AN ANALYSIS OF THE ROLE OF COMMUNITY BASED RADIO STATIONS IN THE DISSEMINATION OF HEALTH CARE INFORMATION TO WOMEN IN KAKAMEGA COUNTY

## BY

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## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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## DEDICATION

To my loving husband Moses, children Michelle, Eve and Evette and the millions of strong women and girls who often remain invisible as the real change agents in today's world.


#### Abstract

Rural women in Kenya account for $34.2 \%$ of the total population and play a significant role as family caretakers, and the driving force behind health information seeking in the family. However, obstacles such as poverty and illiteracy, have deprived the rural women access to information. This study sought to analyse the role of four community-based radio stations (West FM, Radio Mambo, Mulembe FM and Sulwe FM) in disseminating health care information to the rural women in Kakamega County and bridging the gap of poor access to healthcare information service. The specific objectives were to establish the basis and rationale of radio programming in the four community-based radio stations in Kakamega County; examine the relevance of their health-related programs; and the perception of the women on the existing radio-based health care information aired by the four communitybased radio stations in Kakamega County. The underlying theory behind this study is the framing theory. A mixed method research design was used incorporating quantitative survey among women and a qualitative analysis of information in the radio health-related programs. The study population comprised of 53 personnel from four radio stations and 355,000 women aged between 15-49 in Kakamega County. Using a purposive sampling method and the Yamane (1967) sample size formula, identified respondents included eight persons from the four radio stations and 400 women listeners. Semi-structured questionnaire and interview guides were used to collect data from the women listeners and key informants respectively. Quantitative data was analysed using Statistical Package for Social Sciences (SPSS) software. Content analysis of qualitative data was done using Atlas ti.8.Quantitative findings were presented as frequencies, mean, standard deviation in text, table, bar chart, graph and pie chart formats. Qualitative findings were divided into themes and categories and presented in text/narrative format The findings show that women as a significant audience in this study are not included in the design of context specific programming at the four community radio stations even though ( $77 \%$ ) of the women affirmed that they had been influenced to have better perception of health issues. The radio stations provide health related information that enlightens and entertain their audience, however, the content is not evidence-based or context specific.Majority of the women remain neutral on wether the radio health programms have influenced their perception towards health programms.Including women in the program design and conducting periodic research to understand their perceptions towards the programms are some recommended ways to ensure evidence-based and context specific programming to women in Kakamega County that can boost their uptake of healthcare services.This research also forms a benchmark upon which approaches and guidelines for dissemination of health care information to improve access to those services by women can be implemented.


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## LIST OF ABBREVIATIONS AND ACRONYMS

| AIDS | Acquired Immune Deficiency Syndrome |
| :--- | :--- |
| ANC | Ante Natal Clinics |
| CRS | Community based radio Stations |
| CSD | Collective-Subject-Discourse |
| FM | Frequency Modulation |
| HIV | Human Immunodeficiency Virus |
| KBC | Kenya Broadcasting Corporation |
| MSC | Most Significant Change |
| NGOs | Non-Governmental Organizations |
| PMTCT | Prevention of Mother to Child Transmission |
| RCT | Randomized Controlled Trial |
| SPSS | Statistical Package for Social Sciences |
| TBA | Traditional Birth Assistant |
| UK | United Kingdom |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UON | University of Nebraska |
| USA | United States of America |
| VMMC | Voluntary Medical Male Circumcision |

## DEFINITION OF TERMS

| Community based radio | It is a non-profit making radio station. It is supposed to be <br> owned and managed by a community for the benefit of that <br> community. |
| :--- | :--- |
| Content | These are facets included in a radio program. |
| Dissemination | It is the act of spreading something, especially information <br> widely. |
| Health Care Information | It practice of acquiring, analyzing, and protecting digital and <br> traditional medical information vital to providing quality |
| Influence | patient care. |
| Interactive program | This is the capacity of a radio program to influence the <br> behavior of women listeners. |
| This is a program that engages the radio presenters and the |  |
| listeners in a discussion. |  |

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## CHAPTER ONE

## INTRODUCTION

### 1.1Background to the Study

Since the advent of radio,the importance of community radio as a vehicle for community voluntary sector,civil society,agencies,Non-Governmental Organizations (NGO's) and citizens to work in partnership to promote specific community development has been widely studied.A consensus developed that these stations often serve their listeners by offering them a variety of content that is not provided by the larger commercial radio stations and similarly represents programming produced by the community with a focus on local concerns and issues,(Sterling, O’Brien, and Bennett 2007).This research analyzed the role of community radio stations in disseminating health care information to rural women who account for $34.5 \%$ of the total population in Kenya.

