52
31-40	97	27.7	79.6
40 and above	68	19.4	100
Total	350	100	

Source: Researcher 2015

Indications from the table 4.1 above show that there is a mix of age group with representation from 18 years and above. However, the bulk of the respondents belong to the middle age group, (21-30 years) constituting 29 percent, followed by (31- 40 years) which constitutes 27 percent, while age group (18-20 years) and 40 and above years constitute 23 percent and 19.4 percent, respectively.

This implies that majority of the respondents interviewed belonged to the middle aged youth who range between 21 and 40 years, indicating that the sample somehow reflects the composition of young and vibrant generations who are willing to look into the challenges facing their community which include malaria menace. This is unlike the smallest percentage representing the 40 years and above aged respondents, whose concentration may be elsewhere based on the pressure and priorities that life has presented, having a resigned attitude towards some societal issues such as health issues.

#### **4.1.2: Gender distribution of respondents.**

This study sort to establish the gender distribution of the research respondents. The table 4.2 below summarises the findings.

**Table 4.2: Gender distribution of respondents.**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative percent</b>
Male	132	37.7	37.7
Female	218	62.3	100
Total	350	100	

Source: Researcher 2015.

Table 4.2 above indicates that most of the respondents are female constituting 62.3% while their male counterparts constitute 37.7%.

This means that most women are based in the village in comparison to their male counterparts who in most cases are away from their rural home in search of their livelihood. This therefore

explaining the availability of more women respondents than men in this study in addition to the fact that they face the malaria menace first hand in comparison to their male counterparts.

#### **4.1.3: Marital status distribution of the respondents.**

The study sort to establish the marital status distribution of the research respondents. The table 4.3 below summarises the findings.

**Table 4.3: Marital status distribution of the respondents**

<b>Marital status</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative percent</b>
Single	143	40.8	40.8
Married	207	59.1	100
<b>Total</b>	350	100	

Source: Researcher 2015.

Table 4.3 indicates that most of the respondents are married constituting 59.1 percent, while the unmarried (singles) are 40.8 percent of the targeted respondents.

From the above data, majority of the married people stay in the rural areas since in most cases they have a need of establishing themselves alongside their families and that it is cheaper for them being in the rural than in the urban areas. On the other hand, the single people in the rural areas are fewer most probably due to the fact that most of them migrate to urban areas in search of their livelihood and that they easily move around in comparison to the married who would have to put many things into consideration before moving from one place to another.

#### **4.1.4 Occupation distribution of Respondents.**

The study sort to establish the occupation distribution of the research respondents. The table 4.4 below summarises the findings.

**Table 4.4: Occupation distribution of Respondents.**

<b>Occupation</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative percent</b>
EMPLOYED	70	20	20
BUSINESS PERSON	52	14.9	34.9
PEASANTS	167	47.7	82.6
STUDENT	61	17.4	100
<b>Total</b>	350	100	

Source: Researcher 2015.

According to table 4.4, majority of the respondents are peasants as they constitute 47 percent. This is followed by the employed that constitute 20 percent, while students constitute 17 and percent, the business people constitute 14.9 percent.

This implies that a majority of the population in the rural areas are peasants since there are very little economic activities that take place there and therefore there is a high likelihood that the people rely on their small pieces of farms as a source of their livelihood. This affirms the report: It is estimated that about 60% of Emuhaya population lives below the poverty line. Poverty here is more pervasive in the urban areas than in the rural with corresponding poverty ratios of 78% and 58% respectively. For example, 60% of division residents are impoverished and therefore suffer from food insecurity (Kenya national Bureau of Statistics, 2012).

#### **4.2 Use of radio among people in Emuhaya District.**

The study sought to find out if there are any programs broadcast on vernacular radio in Emuhaya district that address malaria control and prevention.

##### **4.2.1 Radio listenership among residents of Emuhaya District.**

This study sought to find out the listenership of radio among the people living in Emuhaya District. The following table summarises the findings.

**Table 4.5: Radio listeners among residents of Emuhaya District.**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative percent</b>
Yes	327	93.4	93.4
No	23	6.6	100
<b>Total</b>	<b>350</b>	<b>100</b>	

Source: Researcher 2015.

Table 4.5 illustrates that majority of the respondents listen to radio as indicated by the 93.4 percentage reporting to be radio listeners while only 6.6 percent do not listen to radio.

This shows that radio is a common medium of communication in Emuhaya District and therefore attracts great listenership. This could be attributed to the fact that radio is affordable and therefore easily available even to the rural population which agrees with Moemeka who states that radio is the only medium of mass communication with which the rural population is very familiar (Moemeka 1990). Being in the rural, this also implies that radio serves as a key source of news, entertainment and education among the residents explaining the high percentage of listenership.

#### **4.2.2 Radio ownership among the residents of Emuhaya District.**

The study sort to establish radio ownership among the people living in Emuhaya District. The table 4.6 below summarises the findings.

**Table 4.6: Radio ownership among the residents of Emuhaya District.**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative percent</b>
Yes	302	86.3	86.3
No	48	13.7	100
<b>Total</b>	<b>350</b>	<b>100</b>	

Source: Researcher 2015.



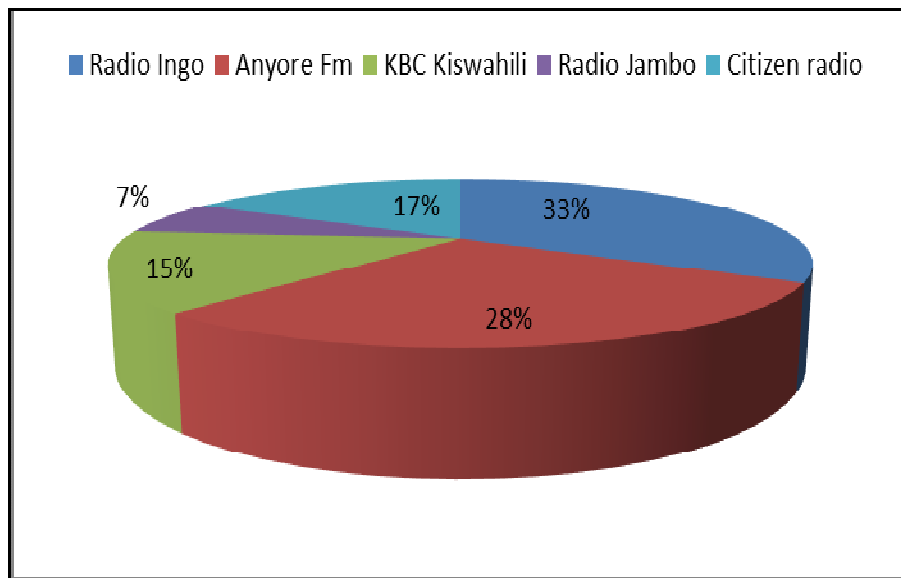
Table 4.6 shows that a majority of the radio listeners own their own sets as indicated by the 86.3 percent of the respondents own their own set of radio while 13.7 percent do not own a set of radio.

Interview and focus group respondents indicated that they access radio through sets that are individually owned although a few respondents indicated that they access it through their mobile phones. The inclusion of radio as an important accessory in any mobile phone has helped in the general increment of radio listenership and ownership. A report by Synovate on Media Consumption Habits in Kenya (2011) indicated that radio is the most accessed media. This may be attributed to the fact that radio remains the most powerful, and yet the cheapest, mass medium for reaching large numbers of people in isolated areas especially in the rural..

#### 4.2.3 Radio station listened to by the residents of Emuhaya District.

The researcher sought to find out the radio station listened by the people in Emuhaya District. Figure 4.1 summarizes the findings.

**Figure 4.1: Radio station listened to by the residents of Emuhaya District.**



Source: Researcher 2015.

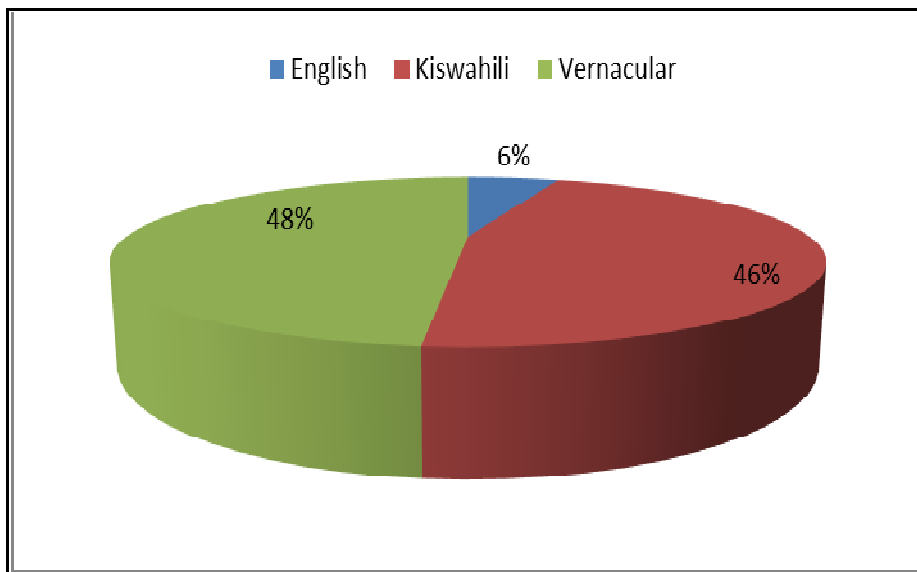
Figure 4.1 indicates the respondents listen more to Radio Ingo in comparison to other radio stations seen from the 33 percent closely followed by Anyore Fm at 28 percent followed by Radio Citizen, KBC radio and Radio Jambo respectively.

The above results imply that there is a general increase in the number of stations broadcast even in the rural areas. This includes vernacular radio stations. This also shows that many listeners have shifted their allegiance to listening to vernacular stations rather than mainstream radio available in the community. This could be because of the new ideas and programs that come along with these new stations. This support the report: vernacular radio stations are especially popular in rural areas, a majority listeners being older than 30 years (Media Council of Kenya, 2012).

#### 4.2.4 Language of broadcast preferred by the radio listeners in Emuhaya District.

This researcher sought to find out among the people in Emuhaya what language of broadcast the preferred. Figure 4.2 below summarises the findings.

**Figure 4.2: Language of broadcast preferred by the radio listeners in Emuhaya District.**



Source: Researcher 2015.

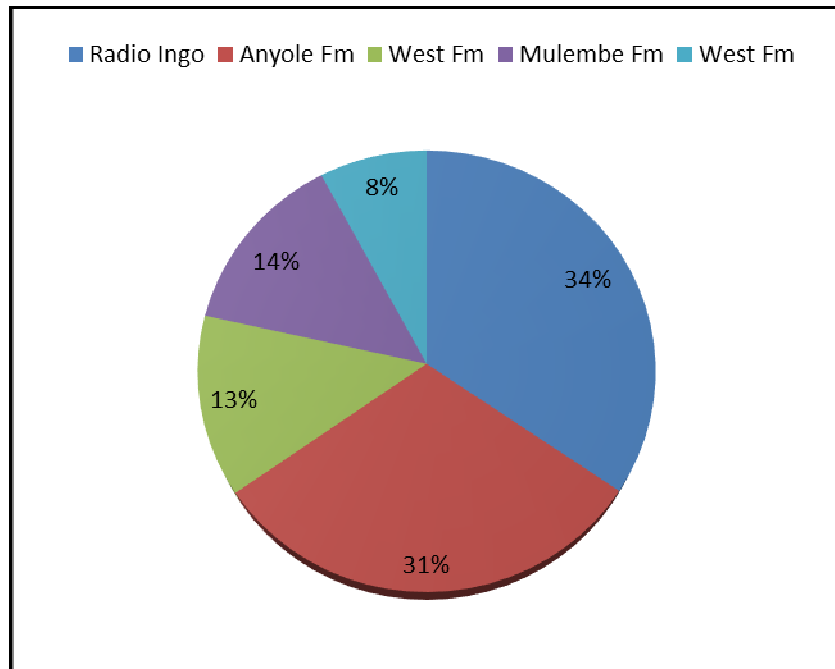
As indicated by figure 4.2, the language of preference in broadcast according to the respondents is vernacular which has 48 percent of the respondents, while Kiswahili has 46 percent and English has 6 percent.

This implies that a majority of the listeners prefer listening to programs broadcast in Kiswahili or mother tongue as compared to English. This may be attributed to the fact that the two languages are the most common language of communication among the people in Emuhaya District and many other rural areas. This could also be attributed to the fact that majority of the population in Emuhaya District may be semi-illiterate and therefore not competent in the English language. This confirms that countrywide, five of the ten most popular Kenyan radio stations broadcast in vernacular language (Media Council of Kenya, 2012).

#### 4.2.5 Vernacular radio stations listen to by the residents of Emuhaya District.

This researcher sought to find out the vernacular radio stations listen to by the people of Emuhaya District. Figure 4.3 below summarises the findings.

**Figure 4.3: Vernacular radio station listened to by the residents of Emuhaya District.**



Source: Researcher 2015.

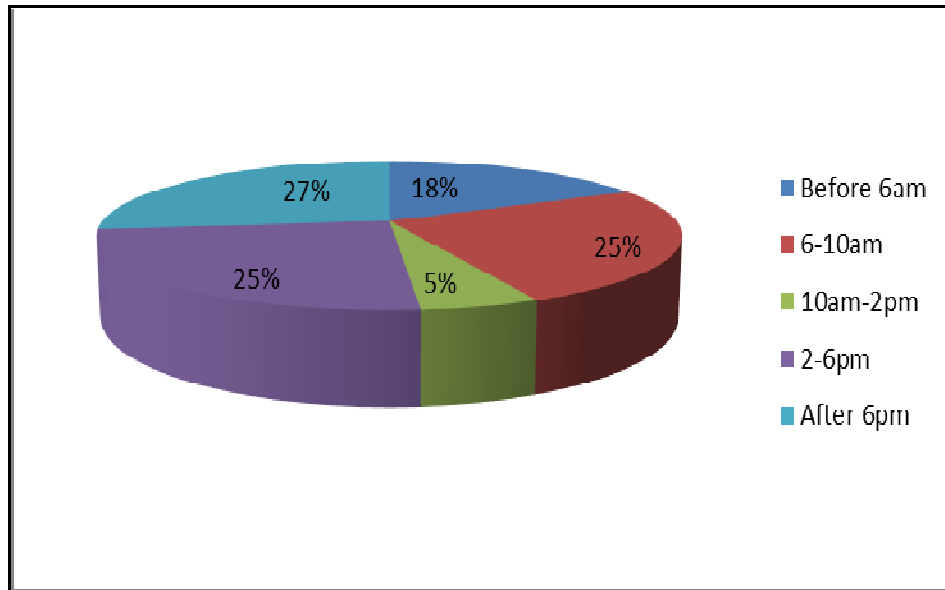
Figure 4.3 shows that there are several vernacular station broadcast in Emuhaya District. Majority of the respondents have a preference of listening to Radio Ingo which has 34 percent closely followed by Anyole Fm which has 31 percent while West, Fm, Mulembe FM and Equator FM having a total of 35 percent. During the focus group discussion and interviews with the local leaders, it was revealed that the radio listeners have enjoyed national radio, community radio and vernacular radio stations. One spectacular station that was pointed out is Radio Ingo which is a vernacular radio station broadcast in the area.

The implication is that there are several vernacular station broadcast in Emuhaya District and each of them has some audience as seen from the distribution chart. As a result of devolution, media practitioners have taken advantage of it and also devolved their products since some of the stations are owned by main stream media houses for instance, radio Ingo is owned by Kenya Broadcasting Corporation while Mulembe Fm is owned by Royal media Group. The above is a pure indication that Emuhaya District has benefitted from the media Act (2013) which has enabled many radio stations to be licensed. From the analysis, the vernacular stations have become popular than the main stream radio.

#### **4.2.6 Time when radio is listened to most among the Emuhaya District residents.**

This researcher sought to find out the time when radio is listened to most among the Emuhaya District residents. Figure 4.3 below summarises the findings.

**Figure 4.4: Time when radio is listened to most among the Emuhaya District residents.**



Source: Researcher 2015.

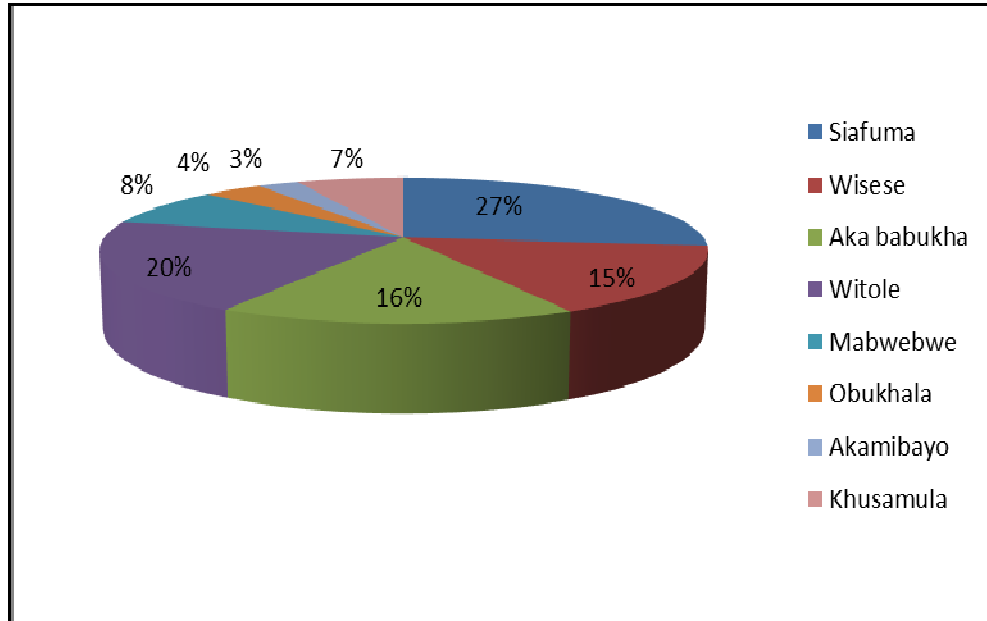
Figure 4.4 indicates that majority of the respondents listen to radio after six in the evening as shown by the 27 percent, while the others listen between six to ten in the morning and two to six in the afternoon as they equally have 22 percent each. Only 5 percent of the respondents listen to radio between ten in the morning and two in the afternoon.

This implies that radio is most listened in the evening after six most probably as a key source of entertainment and news. Being a rural set up, there less economic activities that take place after six in the evening thus people retreat back to their homes for rest after a day's work. It also receives a good listenership in the morning before ten most probably because the people in the region are yet to get busy with their daily chores.

#### **4.2.7 Favourite programme among the Emuhaya District residents aired on Radio Ingo.**

This researcher sought to find out the favourite programme among the Emuhaya District residents aired on Radio Ingo. Figure 4.5 below summarises the findings.

**Figure 4.5: Favourite programme on Radio Ingo among the Emuhaya District residents.**



Source: Researcher 2015

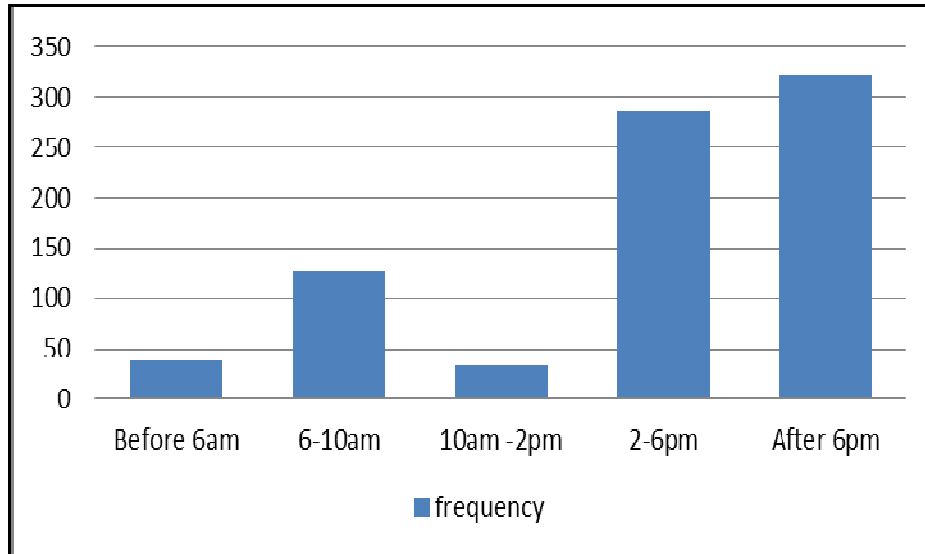
Figure 4.5 indicates that there are several programmes aired on Radio Ingo and the favourite program listened on is Sifuma which has 27 percent, followed by Witole which has 20 percent. Akamibayo received the lowest percentage of 3 percent.

The above indicates that vernacular radio have been embraced in the society and as a result, they have strived to come up with different programs to address different societal issues and meet their audience's demand. These stations distinguished themselves by the genre of music and content they broadcast, in the process munching away portions of the large audience share that the state radio broadcaster enjoyed (African Annual, 2014).

#### **4.2.8 Time when the favourite programme(s) is aired.**

This study sought to find out the time when favourite radio programs are aired on vernacular radio broadcast in Emuhaya District. Figure 4.6 summarizes the findings.

**Figure 4.6: Time when the favourite programme(s) is aired.**



Source : Researcher 2015

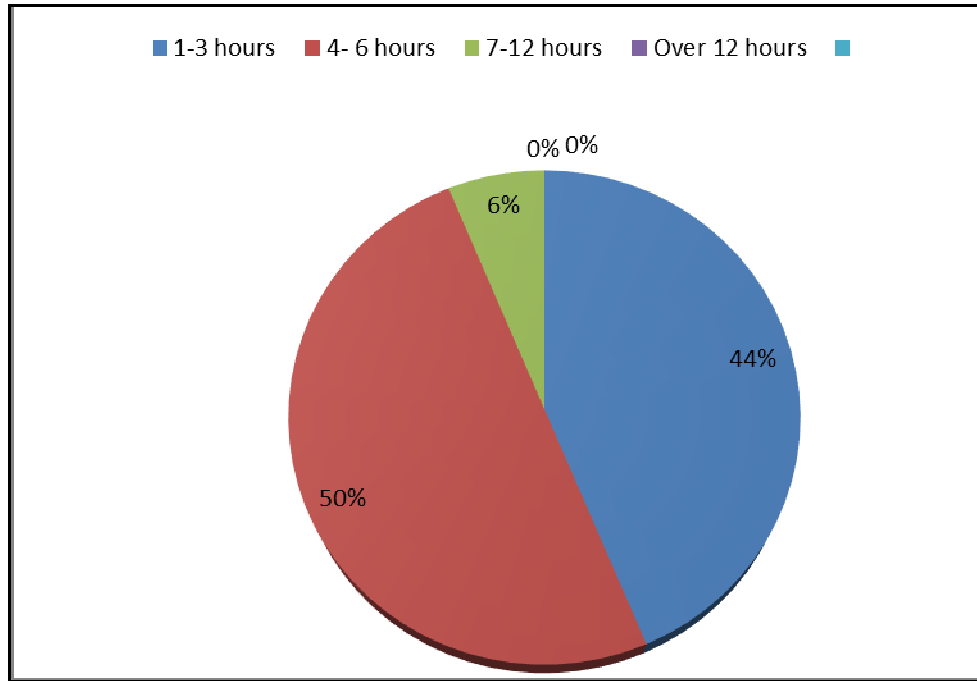
From the above Figure 4.6, indications are that most of the respondents listen to their favourite program on radio after six in the evening as shown by the graph followed by those who listen to them between two to six in the afternoon. The time when radio is least listened to is between ten in the morning and two in the afternoon.

This generally implies that radio is most listened to in the afternoon and evenings basically as a source of entertainment. This is probably after a day's work as a way of relaxation through entertainment offered on radio and to also learn of the happenings of the day through the news broadcast. The radio owners have equally studied and known the behaviour pattern of their consumers for instance, when the people are likely to listen to radio and therefore programmed their programs accordingly to win more listeners as a result of the competition in the market.