One of the crucial components in the Beijing Declaration and Platform for Action was the recognition and limelight on the right of women to enjoy the highest attainable standard of physical and mental health. (UNDP,1990 )as cited by (Nwagu \& Ajama, 2011) More than 75 percent of women in Kenya live in the resource and infrastructure starved rural and remote communities (KNBS,2010).These women play essential and dynamic roles in the rural economies, being actively involved in agriculture mainly, which is the basic sector of the Kenya rural economy. The health of these women is critical to food production and sustenance of families. However, in comparison with their urban counterparts, the health status of the rural women, is poor; they are seldom educated and are more likely to suffer from lack of access to proper healthcare information. One major explanation of this observation is information poverty; rural women lack adequate access to healthcare information sources and literacy to meet their health information needs (Nwagu \& Ajama,
2011). To make informed choices and access the required healthcare services the rural women must have easily available, accurate, and timely information, and they must use it.These observations apply exactly to the rural women in Kakamega County ranked $5^{\text {th }}$ among 15 counties with the highest maternal mortality cases in Kenya. The research sought to analyse the role community-based radio stations are playing to bridge the gap of poor access to healthcare information services by these women which is a maternal health-related Millennium Development Goal in sub Saharan Africa.

The research seeks to contribute to the growing scholarship on community radio worldwide and its role in promoting access to healthcare information to this exceptional group cohort who are significant role players in community development, decision-makers in terms of medical and treatment decisions; main family caretakers and driving force behind health information seeking in the family.

Rural women can access diverse media choices but they are heavily fragmented.Audience habits, preferences and patterns affect media behaviour. Kenya's media consumers use radio the most, followed by television and newspapers (Mbeke, Ugangu, Okello: 2010).Consequently the study focused on analysing the community based radio as a powerful source of information in the rural area (Tucker, 2013) and in creating awareness, providing information and education, improving skills and political and economic development or empowerment of women. (Venu Arora, 2015) Community-based radio plays an important role in the lives of rural women as it creates awareness, provides information and education, improves their skills and on the whole it promotes social, cultural, political and economic development or empowerment of women. Many studies have proved that community-based radio is an instrument of power in changing the lives of women (Nirmala, 2015).Yet majority of the rural women face significant challenges in having access to
excellent quality and timely health care information that enables them to access needed services and support (Pullen, Fiandt \& Walker, 2011; Schofield, Bloch, Herman, Murphy, Nankervis\& Singh, 2008).In the current design of the basis and rationale of programming at the community based radio stations there is a gap in determining how messages should be packaged to commensurate with the rural women's stages of behavior change as well as the intended behavior change that the programmes wish to bring out.The result of these is that the rationale of programming does not encourage the rural women to go for services and create awareness about their health issues.

At the same time ,access to appropriate health information through the community-based radio stations enables women to access needed services, which is crucial in the promotion of their families. Research studies have demonstrated that having access to excellent quality and timely information enables women to access needed services and support (Pullen, Fiandt\& Walker, 2011; Schofield, Bloch, Herman, Murphy, Nankervis\& Singh, 2008).Furthermore excellent quality health information can successfully substitute for consultation with health professionals, thereby enhancing rural women's sense of autonomy and potentially having positive fiscal benefits. In Kenya many community based-radio stations may be lacking a clear step by step road map which guides them in content generation and even loosely defining their concept in changing behavior to a strategic and participatory program with a measurable impact on the intended audience who are the women.This situation presents a problem where health topics that are aired by the community based radio stations are not able to meet their health information needs making them irrelevant .Yet the availability of the correct health content will improve the health knowledge and change the health behaviors of the illiterate and poor communities, as it does not require any reading skills or money for endless purchasing (Zamawe, Banda \& Dube, 2016).

Based on reviews on audience perceptions of programming and participation, community based radio stations make a significant positive contribution to health information dissemination in the rural areas (Nirmala, 2015; Venu Arora, 2015) There is evidence that the diverse nature of community-based radio programming is playing a key role in enhancing the emotional and social well being of its equally diverse audiences. (Venu Arora, 2015) though a majority of the rural women might not be relying on the community based radio stations as a source of health care information. (Nwagu \& Ajama, 2011). This has been attributed to complains from the rural women due to religious obstacles, influence of their husbands, language barriers, lack of confidence on the sources, as well as the problem of confidentiality. (Nwagu \& Ajama, 2011) Further more the rural women are less frequently involved in the program design of the health program. The implication is that women's health issues are compartmentalised in media text formats and schedules. The consequence is that the women's perception's towards the radio health programmes aired might not be able to change their knowledge and attitudes and motivate them to acess health care services.