#### **4.2.9 Time used to listen to radio to among the people of Emuhaya District.**

This study sought to find out the time used by the Emuhaya District residents to listen to radio. Figure 4.7 summarizes the findings.

**Figure 4.7: Time used to listen to radio to among the people of Emuhaya District.**



Source: Researcher 2015.

According to figure 4.7, a majority of the respondents listen to radio for four to six hours as shown by the 50 percent, while 44 percent listen for one to three hours. Six percent listen for seven to twelve hours while none listens for over twelve hours.

The respondents generally listen to radio for up to 6 hours which is a quarter of a day. This is most probably because radio programs are informative, educative as well as a source of entertainment. In addition to this, radio programs can still be consumed as listeners go on working since it is audio and may not need a hundred percent concentration to benefit from its programs. This confirms most research done before that have indicated that radio is the leading source of news, current affairs and gossip. According to the Kenya Audience Research Foundation 2012 report, on average 93% of the Kenyan population listens to radio at least once in seven days, while the average time spent listening per day is 6 hours.



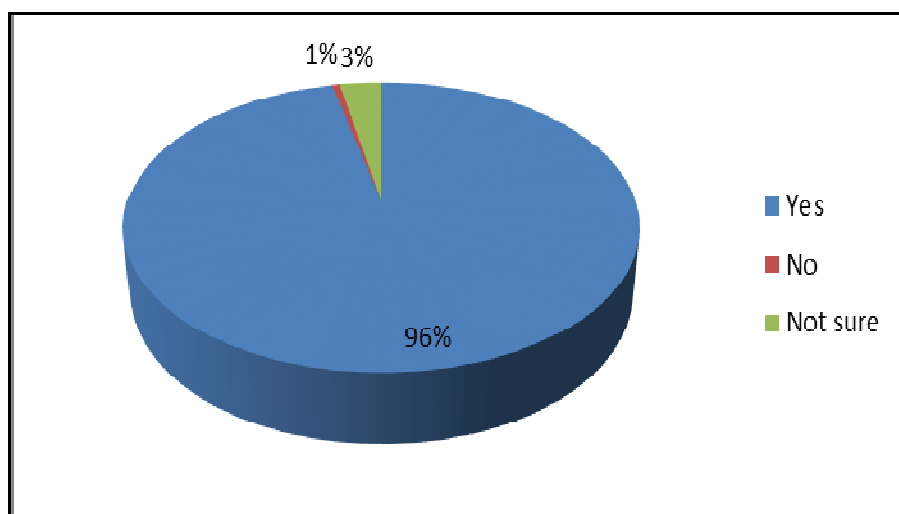
### 4.3 Radio programmes regarding malaria.

This sort to study the radio programmes and their contents in relation to malaria. The following were the findings.

#### 4.3.1 Information on radio Ingo regarding to malaria.

This study sought to find out if there is any information broadcast about malaria on Radio Ingo. Figure 4.8 summarizes the findings.

**Figure 4.8: Information on Radio Ingo regarding to malaria.**



Source: Author 2015.

Figure 4.8 indicates that a majority 96 percent of the respondents have heard of information regarding to malaria on Radio Ingo while 3 percent have never heard and 1 percent were not sure of having had of any information on malaria over the radio.

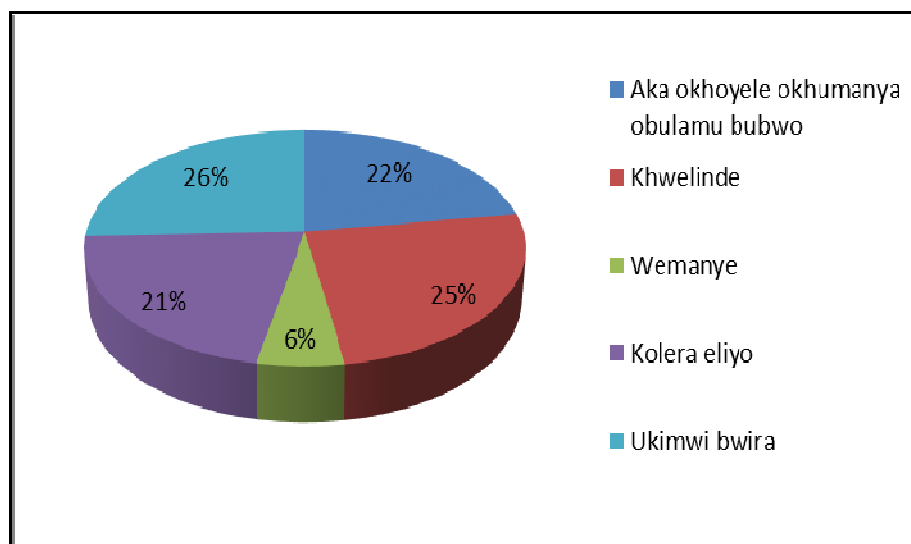
The above implies that vernacular radio has been effectively used to communicate about malaria control and prevention among the people of Emuhaya District. This has been dictated by the fact that Emuhaya District is one of the regions in Kenya that is greatly affected by malaria attacks and therefore, it is an aspect of health that cannot be ignored. Therefore to inline with the current events, together with the Ministry of Health, the vernacular radio stations' owners have partnered to have programs broadcast on radio to disseminate any relevant information on malaria. In

terms of effectiveness in making the target population aware of the 2011 campaign, interpersonal communication at the community level and use of vernacular radio broadcasts had the most significant impact according to the evaluation (Kenya- AMP Mission Report, 2014).

#### 4.3.2 Health programme / advertisement aired on Radio Ingo.

The researcher sought to find out if there are any health programme(s) or advertisement(s) aired on Radio Ingo. Figure 4.9 summarizes the findings.

**Figure 4.9: Health programme/ advertisement aired on Radio Ingo.**



Source: Researcher 2015

Figure 4.9 indicates that there several programmes addressing health issues in the society which include Ukimwi Bwira” which has 26 percent, “Khwelinde” with 25 percent, “Aka Okhoyele Mulamu Bubwo” having 22 percent. “Wemanye has the least percentage of 6 percent.

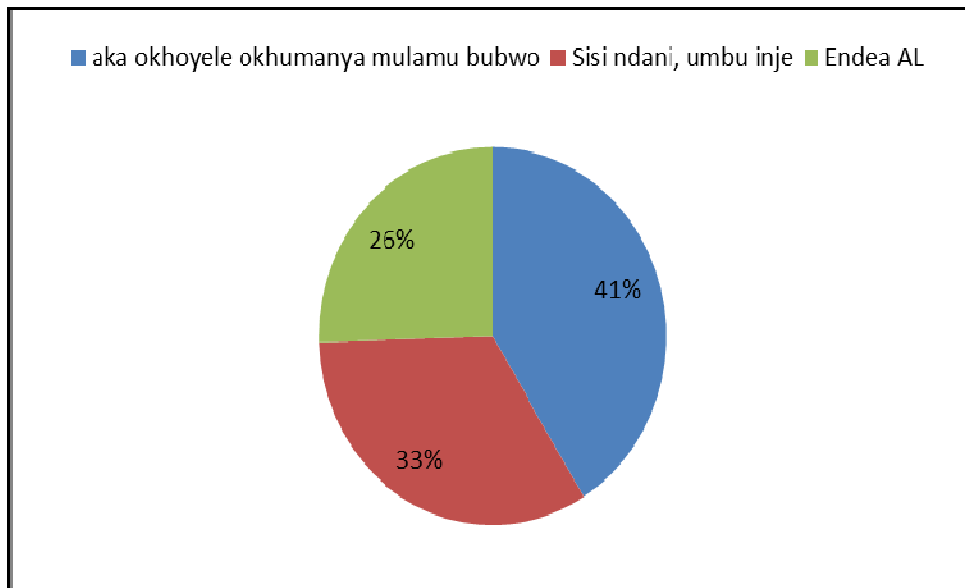
In the recent, there has been a great challenge in the health sector with attacks from various health conditions and disease both curable and incurable. As a result there have been a calls to have combined effort put together to fight some of these diseases through lifestyle and

medication. The above information implies that there are several health programs aired on the vernacular radio stations addressing different health issues affecting our society today. This is mainly determined by what is considered to be a crisis at given times.

#### 4.3.3 Radio programme/advertisements aired on Radio Ingo regarding to malaria.

The researcher sought to find out if there are programmes or advertisement aired on Radio Ingo regarding to malaria. Figure 4.10 summarizes the findings.

**Figure 4.10: Radio programmes/advertisements aired on Radio Ingo regarding to malaria.**



Source: Researcher 2015.

Figure 4.10 indicates that there are programmes on Ingo Radio regarding to malaria with ‘Aka Okhoyele Mulamu Bubwo’ having 41 percent, ‘Sisi Ndani, Umbu Inje’ having 33 percent and ‘Endea AL’ having 26 percent.

This shows that there are media messages that have been used in Kenya to promote the fight against malaria in an effort to impact on malaria control and prevention, although it still remains a threat. Experts in the health sector are constantly looking for solution(s) to the malaria menace and as a result, they come up with new ways of fighting the disease. Any new discovery that has

been proven to be able to fight malaria is communicated to the people immediately and radio happens to be one of the main medium of this communication.

#### 4.3.4. Frequency of the programmes/ advertisement on malaria are aired on Radio Ingo.

The researcher sought to find out how frequently programmes or advertisement on malaria are aired on Radio Ingo. Table 4.7 summarizes the findings.

**Table 4.7: Frequency of the programmes/ advertisement on malaria are aired on Radio Ingo.**

<b>Time</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Cumulative percent</b>
Hourly	8	2.3.	2.3.
Every 6 hours	10	2.9	5.2
Daily	326	93.1	98.3
Weekly	6	1.7	100
<b>Total</b>	<b>350</b>	<b>100</b>	

Source: Researcher 2015.

Basing on table 4.7, these programmes are aired daily as seen from the 93 percent while 2.9 percent of the respondents thought that the programs are aired after every six hours. No respondents said that the programmes are aired monthly as 1.7 percent thought that the programmes are aired weekly. The interviews and focus groups revealed that the listeners were interested in news, entertainment and developmental programmes. However majority of the listeners preferred a mixture of the three. From an interview with Radio Ingo manager, she said this about the listeners.

“Radio Ingo is broadcasted by KBC which is an established entity in the radio world. We chose to have the station broadcast in Anyole - the local dialect spoken by the people in Emuhaya District and that is a decision

we have not regretted taking since our listeners have been loyal to the station seen through their daily participation. We have programs aired based on the demands of our listeners. That is what guides us.”

According to her, the radio programming system has catered for their listeners’ interest featuring programs according to their preference distributed throughout the day. This implies that though there are programs regarding to malaria aired on these vernacular stations, they are not as frequent as expected basing on the posing challenge of malaria menace. This is because the media houses have to take care of their listeners demands and in the process may have sidelined some of the key issues meant to be aired such as malaria.

#### **4.4 Health programmes on radio and malaria control and prevention in Emuhaya District.**

##### **4.4.1 Knowledge on malaria among the people in Emuhaya District.**

The researcher sought to find out if the residents of Emuhaya District have any knowledge on malaria. Table 4.8 summarizes the findings.

**Table 4.8: Malaria awareness among the Emuhaya District residents.**

<b>Reponses</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Cumulative percent</b>
Yes	340	97.1	97.1
No	10	2.9	100
<b>Total</b>	<b>350</b>	<b>100</b>	

Source: Researcher 2015.

Table 4.8 indicates that 97.1 of the respondents have heard of information regarding malaria while 2.9 percent have not heard of anything about malaria.