### 1.2 Statement of the Problem

Excellent quality healthcare information can successfully substitute for consultation with health professionals, thereby enhancing women's sense of autonomy and potentially having positive fiscal benefits. However, this is not the case in most parts of the rural areas in Africa. According to a study investigated by Johnson's CMIS, some of the traditional information sources available to the rural women are local drug hawkers, friends and family, drug sellers, traditional healers, oracle homes, faith healers and chemist. Although the role of traditional sources cannot be discredited in health care delivery in any rural African setting, the unstandardised nature of the knowledge of diseases the practitioners possess as well doubt of their knowledge of human body, among others makes the sources unreliable for delivering
adequate health care information.In Kenya community based radio has been identified as a powerful source of information especially among the vulnerable poor. But despite the significant roles the community based radio stations play, a majority of the rural women are likely to suffer from lack of access to proper healthcare information to meet their information needs .In Kakamega County which is the focus of this study lack of access to proper health care information has contributed to an increment in maternal mortality cases ranking it 5th amongst 15 counties in Kenya with the worst reproductive maternal health statistics contributing to the $98.7 \%$ of total maternal deaths .These calls for a critical review of the basis and rational of radio programming at the community based radio stations and how the content broadcasted empowers the rural women to make informed choices and access the required healthcare services.

Access to appropriate health information through the community-based radio stations enables women to access needed services, support and substitute for consultation with health professionals, thereby enhancing rural women's sense of autonomy and potentially having positive fiscal benefits. Understanding the step by step road map which guides the stations in content generation and even loosely defining their concept in changing behavior to a strategic and participatory program with a measurable impact on the intended audience who are the women is important .The health topics aired by the community based radio stations are not able to meet the health information needs of the rural women making them irrelevant.Yet the availability of correct health content will improve the health knowledge and change the health behaviors of the illiterate and poor communities and empower them to acess heath care services.

There is evidence that diverse nature of community-based radio programming plays a key role in enhancing the emotional and social well being of its equally diverse audiences.

However majority of the rural women might not be relying on the community based radio stations as a source of health care information which they attibute to religious obstacles, influence of their husbands, language barriers, lack of confidence on the sources, as well as the problem of confidentiality and lack of involvement in the program design of the health program. The implication is that the women's perception towards the radio program cannot make them change their knowledge and attitudes towards the programs and motivate them to acess health care services.

The results of this research act as a guide for community-based radio stations in designing a clear step by step framework for disseminating health care information for women in Kakamega County. Secondly, this study is expected to form a benchmark upon which approaches and guidelines for dissemination of health care information to improve access to those services by women can be implemented.

### 1.3 Research Questions

The study was based on three main research questions, namely:
i. What is the basis and rationale of radio programming inthe four community-based radio stations in Kakamega County?
ii. What is the relevance of health-related programs aired by the four community-based radio stations to women in Kakamega County?
iii. What is the perception of the women on the existing radio-based health care information broadcasted by the four community-based radio stations in Kakamega County?

### 1.4 Objective of the Study

This study was designed to analyse the role of community-based radio stations in the dissemination of health care information to women in Kakamega County.

The specific objectives were to:

1. Establish basis and rationale of radio programming in the four community-based radio stations in Kakamega County.
2. Examine the relevance of health-related programs aired by the four community-based radio stations to women in Kakamega County.
3. Assess the perception of women towards existing radio-based health care information aired by the four community-based radio stations in Kakamega County.

### 1.5 Scope and Limitations of the Study

The study was confined to four community-based radio stations broadcasting in Kakamega County, with a thematic focus on analysing the basis and rationale of radio programming in the four community-based radio stations, the relevance of health-related programs aired by the four community-based radio stations and the perceptions of the women listeners towards the radio health programs aired by the four community-based radio stations.Respondents were rural women of reproductive age from Kakamega County and selected staff of the four radio stations. The stations' programmes' format, language of broadcast, the target audience, program schedule, level of interaction with the listeners in the community and the types of programmes aired were examined.

The study was limited by the research design and sample group. The use of respondents' perceptions as opposed to more objective measures, was another limitation. (Merchant, Stringer and Theivananthampillai 2010) state that subjective performance evaluations are
based on personal impressions and judgments, which make them difficult to anticipate. The questionnaires did not assess respondents' in-depth understanding of health programs beyond recall of the title of the programs. During the one-on-one interviews with the radio station personnel, responses were skewed due to the perceived sensitivity of the sought information from the respondents' perspective. In addition, the response rate for the women interviewed was $80 \%$ instead of $100 \%$.