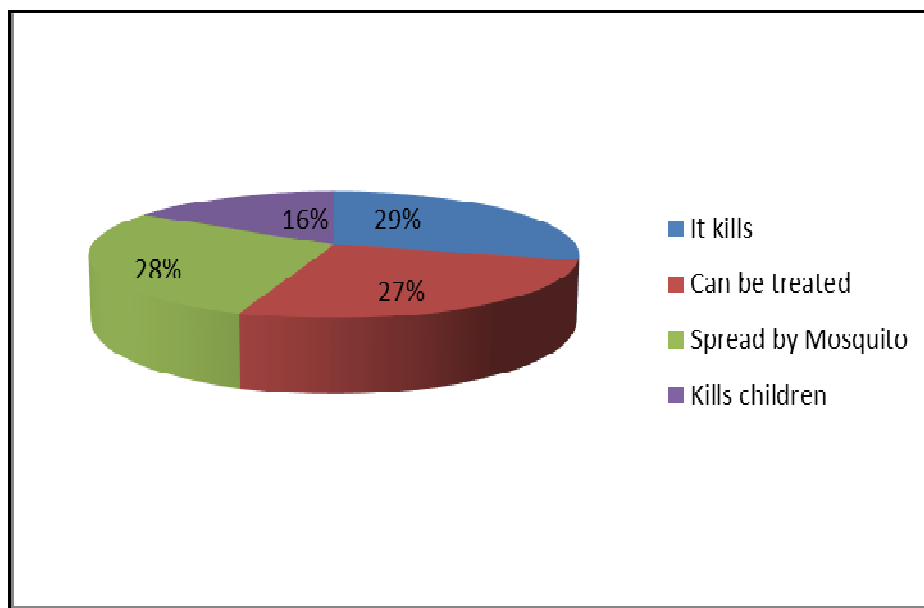
This implies that malaria is not a new aspect among the people of Emuhaya District and therefore majority of them are familiar with it and the threat it poses as disease among them. Malaria has and remains a threat to the residents of Emuhaya and beyond. This agrees with the

statement: Malaria occurrence in tropical and sub-tropical developing countries has become a paradox in these regions because the disease has defied sophisticated technological initiatives for its control (Tonui et al, 2013).

#### 4.4.2 Knowledge on malaria that the Emuhaya District residents know.

The researcher sought to find out what information the residents of Emuhaya District have regarding to malaria. Figure 4.11 summarises the findings.

**Figure 4.11: Information about malaria that the Emuhaya District residents know.**



Source: Researcher 2015

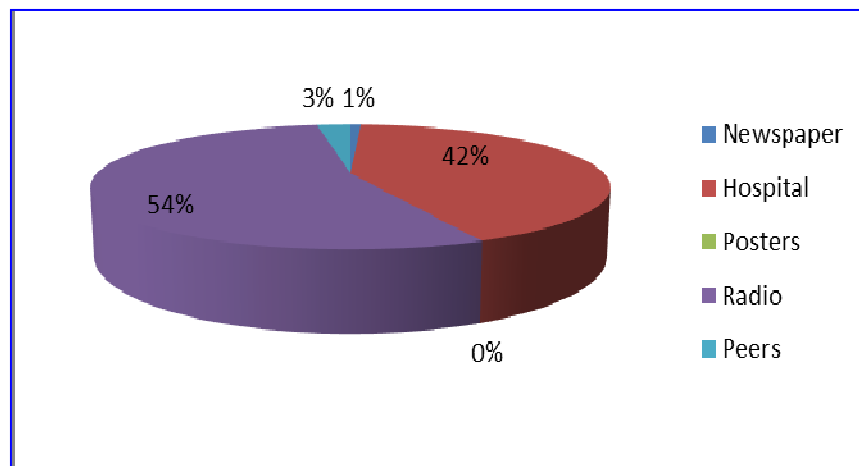
Figure 4.11 indicates that 29 percent of the people know that malaria kills. 28 percent of the respondents believe that malaria is spread by mosquito while 27 percent believe that it can be treated. 16 percent know that it kills children.

According to this data, the Emuhaya District community appreciates that malaria is a threat to them as it causes deaths especially of the children. They as well are aware that it is spread by mosquitoes and that it can be treated. This is proof that malaria is a common disease in the region and therefore its effects well known to the people and therefore a need to enlighten them more on how to deal with it and if possible overcome it.

#### 4.4.3 Source of information about malaria among Emuhaya District residents.

The researcher sought to find out the source of information about malaria among Emuhaya District residents. Figure 4.12 summarises the findings.

**Figure 4.12: Source of information about malaria among Emuhaya District residents.**



Source: Researcher 2015.

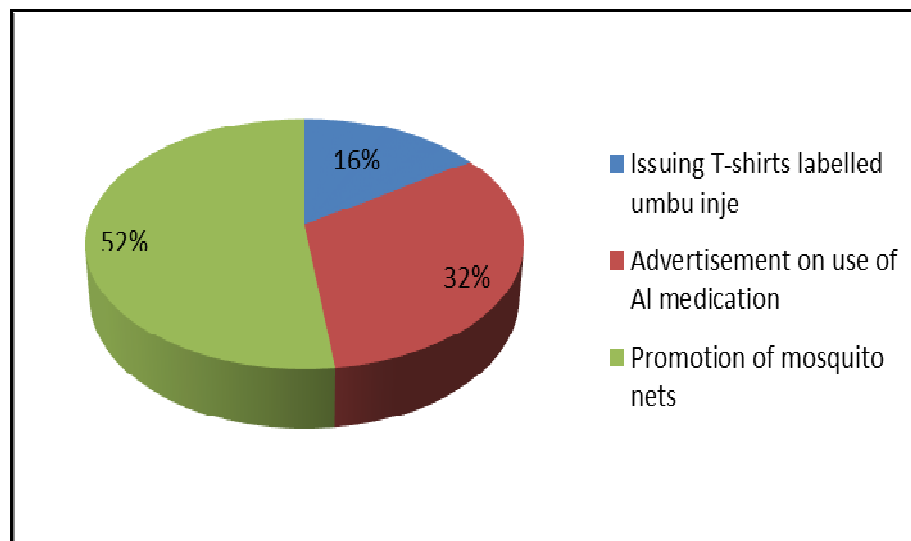
Figure 4.12 indicates that 54 percent of the respondents heard about malaria through the radio, 42 percent heard through hospital while 3 percent heard through peers. Only 1 percent heard through peers while none heard through posters.

There are several sources of information regarding to malaria in the district. However, the above data shows that vernacular radio has played a big role in disseminating information regarding to malaria. This is supported by previous studies that have shown that campaigns traditionally have relied on mass communication such as public service announcements on billboards, radio and television and educational messages in printed materials such as pamphlets to deliver health messages (Healthy People 2010 Guidelines). According to PSI 2012, “Mbu inje, sisi ndani” campaign adopted an integrated approach with radio as the major source of information, complemented by interpersonal communications through community-based organisations and other contracted agencies.

#### 4.4.4. Radio Ingo participation in Malaria control and prevention in Emuhaya District.

The researcher sought to find out how Radio Ingo has participated in the Malaria control and prevention in Emuhaya District. Figure 4.13 summarises the findings.

**Figure 4.13: Radio Ingo participation in Malaria control and prevention in Emuhaya District.**



Source: Researcher 2015.

Figure 4.13 shows that Radio Ingo has mobilized listeners to help in prevention, cure and control of malaria by promoting use of mosquito nets as indicated by 52 percent, 32 percent say through advertisement on use of AI treatment and 16 percent say by issuing T-shirts labelled “umbu inje”.

Interview with the Media manager and the nurse revealed that most the malaria campaigns and programs heavily rely on the Ministry of Health for them to give permission for them to be run in the radio channels. Some of the campaigns are seasonal and therefore do not run for a long time.

The media manager said,

Malaria generally in western Kenya where I come from remains a challenge. If it was my wish, I would run some of these campaigns year



in and out. It is unfortunate for us to report for examples about five children dying of malaria in Western province in this 21<sup>st</sup> Century when malaria is curable and preventable. It really breaks my heart.

This shows there have been continuous campaigns going on about malaria control and prevention, most probably basing on the Agenda Setting Theory which has a potential of offering a high versatility in health promotion, even though they do not sound to be sufficient. This is attributed to the fact that malaria remains a threat in the tropical regions which includes Emuhaya District despite all the effort that has been put to tame it. There is therefore still a need for the fight to go in order to achieve the millennium goals.

#### **4.4.5 Format adopted by radio to present information on malaria.**

The researcher sought to find out the formats adopted by radio to present information on malaria.

Table 4.9 summarises the findings.

**Table 4.9: Format adopted by radio to present information on malaria.**

<b>Reponses</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Cumulative percent</b>
talk shows	35	10	10
campaigns	312	89.1	99.1
skits	-	-	-
quizes	3	0.9	100
Total	350	100	

Source: Researcher 2015.

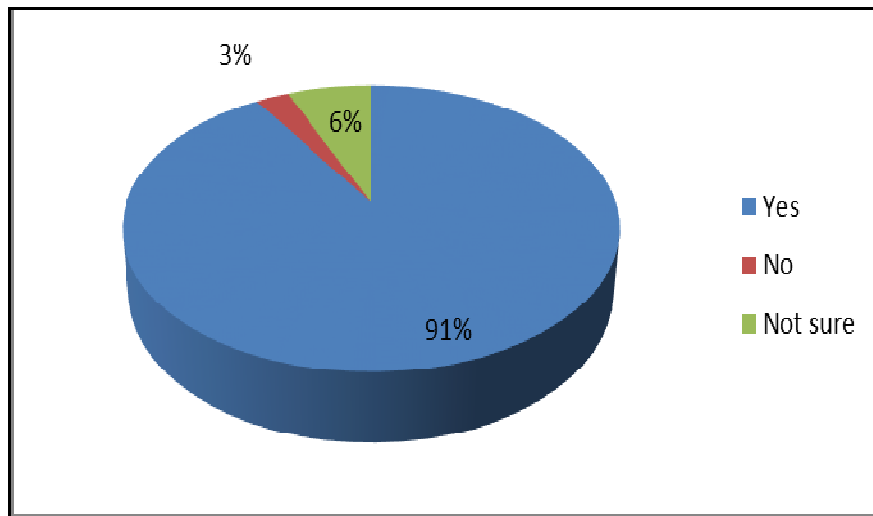
Table 4.9 indicates that 89.1 percent of respondents showed that information on malaria is presented in form of campaigns, while 10 percent said it was through talk shows. A minority 0.9 percent believe it is through quizzes while none indicated it was through kits.

This clearly shows that vernacular radio has chosen to practise Community Mobilization Theory in broadcasting information regarding to malaria where the people have been given an opportunity to be part and parcel of what is going on through having talk shows. However more emphasise has still been put to campaigns which still allow a little participation from the audience for instance by going for the T-shirts.

#### 4.4.6 Presence of malaria campaigns on Radio Ingo in the recent.

The researcher sought to find out the presence of malaria campaigns on Radio Ingo in the recent past. Figure 4.14 summarizes the findings.

**Figure 4.14: Presence of malaria campaigns on Radio Ingo in the recent past.**



Source: Researcher 2015.

Figure 4.14 indicates that 91 percent of the respondents affirmed that there has been a malaria campaign on radio Ingo of recent while 3 percent negated as 6 percent were not sure.

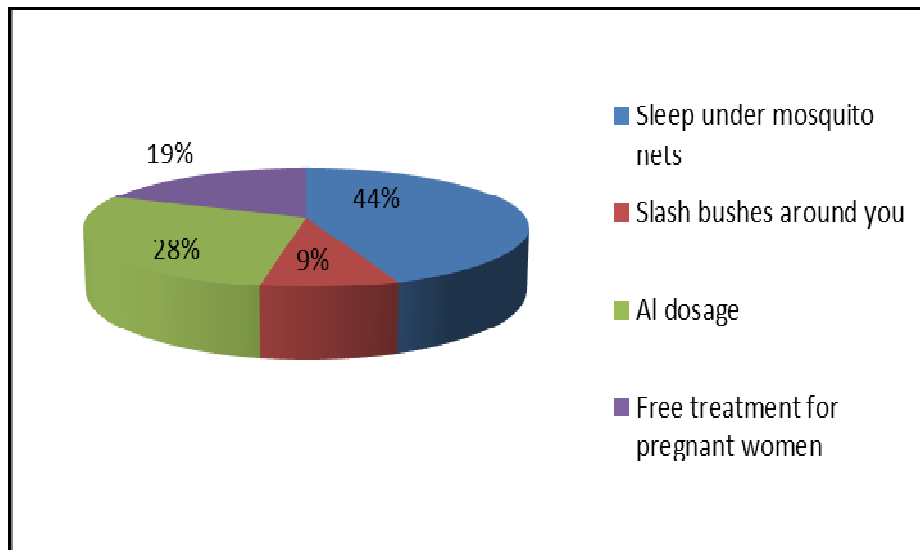
This implies that the sectors concerned with the malaria menace are still playing a role in the fight against malaria and using Diffusion of Innovation Theory. The Ministry of Health especially, has always communicated any information and new techniques that have been discovered and can be used in the fight malaria. Malaria has remained top in the agenda of the

Ministry of Health alongside World health Organization. The goal of the National Malaria Strategy is to reduce morbidity and mortality associated with malaria by 30% by 2009 and to maintain it to 2017 (Kemri, 2015).