These limitations did not however negatively affect the quality and outcome of the study.

### 1.6 Significance of the Study

Addressing the role of community-basedradio in the dissemination of health care information for rural women is crucial to the field of communication for several reasons. One of them is that there is growing body of evidence on the rapid growth of community-based radio around the world (Buckley, 2008). Given such growth, and the increasing general acknowledgement of the role played by women in society, and the importance of health in the scheme of things.Currently there is little evidence to show the significant role these stations play in bridging the gap of poor access to healthcare information services by women which is a maternal health-related Millennium Development Goal in sub Saharan Africa. Many previous studies that examine community-based radio stations have often focused on these stations as an alternative to mainstream media and the production process leaving out research to understand the basis and rationale of their programming, the relevance of the content they produce and further look at the perceptions of the women towards existing health care-based information aired by these radio stations

Understanding how community-basedradio can or has been used to increase the knowledge and level of women's awareness of their reproductive health issues is the key focus of this
research.There is need for greater participation of women and representation of their perspective on health care information through community-based radio stations.This involves an in-depthanalysis on the step by step framework that guides community-based radio stations basis and rationale in programming, their choice and design for the radio health programmes aired and their relevance.

Promoting communication media such as community-based radio programmes on/for women will facilitate access to important information and give a voice to the traditionally voiceless women. In addition, it will be an avenue for women to voice issues that affect their lives and shift them from the domestic and marginalized life into the outside world.

The results of this research act as a guide for community-based radio stations in designing a clear step by step framework for disseminating health care information for women in Kakamega County. Secondly, this study is expected to form a benchmark upon which approaches and guidelines for dissemination of health care information to improve access to those services by women can be implemented.

### 1.7 Theoretical Framework

According to (Mentzer and Carlini, 2008), a good research is supported by theory. The main concern of this study was to analyzethe role of community-based radio stations in the dissemination of health care information to women in Kakamega County. The framing theory was found to be best suited to help assess the study objectivesand justify main arguments from the study findings. The framing theory as put forth by Goffman (1974) states that people interpret what is going on around their world through their primary framework. The basis of framing theory is that the media focuses attention on certain events and then places them within a field of meaning (Baran and Davis, 2009; Goffman, 1974). Research argues that news frames function to suggest how audiences can interpret an issue or an event.In fact,
news frames can exert a substantial influence on citizens beliefs attitudes and behaviours.According to Scheufele \& Nisbet 2007 media frames help in setting up debates among citizens as part of a frame contest in which one package gains influence because it resonates with popular culture or series of events. In 1997 Republican pollster Frank Lutz researched Republican campaign messages and distilled terms and phrases that resonated with specific interpretive schemas among audiences and helped shift attitudes.He coined the popular word 'It's not what you say, it's how you say it". This means that the effects of the message are not a function of content but of differences in the modes of presentations.Different studies have examined subsets of on frame building. Some have argued that the way news is framed in mass media is a result of social and professional routines of journalists (van Dijk, 1985), "driven by ideology and prejudice" (Edelman, 1993, p. 232), or shaped by an interaction of journalists' norms and practices and of the influence of interest groups (Gamson \& Modigliani, 1987) as cited by (Tewksbury \& A.Scheufele, 2009).

In analyzing the role of community radio in the dissemination of health care information to women in Kakamega County the research seeks to analyze the basis and rationale of programming-with a focus on how these four stations frame or plan their programming. This focuses on, establishing the program formats, choice of content to air and timing for airing those messages andthe language used. Indesigning their programming do the community radio stations identify programs that have power to influence how audiences interpret and evaluate issues that affect them?

Framing theory stipulates that "how something is presented to the audience (called "the frame") influences the choices people make about how to process that information" (Goffman, 1974). The author further observes that frames are abstractions that work to organize or structure message meaning. The major thrust of the framing theory is in terms of
the frame the news or media place on the information they convey. In the same breath several other studies have demonstrated that how people think about an issue, including what they believe are the most important considerations that bear on it, can be influenced by exposure to a frame in the news (Brewer, 2002; Shen, 2004) The frames influence the perception of the news by the audience. Framing theory provides a rhetorical analysis of text (an issue, or the reporting of the issue) to identify perception and/or interpretation and involves the use of metaphor, spin, storytelling, jargon, word choice, and other narrative elements (Calabrese, 2016). How do the community-based radio stations frame content of the radio health programs they broadcast to reflect the needs of the women as part of their main target audience? What are some of the factors that come into play when framing? Do they factor in issues like language which is simple enough for the women to comprehend, consider experiential sharing to motivate other women listeners, do they engage technical experts who are authorities in their fields to provide information based on the program being aired?