#### 4.4.7 Recent malaria campaign(s) on radio.

The researcher sought to find out the recent malaria campaigns on radio. Figure 4.15 summarizes the findings.

**Figure 4.15: Recent malaria campaign(s) on radio.**



Source: Researcher 2015.

Basing on figure 4.15, 44 percent of the respondents said that the campaign has been on sleeping under mosquito nets, while according to 28 percent it was on AL dosage. 19 percent of the respondents say that it was on free mosquito nets for pregnant women while 9 percent said it was on slashing bushes around you.

This implies the people of Emuhaya District are not ignorant of ways of especially controlling malaria. There are various means and ways that have been discovered and communicated to the people of Emuhaya District to help in the fight against malaria. This is attributed to the fact that

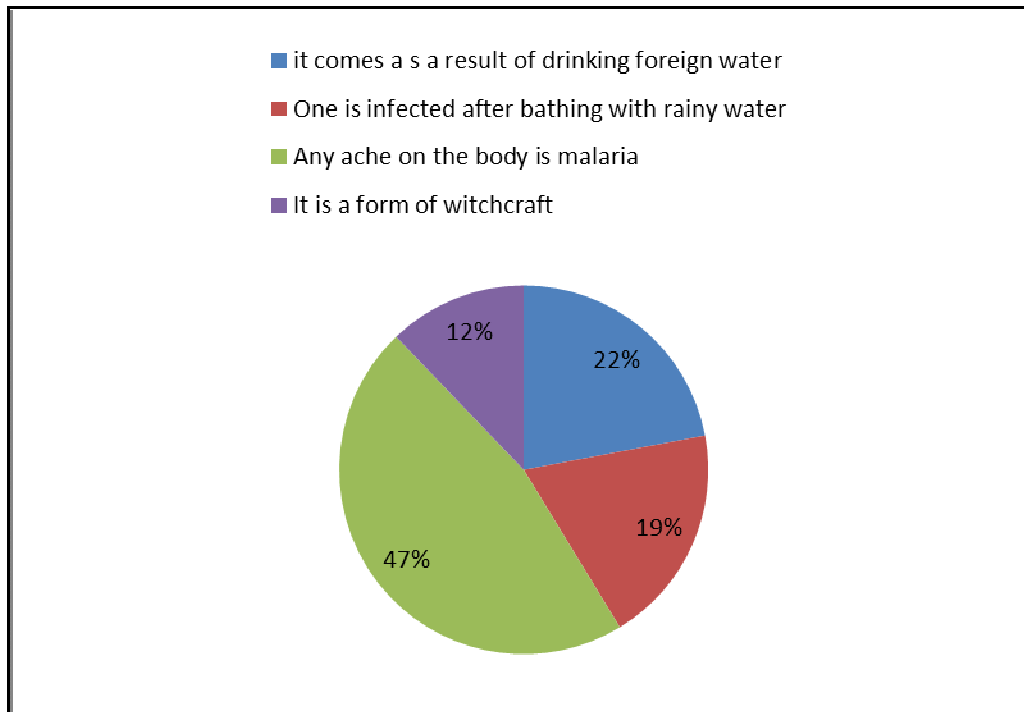
the malaria strand(s) keep on becoming complex and resistant to the existing measures taken and therefore, new modes of control have to be discovered every now and then creating a need of continuous communication.

#### 4.5 The impact of radio programmes on malaria control in Emuhaya District.

##### 4.5.1 Views on malaria based on belief and culture among Emuhaya District residents.

The researcher sought to find out the views on malaria based on belief and culture among the residents of Emuhaya District. Figure 4.16 summarises the findings.

**Figure 4.16: Views on malaria based on belief and culture.**



Source: Researcher 2015.

Figure 4.16 indicates that 47 percent of the respondents believe that anybody ache is malaria, 22 percent believe that it comes as a result of drinking foreign water, while 19 percent believe that one is infected after bathing with cold water and 12 percent believe that it is a form of witchcraft.

This indicates that there is a lot of wrong information among the people in regard to causes of malaria as shown by some of these responses among the respondents. This might be due to lack of enlighten and exposure. This implies that there is a great need to disseminating the correct information that regards to malaria in order to make the fight against it successful. This therefore gives radio and other forms of media a chance to communicate the correct information regarding to malaria control and prevention.

#### **4.5.2 Listenership of health programmes to manage your health system.**

The researcher sought to find out the listenership of health programmes to improve or manage health system among the Emuhaya District residents. Table 4.10 summarizes the findings.

**Table 4.10: Listenership of health programmes to manage your health system.**

<b>Reponses</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Cumulative percent</b>
Yes	273	78	78
No	6	1.8	79.8
Not sure	71	20.2	100
Total	350	100	

Source: Researcher 2015.

Table 4.10 shows that 78 percent of the respondents listen to radio programmes to improve or manage their health system while 1.7 percent do not as 20.2 are not sure.

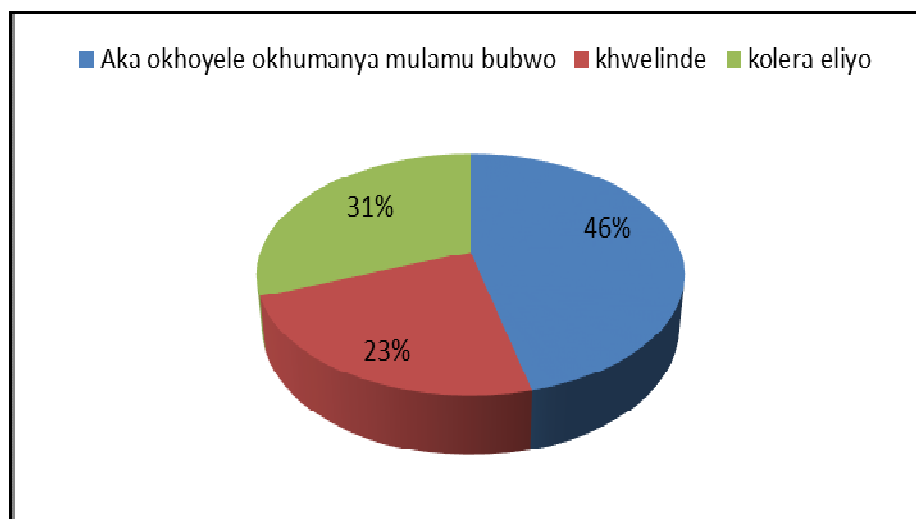
This implies that the residents of Emuhaya district receive and appreciate the information passed through the radio regarding health issues. This is an indication that radio plays a big role in improving and managing health system among the people of Emuhaya District. The more they listen to health-related programmes the more the more they become equipped on health issues.

Health communication and education remain one of key components in malaria control and prevention (Mboera, Makundi & Kitua, 2007).

#### 4.5.3 Programmes on radio listened to, to manage health system.

The researcher sought to find out the programmes on radio listened to, to improve or manage health system among the residents of Emuhaya District. Figure 4.17 summarises the findings.

**Figure 4.17: Programmes on radio listened to, to manage health systems.**



Source: Researcher 2015.

Figure 4.17 indicates that 46 percent of the respondents listen to “Aka Okhoyele mulamu bubwo”, 23 percent listen to “Khwelinde” and 31 percent listen to “Kolera Eliyo” to improve and manage their health systems.

Health is one of the great concerns in Emuhaya District and beyond. The radio as a medium of communication has many times set some of these health issues as an agenda in its programming. The above data shows that radio has played a role in addressing these issues. There are several issues addressed by these health programs which include Cholera control and HIV/Aids, probably determined by the prevalence of the diseases.

#### 4.5.4 Listenership to Program(s) on malaria aired on Radio Ingo.

The researcher sought to find out the listenership to Programme(s) on malaria aired on Radio Ingo. Table 4.11 summarises the findings.

**Table 4.11: Listenership to Programme(s) on malaria aired on Radio Ingo.**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative percent</b>
Yes	211	78	78
No	66	1.7	79.7
Not sure	73	20.2	100
Total	350	100	

Source: Researcher 2015.

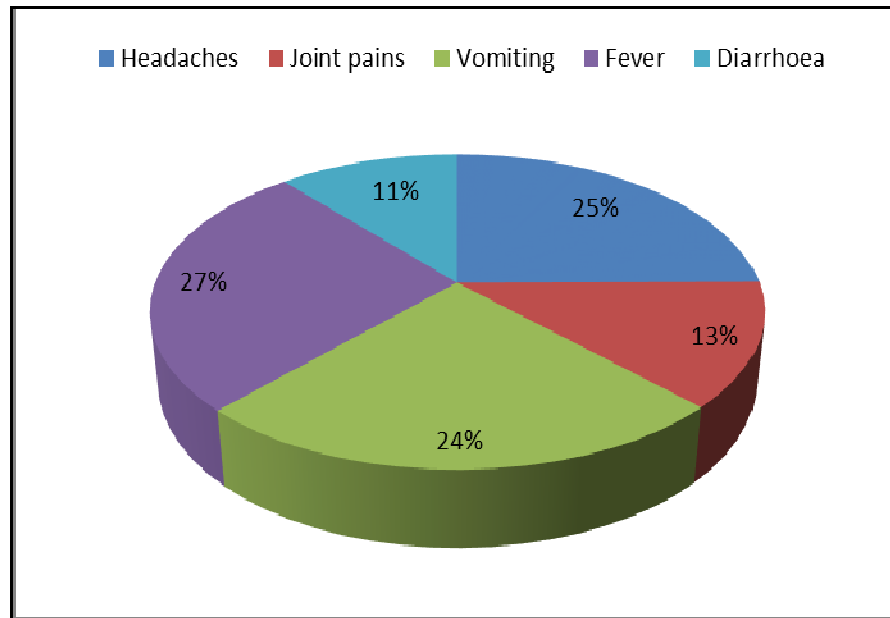
Table 4.11 indicates that 78 percent of the respondents tune in to Radio Ingo in order to listen to programmes on malaria while 1.7 percent do not tune in. On the other hand 20.2 percent did not indicate whether they tune in or not.

From the interviews, it was gathered from the respondents that malaria advertisement come in between their favourite programmes and therefore get to listen to them. They also pointed out that there are very few programmes that particularly aimed at addressing malaria in comparison to HIV/Aids in the past. Radio Ingo have aired programs on malaria and have been able to get a majority audience to the same showing that the audience appreciate the programs on malaria aired on Radio Ingo.

#### 4.5.5 Malaria symptoms mentioned in the programs aired on radio.

The researcher sought to find out the malaria symptoms mentioned in the programs aired on radio among the residents of Emuhaya District. Figure 4.18 summarises the findings.

**Figure 4.18: Symptoms of malaria mentioned in the programmes aired on radio.**



Source: Researcher 2015

Basing on figure 4.18, 27 percent of the respondents say fever is a symptom of malaria based on the information given by the programmes, 25 percent say headache, 24 percentage say it is characterized by vomiting while 13 percent say is joint pain. Meanwhile 11 percent say it is diarrhoea.

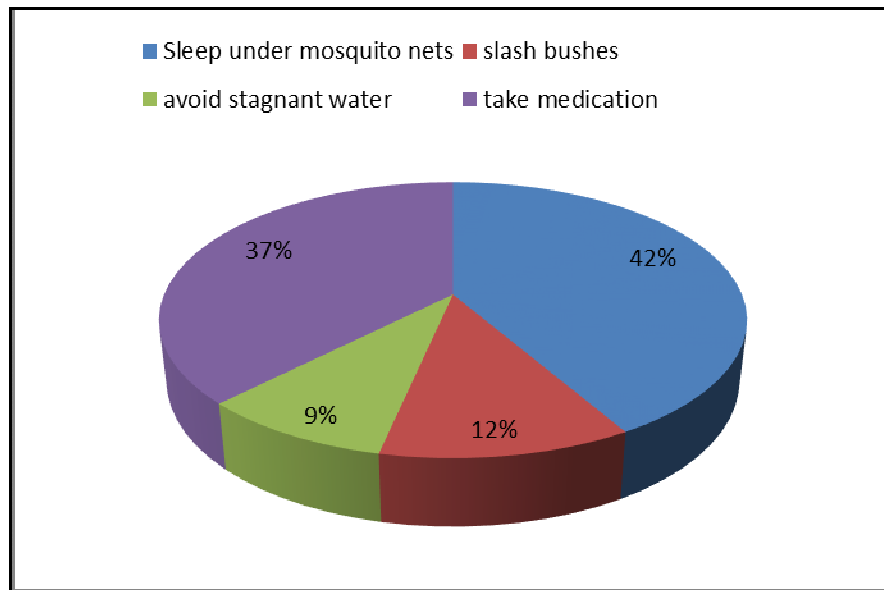
Malaria has been portrayed as a common occurrence among the residents of Emuhaya District. The above pie chart implies that the respondents knew the symptoms of malaria showing that they are well versant with it and know when to dictate an illness to be malaria or not. This could be attributed to the programs aired on malaria on the vernacular radio stations that have enlightened them on malaria.

#### **4.5.6 Preventive measures against malaria mentioned in programmes aired on radio.**

The researcher sought to find out the preventive measures against malaria mentioned in these programmes aired on radio among the residents of Emuhaya District. Figure 4.19 summarises the findings



**Figure 4.19: Preventive measures mentioned in programmes aired on Radio.**



Source: Researcher 2015.

Figure 4.19 indicates that there are preventive measures against malaria mentioned in the programmes aired on radio. 42 percent show that sleeping under mosquito nets is most mentioned, 37 percent say is taking medication, 12 percent say it is slashing bushes while 9 percent say it is through avoiding stagnant water. The interview respondents applauded the government for distributing free mosquito nets to pregnant women and children under five.

From the study, it is clear that one of the key messages communicated on radio regarding to control of malaria is sleeping under mosquito nets and seeking medical attention when necessary as mentioned by the respondents. This therefore shows a positive impact of the malaria campaigns carried out since the respondents portray knowledge on ways of controlling malaria as broadcast over the radio.

#### **4.5.7 Management of malaria among the residents of Emuhaya District.**

The researcher sought to find out how the residents of Emuhaya District manage malaria. Table 4.12 summarises the findings.

**Table 4.12: Management of malaria among the residents of Emuhaya District.**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative percent</b>
Self-treatment	54	15.4	15.4
Local herbs	52	14.9	30.3
Medical attention	233	66.6	96.9
Chinese herbs	11	3.1	100
Total	350	100	

Source: Researcher 2015.

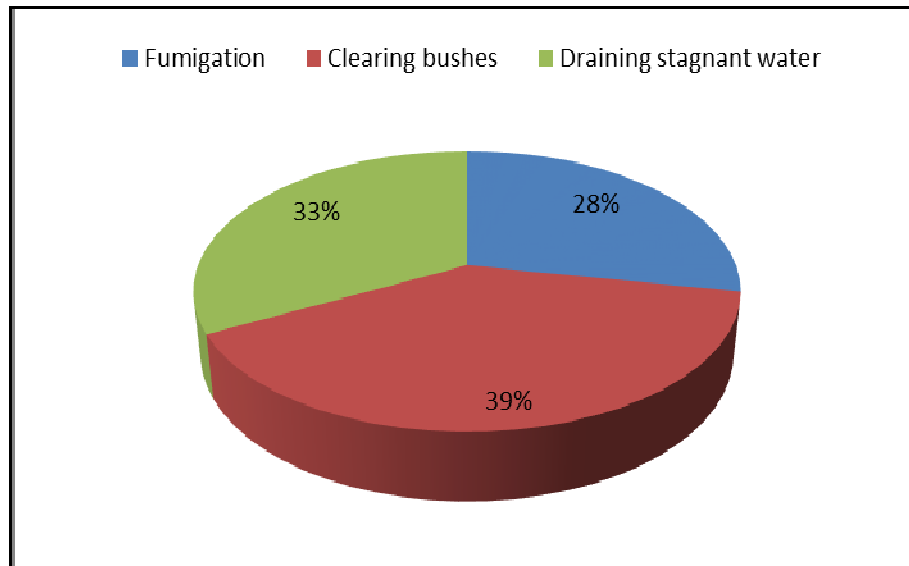
Table 4.12 above indicates that 66.6 percent of the respondents seek medical attention to manage malaria, 15, 4 percent practice self-treatment, 14.9 take local herbs while 3.1 take Chinese herbs to manage malaria.

These results imply that the Emuhaya people have appreciated the government effort in ensuring there is malaria treatment and there seek medical attention when infected. The nurse interviewed pointed out that the government had made malaria treatment to be quite affordable and that with as little as twenty shillings, the AL malaria treatment was available to the locals in all health centres and clinics in the region. She also confirmed that there is an increase in number of malaria cases that have come to seek treatment in the last two years as compared to the previous years. These could be attributed to the radio programs and campaigns that have been aired on the vernacular radio.

#### **4.5.8 Community measures taken to control malaria in Emuhaya District.**

The researcher sought to find out the Community measures taken to control malaria among the residents of Emuhaya District. Figure 4.20 summarizes the findings.

**Figure 4.20: Measures taken to control malaria among the residents of Emuhaya District.**



Source: Researcher 2015

Figure 4.20 shows that the community has chosen to take measure to control malaria by 39 percent indicating it is through clearing bushes, 33 percent through draining stagnant water and 28 percent through fumigation.

Malaria has posed a great challenge to the residents of Emuhaya District. As a result, the community has taken it upon itself to implement some of the ways of controlling malaria such as clearing the bushes. The Emuhaya Location's chief indicated that in every baraza he holds, he always reminds the people clear any bushes around them as one measure of controlling malaria. The Member of Parliament, Dr. Wilbur Ottichillo, has also facilitated fumigation of the constituency of which Emuhaya district residents were beneficiaries. This has been effectively communicated through radio Anyole which he owns. This implies that the community has taken it upon them to also prevent themselves from malaria by taking preventive measures in the fight against malaria.

#### **4.5.9 How radio complements government's effort in the fight against malaria.**

The study sought to find out if radio complements government's effort in the fight against malaria. Table 4.13 summarises the findings.

**Table 4.13: Radio complements government's effort in the fight against malaria.**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative percent</b>
Yes	291	83	83.1
No	39	11.1	94.5
Not sure	20	5.7	100
Total	350	100	

Source: Researcher 2015.

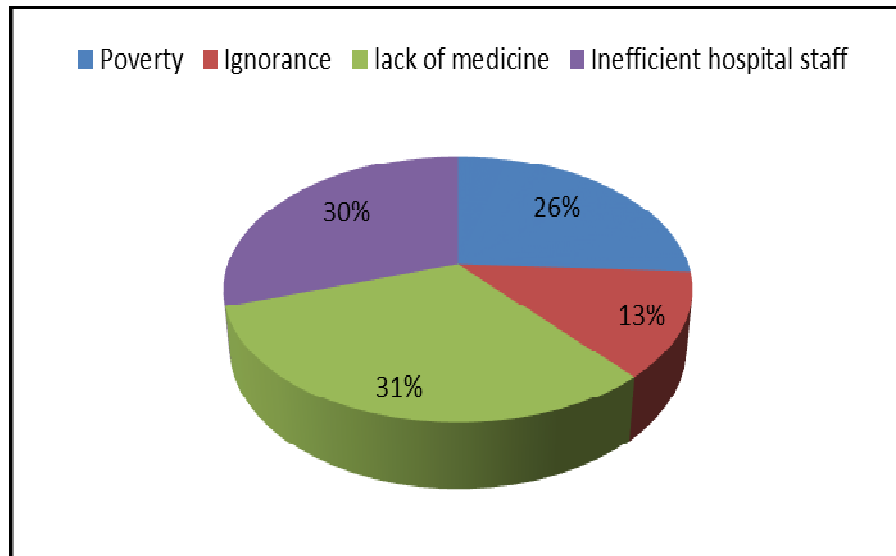
Table 4.13 indicates that 83 percent believe that radio complements the government in the fight against malaria, 8.8 percent of the respondents do not think so while 5.7 percent are not sure.

This study sought to find out the impact of radio on malaria control. From the respondents who listen to radio and the radio manager, there is information passed through the radio about malaria in form of advertisements and programs. The existence of these programs and advertisement on radio considerably facilitates the messages and effort of the medical practitioners and the government on malaria attack.

#### **4.5.10 Challenges faced in the fight against malaria in Emuhaya District.**

The study sought to find out if there are any challenges faced in the fight against malaria among the residents of Emuhaya District. Figure 4.21 summarises the findings.

**Figure 4.21: Challenges faced in the fight against malaria in Emuhaya District.**



Source: Researcher 2015.

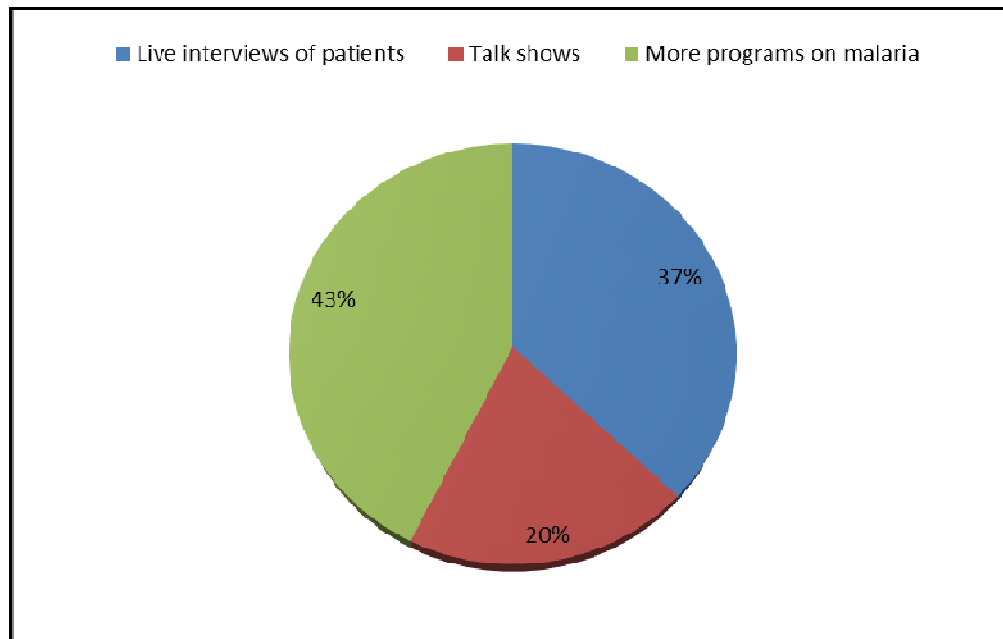
Figure 4.21 indicates that 31 percent of the respondents view lack of medicine as a challenge to the fight against malaria, 30 percent see it as inefficient hospital staff, 26 percent see ignorance as a challenge and 13 percent view ignorance as a challenge.

Despite all the effort put in the fight against malaria, there are still challenges in the same the key one being insufficient medication and hospital staff, may be because of the rampant malaria cases.

#### **4.5.11 Views on how radio can educate the listeners more on the fight against malaria.**

This study sought to find out views from the residents of Emuhaya district on how radio can educate the listeners more on the fight against malaria. Figure 4.22 summarises the findings.