In 1999, a scholar named Dietram Scheufele outlined the difference between Goffman's concept of framing and related terms such as script, or schema. He argued that even though Goffman had introduced the idea of human primary frames, the media also "frames" the message it is presenting to the public. Scheufele argued that mass media actively set the frames of reference that readers or viewers use to interpret and discuss public events. Scheufele claimed that media's framing of messages sent to the public combined with everyone's frames of understanding the consumed message created the full concept of framing (Calabrese, 2016).

Figure 1.1: Theoretical Framework: Framing Theory


## Adapted from Scheufele's theoretical framework. (Calabrese, 2016)

According to the theoretical framework as depicted in Figure 1.1, radio stations can use this process to achieve whatever reaction they hope to. The radio station producers and presenters, whilst keeping in mind the general radio station objectives and impact of the radio programmes on the community, develop media frames focused on the individual target listeners frames. The station can frame information to have a predetermined impact on its listeners. When designing a message, the radio station through its personnel in the field, therefore strive to understand how the people they are targeting perceive the world around them. This includes focusing on their values, their opinions, their experiences, their environment, and what matters to them. As stated by Calabrese (2016), the media uses the public has predisposed feelings to frame a message to be consumed a certain way, by a specific group of people. Once the radio stations frame the received message and send it, the message is then filtered through everyone's primary frame where it is manipulated and
perceived in its own unique way. The community then reacts to the message, reshapes its feelings and frame, and the process begins again.

The target listeners' frames in this model encompasses the needs of the target listenership which in this case includes gaps related to access to health care information in Kakamega County. Despite the high maternal deaths (UNFPA, 2014), access to health care information and services by the women in Kakamega county remain dismal. The framing theory emphasizes that the community-based radio stations provide a focus and environment for producing programs that can influence the women (target audience) perceptions towards healthcare and motivate them to go for services at the health facility.Thus, it rightfully forms a basis on which the four-sampled community-based radio stations - Radio Mambo, WEST FM, Sulwe FM, and Mulembe FM- should operate. The theory was therefore very vital in guiding the researcher in analyzing the role each station plays in designing their programs airing relevant programs on health and if the framing has an on the perceptions of women listeners towards the existing radio-based health care information.

Community based radio have potential for considerable influence, but it is the ideas and values conveyed through their programmes are framed in the way the radio content is developed. Community based radios respond to the needs of the community they serve, contributing to their development within progressive perspectives, which are in favour of social change. In addition, community-based radios strive to democratize communication through community participation, in different forms and in accordance with each specific social context.

## CHAPTER TWO

## LITERATURE REVIEW

### 2.1 Introduction

This chapter discusses the literature related to the role of community-based radio stations in disseminating health care information to women. The researcher reviewed literature related to basis and rationale of radio programming, the relevance of health related programmes aired by the community-based radio stations and the perception of the rural women towards health information aired by the four community-based radio stations.

### 2.2 Basis and Rationale of Radio Programming in Community Based Radio Stations

Community Based Radio Stations (CBRS) have been recognized as a valuable tool in public health and economic development. They provide relevant and community-focused programming that address community specific issues and concerns. The local voices promote local issues, which foster the development of community dialogue around important topics, which have the potential of creating significant impact on health and development (Walters, James \& Darby, 2011).Furthermore (Jallov 2012),states that community-based radio achieves its developmental objectives only if the programmes are well researched, produced and presented in local languages and in a manner that is comprehensible.Consequentyl this study looks at the basis and rationale of radio programming at the four community based radio stations and if it is designed in a manner that is conmrehensible with the listeners taking centre stage in the prodcution and presentatio process.

Normatively, community radio programming should be created by and for the community that it serves. Although most community radio stations this model, there is always some mixed programming Music, talk, public affairs, and public information are staples of community radio stations (Tucker, 2013).

Another significant role played by the community-based radio stations is they act as a voice for the poor who rarely have a voice in commercial media. (Tucker, 2013).For this reason the study seeks to analyse if the basis and rationale of programming pays attention to the marginalized voices and invites them to contribute and particpate in their programmmig.

In Portland, Oregon, at KBOO Community radio, a regular program on the homeless, 'Hole in the Bucket' encourages the participation of local homeless organizations and individuals, providing training on interviewing techniques and radio production to homeless and formerly homeless volunteers. (Tucker, 2013) In Atlanta, Georgia, WRFG Community Radio's "Class Chronicles" program is run by a collective of poor people. In Tanzania Radio Mampita \& Magneva in Madagascar focus on community building in poor areas, with a strong emphasis on the participation of poor people in the creation of programming (GumucioDagron, 2001:204) as cited by (Tucker, 2013).Further more in the Philippines, the Tambuli Radio Network calls itself the "voice of the small community for the development of the underprivileged." (Gumucio-Gumucio-Dagron, 2001:207) Its twenty radio stations serve impoverished poor people.
(Johnson-Turbes, Hall, Kamalu and Zavahir 2010) state that call-in shows and personal on-air interviews are formats unique to radio that can be effective for promoting social learning, and people reciprocally learn from each other. Messages on such shows can be tailored to target audiences and designed to contain interactive elements customized to local community concerns. Radio provides a forum for 2-way communication via live radio shows that allows the radio program presenter to interact with the listeners through phone calls and text messages. Their views, opinions and questions can be freely expressed during this time to obtain health and other relevant information. In a recent study on mammography promotion,
social learning and listener interaction via radio was an effective way to disseminate health information.

Another example of community-based radio is found in the urban areas of the United States of America, which have radio stations that target and reach African American audiences ("black radio"). Such stations typically devote a substantial percentage of their air time to programming such as call-in shows, personal on-air interviews, and community promotions, rather than news and public affairs programming (Johnson\& Birk, 2013). Another channel Black radio is also another example of an important communication channel used to reach African American audiences and facilitates health promotion in the African American community (Kennedy, Kumanyika, Ard, Reams, Johnson, \& Karanja, 2010). Black radio stations are effective change agents, which encourage community partnerships and promote drug awareness, nonviolent behavior, education, and other community issues, including those related to health (Johnson\& Birk, 2013).

Community-based radio represents programming that is produced by the community with focus on local concerns and issues. Unlike the mainstream media, the local people's participation is prevalent -rather than merely talking about the community; the people themselves make suggestions about programs. This strengthens local culture and cohesion with the recognition that the station belongs to them; it becomes a forum for a wide diversity of local opinions and views (Sterling, O’Brien, and Bennett, 2007).

In her analysis of radio programming in rural Ghana (Whaites, 2008), showed that only $0.8 \%$ of total weekly programming time was dedicated specifically to women's issues. Health, sanitation, and children's issues, also generally considered women's issues, sat at $1.3 \%$ of total programming time each. Even with the small percentage of time women's issues receive on radio, there is a broad perception that women's rights are not accurately portrayed.

Stations run women's programmes on how to be a good wife or how to raise children, which limit women to traditional roles. The report concludes that outside of this, stories tend to focus on negative issues such as homeless women living in the markets, women who cannot afford to pay their children's hospital bills or women who have been abused.

Most importantly the media plays a leading role by providing correct and appropriate information. It creates awareness among the women by filling in the gap of the appropriate knowledge needed for the prevention mechanism and at the same time working towards avoiding misconceptions. (Schiavo 2014) contributes that; mass media can reach significant percentages of interested groups and audiences". If adequately used and selected in response to the audience needs and preferences as radio, television print media and the Internet are powerful connectors between communicators and their audiences. (UNAIDS 2004) underscores that, "media is increasingly important in most women's lives, and in many countries, as it represents excellent channels through which to reach both men and women with HIV prevention messages." (Degefu 2010) also points out that the mass media have played an important role in communicating ideas about HIV/AIDS. In this regard using the community based radio statios to facilitate discussion and raise the public's consciousness about topical issues, which include health matters, is one of the achievements the media houses accomplish.
(Lawrence 2012) points out that, Community Based Radio Stations (CRS) have been recognised as an important tool in public health and economic development. Radio play its leading role in several ways such as exhibiting the benefits of behavioural change, encouraging the women to access health care information and demonstrating health care information for women and other related issues to be public agenda. Moreover, by educating the women on health care, the media creates positive change towards women accessing health
care information and services. Therefore, radio can be taken as one of the pathways of change and an influential power over the public.

Radio also promotes activities, such as immunization and family planning, by providing programming that is relevant and community focused, which address community specific issues and concerns. Local voices promoting local issues foster the development of a community dialogue around important topics such as health matters that can have significant impact on the development of a nation (Grilli, Ramsay and Minozzi, 2002; Degefu, 2010).