**Figure 4.22: Views on how radio can educate the listeners more on the fight against malaria.**



Source: Researcher 2015.

Finally, figure 4.22 indicates that 43 percent of the respondents think more programmes on malaria should be included, 37 percent believe in more live interviews with malaria patients while 20 percent prefer talk shows.

This indicates that the audiences appreciate the role played by vernacular radio in the fight against malaria and that they want to be part of what is broadcast by being allowed to participate actively in the programmes. It also shows that there is some attention given to discussions on malaria broadcast on vernacular radio that is of advantage to the populace. As stated by Community Mobilization Theory: Community Mobilization usually involves collaboration among health workers and communities in activities seeking to ‘empower’ them or ‘build their capacity’ to exercise greater agency over their well-being, through increasing their opportunities for meaningful social participation and building enabling partnerships with supportive outsiders (Rifkin and Pridmore, 2001).

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS.**

### **5.0 Introduction.**

This chapter summarises the findings of this study, which responds to the three research questions identified in chapter one, as well as recommendations which all come from the work of the project. The summary of the findings are derived from analysing the data gathered both quantitatively and qualitatively in chapter four. The findings form the basis for the recommendations made thereafter.

### **5.1 Summary of key findings.**

Media messages have been used in Kenya to promote the fight against malaria in an effort to impact on malaria prevention. Malaria risk and disease burden is inequitably distributed at both country and household level because of poor housing, lack of education and access to health services, creating a vicious cycle of enhanced vulnerability to malaria due to increased exposure, high household medical costs and reduced ability to pay for treatment. Decisions for prevention or treatment are made depending on the economic ability of the household, perceived susceptibility and assessment of consequences. Furthermore, malaria transmission is facilitated by environmental degradation, poor drainage and clearing of vegetation that accommodates the mosquito species (WHO, 2014).

As a first step, therefore, it is necessary to establish how much local people understand about malaria as a problem, establish their socio-economic background and create awareness that will encourage new malaria prevention behaviours

#### **5.1.1 Malaria programmes and vernacular radio stations in Emuhaya District.**

The study found out that Emuhaya District has benefitted from the media Act (2013) which has enabled many radio stations to be licensed. There are several vernacular radio station broadcast in the district which include Mulembe Fm, Anyole Fm, Radio Ingo; with the key one being Radio Ingo which has programmes addressing life issues, one of them being health issues.

Malaria control and prevention has been featured in these health programs broadcast on vernacular radio.

### **5.1.2 Malaria control and health programmes broadcast in Emuhaya District.**

It is clear that health programmes address various health issues in the society which include prevention of HIV/Aids, Cancer and Malaria. Health programmes and advertisements that specifically address malaria convey messages of prevention, treatment and control of malaria.

### **5.1.3 Impact of radio programmes on malaria control in Emuhaya District.**

It is clear that radio is a source of ideas and a cheap and convenient way of communicating any new ideas in the fight against malaria. This study has established that there is a close relationship between malaria attacks, its prevention and radio messages as indicated. Generally the government, Non-Governmental Organization and international agencies have made use of radio to reach grass root people as well as other citizens to inform them of the causes, effects, symptoms and preventive measures against malaria attacks as well as the communication of any new forms of treatment of malaria.

## **5.2 Conclusion.**

After a thorough analysis of the data which has determined the outcome of this study, it is worth concluding that radio still remains a strong medium of mass communication which impacts on people's behaviour, attitudes, thoughts and perception and that there are health programmes broadcast on vernacular radio that are very effective, complementary and capable of making a great impact on the populace in the fight against malaria.

### **5.2.1 Vernacular radio stations and malaria control in Emuhaya District.**

It can be concluded that one of the key health issue addressed by vernacular radio is malaria control and prevention, which features in the radio programming. There are programmes that are



about malaria control broadcast on these vernacular stations which include Siafuma and Witole. There are also advertisements that are campaigns against malaria such as “Tumia AL” and “Umbu Inje Sisi Ndani” sponsored by the Ministry of Health. The fact that discussion on malaria feature on radio stations as shown in the study shows that there is a lot of potential to be tapped in the use of radio in the course of combating malaria.

### **5.2.2 Health programmes addressing malaria and vernacular radio in Emuhaya District.**

It can be concluded that The Ministry of Health together with several foundations have worked closely with the radio stations and specifically vernacular radio to convey a lot of information that regards to malaria control and prevention.

### **5.2.3 Impact of radio programmes on malaria control in Emuhaya District.**

It is easy to conclude that radio has a big potential in broadcasting ideas that regard to the fight against malaria. Most listeners in the rural areas prefer to listen to vernacular radio giving room for community participation and therefore have a platform to impact on the people’s behaviour, attitudes and beliefs in the fight against malaria. The study indicated changes in this area where the respondents have taken deliberate steps to fight the malaria scourge based partly on the information gotten from the radio messages.

## **5.3 Recommendations.**

After the results of this study which show that health programmes on radio have great impact in preventing and reducing malaria attacks generally and specifically to the people of Emuhaya District, the study suggested successfully on how creation of awareness and the use of mass communication and mass media in general can be used to inform, educate and communicate health messages to people and help prevent the dangers of malaria in order to promote a healthy living. The study therefore recommends the following action plans.

### **5.3.1 Recommendations for future study.**

Based on the findings of this study, it is recommended that further studies can still be carried out by scholars to explain how various forms of communication, interpersonal communication, traditional communication or folk media and other media of communication can be explored to combat the scourge of malaria in Kenya and Africa as a whole.

Further studies can also be carried out by scholars to find out the best way to have community participation in the fight against malaria in Kenya.

### **5.3.2 Recommendations for policy makers.**

Stakeholders in the Ministry of Health should be consistent in production and promotion of information regarding to malaria through radio. Sporadic crisis management style of malaria control does not work well. All individuals should be made aware of their own responsibility in the fight against malaria. It is an everyday effort and not a periodic one. It is everyone's responsibility and not a one government commission.

Generally, radio messages have the potential of preventing and reducing malaria attack among the people of Emuhaya District. More health programmes should be used by the government at all levels. All forms of language and dialects can be used to reach people coupled with the fact that it reaches the most area of the community.

The battle against malaria is continuous and may take more time especially in Africa and other developing countries. Therefore messages in form of jingles, special announcements, formal speeches from government officials and celebrities, drama discussions, poetry, songs etc. should continuously be aired on different radio stations to equip people more on various ways of preventing malaria.

## REFERENCES.

- African Communication Research. (2012). Volume 5 no. 2.
- Anam, C. (2013). *The Role of Vernacular Radio in Peace Building in Kenya: Case of Radio Mayienga in Kondele Kisumu*. M.A Dissertation, University of Nairobi.
- Baran,S.J. &Davis,D.K.(2010). *Mass Communication Theory*. Cengage Learning Customer.
- Basavanthappa,B.T, (2006). *Practice and Public Health Administration, Current Concepts*. New Delhi.
- Bryman, A & Bell, E (2005). *Business Research Methods*.Oxford University Press.
- Chanda, M.M. (2015). *Zambia Times: Vernacular in radio broadcasting*.
- Cooper, D.R & Schindler, P.S. (2003). *Business Research Methods* (8th edition) McGraw-Hill: New York.
- Davies et al, (1996). *Understanding William Syndrome and behaviour Patterns*. New Jersey.
- Deming W.E. (1990).*Sample Design in Business Research*. Canada.
- Dooley, D. (2007). *Social Research Methods*. New Delhi: Prentice Hall.
- Fairbairn, J. & Rukaria, D. (2009).*Poised for Growth, Community Radio in Kenya in 2009 Report*. Open society Institute of Eastern Africa, Nairobi.
- Freier, P. (1983). *Pedagogy of the Oppressed*. New York: Seabury Press.
- Frost, G.L, (2010). *Early FM Radio: Incremental Technology in Twentieth-Century America*.  
John Hopkins University Press, U.S.A.
- Healthy People Guidelines 2010.
- Jeyaratnam, K. (1994). *Occupational Health in National Development*.

- Johnson, S.A. (2011). *Challenges in Health and Development: From Global to Community Perspectives*. Springer Science and Printed Media.
- Kenya National Bureau of Statistics. (2009) *Kenya Population and Housing Census*. Nairobi Kenya.
- K, Moore A, Earp J.A. Kipsat, M. J. et al, (2013). *International Journal of Education and Research: Willingness to pay for improved water supply due to spring protection in Emuhaya District , Kenya*. Vol. 1 No. 7.
- Kobetz E, Vatalaro.(2005) *Taking the Trans-theoretical Model to the field: A curriculum for lay health advisors*. Health Promotion Practice. PubMed.
- Kothari, C. R. (2000). *Research Methodology: Methods and Techniques*. New Delhi.
- Kungu, J.N. (2013). *Factors influencing the Effectiveness of Health Communication in Kenya*. The case of HIV and AIDS Electronic media campaigns targeting the youth. M.A Dissertation, University of Nairobi.
- Lie, R. (2006). *Rural HIV/AIDS Communication/intervention: From using models to using frameworks and common principles*. In J Servaes(ed), *Communication for development and social change*. London: Sage Publications.
- L.D. Jackson & B.K. Duffy (Eds.). (1998). *Health Communication Research: Guide to Developments and Directions*, Westport, CT: Greenwood Press.
- Makau, B. (2009). *A comparative study of Mbaitu and Musyi vernacular radio stations on their role in dissemination of Hiv/Aids messages*. M.A. Dissertation, University of Nairobi.
- McLeish, R, (2005). *Radio Production*. Focal Press, United Kingdom.
- McQuail , D. (2010). *McQuail's Mass Communication Theory*. Sage Publication Ltd.
- Media Council of Kenya, (2012). *The Performance of Vernacular Stations in Kenya*. Media Council of Kenya.

- Ministry of Public Health and Sanitation & Ministry of Medical Services (May 2010). *National guidelines for the diagnosis, treatment and prevention of malaria in Kenya*. Nairobi.
- Moemeka, A. (1994). *Community Education for Development*. Ahmadu Bello University Press.
- Mugenda, O.M. & Mugenda, A.G, (1999). *Research Methods; Quantitative and Qualitative Approaches*, African Centre of Technology Studies, Nairobi.
- Mupusi, D.G. (2013). The place of community radio in packaging and disseminating health messages on UON – Communicable Diseases in slums: A case study of KOCH FM. M.A Dissertation, University of Nairobi.
- Ngechu. M. (2004). *Understanding the research process and methods*. An introduction to research methods. Acts Press, Nairobi.
- Parker, W. (2004). *Ideology, Hegemony and HIV/AIDS: The appropriation of indigenous and global spheres*. University of KwaZulu-Natal, South Africa. (PHD Thesis).
- Pat Pridmore P. & Rifkin, S.B. (2001). *Partners in Planning: Information, Participation and Empowerment* Paperback. Macmillan Education.
- Regal, B. (2005). *Radio: The Life Story of a Technology*. Greenwood Press. United States of America.
- Rogers, E. M, (2005). *Diffusion of Innovations*. Free Press. New York.
- Servaes, J. & Malikhaio, P. (2005). Participatory communication: a new parady? In O. Hemer & T. Tufte (Eds). *Media in Global Chang, Rethinking Communication for development*. Goteborg.
- Schiano, W. & Anderson, E, (2014). *Teaching with Cases; A Practical Guide*. Havard Business Review Press.
- Somekh, B. & Lewin, C. (2005). *Research Methods in the Social Sciences*. London: Sage Publications Inc.

The Kenya Communication Act.

Thomas, R. K, (2006). *Health Communication*. New York.

Tonui, W.K., Otor, S.C.J, Kabiru, E.W. and Kiplagat, W.K. (2013). Patterns and trends of malaria morbidity in western highlands of Kenya. In Journal: International Journal of Education and Research Vol. 1 No. 12, 2013.

Tufte, T. & Mefalopulos, P. (2009). *Participatory communication*. A research practical guide. Working paper N0. 170. Washington, DC: The World Bank.

Wallack,L. (1993).*Media Advocacy and Public Health*. Sage publication.

World Health Organisation, (2014). World Malaria Report. Geneva, Switzerland.