Community based radio has been a new phenomenon in Kenya and continues to develop among diverse communities. There are many community-based radio stations currently in operation targeting various target groups. The regulatory and policy environment following amendments of the Kenyan Communication Act 2012,enabled the formation of more vernacular radio stations reaching more communities and 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 Community based 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 adheres 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.
(Chemwaina 2014) in his study assessing the role of community-based radio stations in enhancing rural development, found that despite some weaknesses in radio programming and the mode of interaction with the rural people, the rural communities are better off today than in the old days when FM radios were non-existent.For example KASS FM a community based radio station broadcasting in Rift Valley, has come up with different developmental programmes that have positively contributed to changing the rural people's ways of life. These programmes include farming, health, marital values, environment, cultural issues, human rights, democracy, religious teachings, peace and reconciliation. Such programmes feature experts, professionals and opinion leaders who address numerous topics of interest to the community. The local people participate in the production of these programmes through letters to the editor, and phone-ins, among others. Programs such as political talk shows, which feature in KASS FM, have become one of the most important ways of community participation. UNESCO report upholds the view that, "the community based radio stations have a significant role to fulfil in creating and sustaining public opinion and political will to deal with the problem" (UNESCO, 2000).

One of the specific objectives of this research was to look at the basis and rationale of radio programming in the four community-basedradio stations in Kakamega County. The media especially radio is believed to have tremendous influence on protecting women by giving them correct health care information (UNESCO, 2008). How the radio stations try to foster community dialogue through their programming are vital in promoting access to health care information. How have the radio stations used established health facts to develop and package relevant radio programmes? (UNFPA 2014) shared a great deal of evidence on the
maternal mortality deaths in Kakamega County in which the four radio stations can contribute immensely by airing health care information to empower the rural women to seeks proper health care services. The programmes need to be well researched and designed, with the target audience taking centre stage in their production and presentation.

### 2.3Relevance of Health Programs Aired by Community Based Radio Stations

Access to appropriate health information enables women to access needed services, which is crucial in the promotion of the health of women and their families. Many research studies have demonstrated that having access to excellent quality and timely information enables women to access needed services and support (Pullen, Fiandt\& Walker, 2011; Schofield, Bloch, Herman, Murphy, Nankervis\& Singh, 2008). Excellent quality health information can successfully substitute for consultation with health professionals, thereby enhancing women's sense of autonomy and potentially having positive fiscal benefits. However, this is not the case in most parts of the rural areas in Africa. According to a study investigated by Johnson's CMIS, some of the traditional information sources available to the rural women are local drug hawkers, friends and family, drug sellers, traditional healers, oracle homes, faith healers and chemist were mainly traditional sources. (Venu Arora, 2015) Although the role of traditional sources cannot be discredited in health care delivery in any rural African setting, the unstandardised nature of the knowledge of diseases the practitioners possess as well doubt of their knowledge of human body, among others makes the sources unreliable for delivering adequate health care information. (Nwagu \& Ajama, 2011).Access to proper health care information is absent in many rural areas and this might be because of lack of a sstemic strategy by the community radio stations in informing rural people

A random household survey of 1,812 parents (mostly mothers), coordinated through Stanford University USA,demonstrated that the provision of excellent quality health information
decreased pediatric consultations with doctors in the following year (Wagner \& Greenlick, 2012).

Similarly, access to health information assists women in decision-making regarding medical tests and procedures. A randomized controlled trial (RCT) involving 1,692 women booking into antenatal care, explored the effects of information sessions on uptake of various antenatal-screening procedures (Thornton, Hewison, Lilford\& Vail, 2005). The study, undertaken by researchers at Leeds University in United Kingdom (UK), demonstrated that, compared to those receiving usual care, women who attended an information session demonstrated more considered uptake of screening tests.

Access to health information increases the likelihood that women will undertake positive lifestyle changes. A telephone study of 102 community-based rural women aged 65+, conducted by researchers at the University of Nebraska measured women's health-promoting behaviors, including physical activity, nutrition, and stress-management behaviors. The findings demonstrated that women with access to health information had lifestyles that are more positive and had made more attempts to make positive lifestyle changes (Wagner \& Greenlick, 2012).

Through the community based radio stations listeners can request information on specific topics, such as market trends, agriculture, health, or life skills for poverty alleviation. The broadcasters search the web for the requested information and put the results on air. (Nirmala, 2015)

The stations can also arrange for on-line discussions between healthworkers, agricultural extensionists, or ordinary villagers with technical experts to discuss a particular problem and broadcast the results.Community radio stations can also be the basefor multi-purpose rural
'telecentres', places with an Internet connection and other services such as public telephone and fax.