[www.emuhaya.co.ke/emuprofile.html](http://www.emuhaya.co.ke/emuprofile.html).

[www.kemri.org](http://www.kemri.org): Malaria Report February, 2015.

Pat Pridmore P. & Rifkin, S.B (2001). *Partners in Planning: Information, Participation and Empowerment Paperback*. Macmillan Education.

**APPENDICES.**

**Appendix I: Research Questionnaire.**

Good morning/afternoon? I am a student at The University of Nairobi. I am undertaking a research study on consumer behaviour in partial fulfilment of Masters' Degree in Communication Studies. I will appreciate if you would respond to the following questions. Your responses will be treated confidentially and your identity is not needed.

**PART 1: BIO DATA.**

1.  18 - 20 years  21 - 30 years  31-40 years  41 and above years
2. Gender  Male  Female
3. Marital status  single  Married
4. Occupation .....

**PART 2: ACCESS TO RADIO.**

5. Do you listen to radio?  Yes  No
6. Do you own a radio?  Yes  No

7. Which radio stations do you listen to?

.....  
.....  
.....

8. Which language of broadcast do you prefer?

[ ] English [ ] Kiswahili [ ] Vernacular.

Specify

.....  
.....

9. a) Do you listen to vernacular radio station?  Yes  No

b) If yes, specify

.....  
.....

10. What time do you listen to radio?

Before 6 am

Between 2pm and 6pm

Between 6am and 10 am

After 6 pm

Between 10am and 2pm

11. What length of hours do you listen to radio?

.....  
.....

12. Do you listen to radio Ingo?  Yes  No

13. What is your favourite radio programme(s) on Radio Ingo?

.....  
.....

14. What time are your favourite programme(s) aired on Radio Ingo?

Before 6 am

Between 2pm and 6pm

Between 6am and 10 am

After 6 pm

Between 10am and 2pm

## **B. USE OF RADIO.**

15. a) Have you heard any information over Radio Ingo regarding to malaria?  Yes

No

b) Mention any radio programmes or advertisements that are aired on Radio Ingo regarding to malaria.....  
.....



16. a) Do you know of any health programme/ advertisement aired on radio  Yes  
 No

b) If yes, which ones?

.....  
.....

17. How frequently are these programmes aired?

- Hourly                       Daily                       Weekly                       Every six hour  
 Others. Specify.....

18. Which of these programs do you like and why?

.....  
.....

19. Do you know about malaria?  Yes  No

20. Where did you hear about malaria from?

- Newspapers       Hospital                       Radio                       Posters  
 Peers  
 Other. Specify .....

21. How has Radio Ingo mobilised its listeners to help in prevention, cure and control of malaria?

.....  
.....

22. What format has the radio adopted to present information on malaria?

- Talk shows       Skits       Quizzes       Campaigns and advertisements.

23. Has there been a malaria campaign on radio Ingo in the recent past?  Yes  No

If yes, specify

.....  
.....

**D. IMPACT OF RADIO.**

24. How do you regard malaria based on belief and culture?

.....

25. a) Do you listen to health programme(s) on radio to improve or manage your health system?

Yes  No

b) If yes, which one?

.....

26. Do you tune in to Ingo Radio to listen to program(s) aired on malaria?  Yes  No

27. If yes, what are some of the symptoms of malaria mentioned in the programme(s)?

.....

28. What are some of the preventive measures against malaria mentioned in these programs?

.....

29. How do you manage malaria attack?

Home/self-treatment.                       Local herbs  
 Medical attention.                               Chinese herbs

30. What are some of the community measures taken to control malaria in Emuhaya?

.....

31. Do you think Radio Ingo complements the government in the effort in reducing and preventing malaria?

.....

32. What are the challenges you face as far as the fight against malaria is concerned?

.....

.....

33. In your opinion, what else do you think should be included on radio to educate the listeners more on the fight against malaria?

.....

**Thank you for filling the questionnaire.**

## **Appendix 2. Focus Group Guide.**

1. Do you know about malaria?
2. What do you know about malaria: cause, symptoms, cure and prevention?
3. What is your source of information about malaria?
4. Is the community taking deliberate measures to fight the disease? If so which ones?
5. What would you regard to be some of the challenges in fighting malaria in your location?
6. Do you listen to radio?
7. Do you own a radio?
8. Do you listen to vernacular radio?
9. Which vernacular radio stations are broadcast in your area?
10. When do you listen to radio regularly?
11. Have you heard of any programme or advertisement on radio regarding malaria?
12. How often are the programmes or advertisements aired and on which stations?
13. What are the programs about?
14. Do you think you now have adequate information on malaria?
15. Do you think the programme have had any impact on the people in regard to the fight against malaria?
16. What do you think should be done in regard to radio to help in the fight against malaria?

### **Appendix 3: Interview Guide for Local Chief.**

1. Are there malaria cases in your location?
2. Is the community taking deliberate measures to fight the disease? If so which ones?
3. What would you regard to be some of the challenges in fighting malaria in your location?
4. Do you listen to radio?
5. Do you listen to vernacular radio?
6. Which vernacular radio stations are available in the area?
7. From your observation when is radio listened to regularly?
8. Have you heard of any programme or advertisement on radio regarding to malaria?
9. How often are the programmes or advertisements aired and on which stations? What are they about?
10. Where were people getting the information on malaria before the programmes began airing on radio?
11. Do you think the programme have had any impact on the people in regard to the fight against malaria?
12. Have you noticed any behaviour changes in people in the area in regards to malaria? control, as a result of the programmes and advertisements?
13. What do more do you think should be done to make the fight against malaria more effective using radio advertising and programming?

#### **Appendix 4: Interview Guide for Media Manager.**

1. Which station(s) do you have that has targeted the audience in Emuhaya District?
2. What are some of the topical issues that determine the choice of program to be aired by the station?
3. What is the listenership of your station? What is the reach of your station in terms of listeners? Who is your targeted audience?
4. From your research, when is your radio station most listened to?
5. Do you have any programme or advertisement on your radio station regarding to malaria?
6. Who are the key sponsors of these advertisements and programmes?
7. How often are the programmes or advertisements aired and on which station(s)?
8. Do you think the programme have had any impact on the people in regard to the fight against malaria?
9. What do you think should be done in regard to radio to help in the fight against malaria?

## **Appendix 5: Interview Guide for a Kenyan Registered Nurse.**

1. Are there malaria cases in this health centre?
2. In your opinion what the prevalence of malaria cases in the region?
3. Do you think the community is taking deliberate measures to fight the disease? If so which ones?
4. What would you regard to be some of the challenges in fighting malaria in this region?
5. Do you listen to radio?
6. Do you listen to vernacular radio?
7. Which vernacular radio stations are available in the area?
8. From your observation when is radio listened to regularly?
9. Have you heard of any programme or advertisement on radio regarding to malaria?
10. How often are the programmes or advertisements aired and on which stations? What are they about?
11. Where were people getting there information on malaria before the programmes began airing on radio?
12. Do you think the programmes have had any impact on the people in regard to the fight against malaria?
12. Have you noticed any behaviour changes in people in the area in regards to malaria control, due to the programmes and advertisements?
13. What do you think should be done to make the fight against malaria more effective using radio advertising and programming?

**Appendix 6: Letter of Introduction.**



**UNIVERSITY OF NAIROBI  
COLLEGE OF HUMANITIES & SOCIAL SCIENCES  
SCHOOL OF JOURNALISM & MASS COMMUNICATION**

Telegram: Journalism Varsity Nairobi  
Telephone: 254-02-334244, 332986, 226451 Ext. 28080, 28061  
Director's Office: 254-02-229168 (Direct Line)  
Telex: 22095 Fax: 254-02-229168  
Email: [director-soj@uonbi.ac.ke](mailto:director-soj@uonbi.ac.ke)

P.O. Box 30197  
Nairobi,  
Kenya

OUR REF:  
YOUR REF:

**DATE:** August 13, 2015

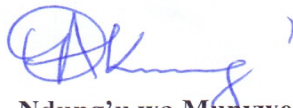
**TO WHOM IT MAY CONCERN**

**RE: ANDESIAH, Grace Gertrude - K50/69672/2013**

This is to confirm that the above named is a bona fide student of the University of Nairobi's School of Journalism and Mass Communication registered for Master of Arts degree in Communication Studies.

Ms. Andesiah has completed her course work and is currently going to collect data for her research project leading to a Master of Arts Degree in Communication Studies.

Any assistance accorded to her will be highly appreciated.



**Ndung'u wa Munywe**  
**Assistant Registrar**  
**School of Journalism & Mass Communication**



NwM/dm

**Appendix 7: .Certificate of Fieldwork**



**UNIVERSITY OF NAIROBI  
COLLEGE OF HUMANITIES & SOCIAL SCIENCES  
SCHOOL OF JOURNALISM & MASS COMMUNICATION**

Telegram: Journalism Varsity Nairobi  
Telephone: 254-02-3318262, Ext. 28080, 28061  
Director's Office: 254-02-2314201 (Direct Line.)  
Telex: 22095 Fax: 254-02-245566  
Email: [director-soj@uonbi.ac.ke](mailto:director-soj@uonbi.ac.ke)

P.O. Box 30197-00100  
Nairobi, GPO  
Kenya

**REF: CERTIFICATE OF FIELD WORK**

This is to certify that all corrections proposed at the Board of Examiners' meeting held on 21<sup>st</sup> May 2015 in respect of M.A./Ph.D final Project/Thesis defence have been effected to my/our satisfaction and the student can be allowed to proceed for field work.

Reg. No: K50/69672/2013

Name: ANDESIAH GRACE GETRUDE

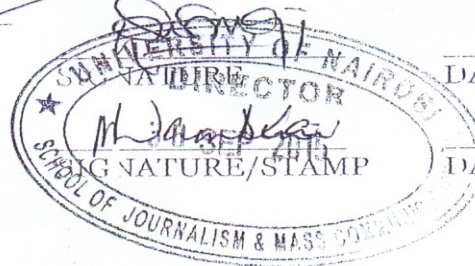
Title: THE USE AND IMPACT OF VERNACULAR RADIO IN MALARIA CONTROL IN KENYA - EMUHAYA DISTRICT

Dr. Sonara  
SUPERVISOR

Dr Samuel Siringi  
PROGRAMME COORDINATOR

Dr. Wambui Kiari  
DIRECTOR

[Signature]  
SIGNATURE



17/09/2015  
DATE

20/09/2015  
DATE

30.9.15  
DATE



**Appendix 8: .Certificate of Correction**



**UNIVERSITY OF NAIROBI  
COLLEGE OF HUMANITIES & SOCIAL SCIENCES  
SCHOOL OF JOURNALISM & MASS COMMUNICATION**

Telegram: Journalism Varsity Nairobi  
Telephone: 254-02-3318262, Ext. 28080, 28061  
Director's Office: 254-02-2314201 (Direct Line)  
Telex: 22095 Fax: 254-02-245566  
Email: [director-soj@uonbi.ac.ke](mailto:director-soj@uonbi.ac.ke)

P.O. Box 30197-00100  
Nairobi, GPO  
Kenya

**REF: CERTIFICATE OF CORRECTIONS**

This is to certify that all corrections proposed at the Board of Examiners meeting held on 22/10/15 in respect of M.A/PhD. Project/Thesis Proposal defence have been effected to my/our satisfaction and the project can now be prepared for binding.

Reg. No: KSD/69672/2013

Name: ANDESIAH, GRACE GERTRUDE

Title: VERNACULAR RADIO AND HEALTH PROMOTION: EXAMINING PROGRAMS, THE USE AND IMPACT OF VERNACULAR RADIO IN MALARIA CONTROL IN EMUHAYA DISTRICT, KENYA.

DR. S. ORIAO  
SUPERVISOR

[Signature]  
SIGNATURE

06/11/2015  
DATE

Dr Samuel Sirigh  
M.A. COORDINATOR

[Signature]  
SIGNATURE

09/11/2015  
DATE

for Dr Samuel Sirigh  
DIRECTOR

[Signature]  
SIGNATURE/STAMP  
NOV 2015  
SCHOOL OF JOURNALISM & MASS COMMUNICATION

09/11/2015  
DATE