Health communication can be used to influence the public agenda, advocate policies and programs, promote positive changes in socio-economic and physical environments, improve the delivery of public health and health care services, and encourage social norms that benefit health and quality of life (Davies, 2006). Thus, health programs are critical as they contribute to the positive progression of the community.

The second objective of this study was to look at the relevance of the radio health programmes aired by the four community-based radio stations. The content and context of the programmes determine their relevance to the listener and dictate the level of application of lessons learnt. The process of content or message development is an important aspect for successful radio programmedevelopment. Given the growth, and the increasing general acknowledgement of the role played by women in society, and the importance of health it is reasonable to focus on how the radio stations determine the structure and content of their programmes, the relevance and the perceptions of the women toward the heath related programmes aired in Kakamega County. How do they strive to ensure that they provide the correct and appropriate health information to the women? Are they communicating ideas around sexual and reproductive health that are key for the women in Kakamega County ? Do the health programmes exhibit benefits of behavioral changes encouraging the women to access health care information and demonstrate access to health care information by women as a public agenda.

Radio was reportedly owned and also used as a source of general information more than GSM set;but not necessarily as a source of health information. Increased health information
programmes could be injected into the activities of the state broadcasting programmes to improve their health information content to rural people.

Message development according to the Behavioral Change Communication (BCC) material development guidelines is defined as "information conveyed to the intended target audience with the aim of motivating them to change their behaviour or actions stimulating dialogue or promoting a product or service" (HAPCO, 2010). BCC is an evidence and research-based process that originated in the 1970s and fronted by health professionals that uses communication to promote behaviors that lead to improvements in health outcomes (McKee, Becker-Benton\& Bockh, 2014). A message summarizes an idea in simple understandable terms and can be easily repeated to the intended audience to have it embedded in their minds. To improve their relevance, HAPCO (2010) recommends that prior to message development, needs analysis should be undertaken as the first step before designing the strategic plan. The Health Education Centre also underscores the need for situational analysis as the first step to effective communication (HEC, 2008). Messages should be packaged commensurate with the audience's current position in the stages of behavior change as well as the intended behavior change that the messages wish to bring out.

Glanz, Rimer and Viswanath (2008) concur that communication interventions should be designed with an understanding of the target audiences their health social characteristics, beliefs attitudes, values skills and past behaviours. When messages are designed, they should fit within an audience lifestyle if we want to win the heart and mind of the people.

Focusing on the relevance of the radio health programmes and how this increases the likelihood of women in Kakamega County to change and pursue a more positive lifestyle is important. Framing key health messages in a way that motivates the women to change their
behavior or dialogue about their health issues is essential. Designing the programmes to address specific needs, which include their social health characteristics and beliefs, is vital.

### 2.4 Perception of Women Towards Radio-Based Health Information Aired by Community Based Radio stations

The empowerment of women through community-based radios is a major focus ofthis study. Empowerment involves sharing information and power with others so that they can make an initiative and make decisions to solve problems and improve service and performance. Mhagama (2015) shares that it is an aspect of development, which can help, marginalized people especially women in rural areas to participate in development activities. Community based radio also has advantages over print media for circumventing low health literacy. Low health literacy, characterized by the inability to read, understand, and use health care materials, is consistently associated with race/ethnicity/tribe.

A study conducted among the Okitipupa rual women in Ondo State Nigeria showed that the rural women are deprived of adequate information sources to guide their health choices. What they know about their health needs and challenges are merely somewhat historical and sometimes heuristic; diseases and their causes are therefore interpreted rigidly and monotonously either through previous experiences of other people or through the advice of traditional or quack modern drug traders who dominate the community health business. (Nwagu \& Ajama, 2011) At the same time these women recycle their local knowledge about ill health conditions and rely on the therapies they have devised over the years based on traditional and cultural ethos without any consciousness about evolutionary and organic nature or even behavioural aspects of diseases. (Nwagu \& Ajama, 2011) This situation is further complcated by the long distance and high cost of modern health care services, as well as lack of confidence on the expertise and ethical trust of the modern health care
practitioners. (Nwagu \& Ajama, 2011) Ironically, the women have sufficient access to modern information and communication technologies which they also use, although the most used and available source the radio does not communicate health care information to them. As a way forward mass literacy and education and awareness programmes directed at the women in the rural communities are important key to improving health, nutrition, and education and to empowering women to participate in decision-making in society (Nwagu \& Ajama, 2011). Consequenty there is also need for targeted awareness programmes to the managers and operators of those sources from which women get health information; effort should also be directed to dismantle the persistent glass ceiling' installed by aspects of culture and which restrict women to the opinions and choices of their husbands.In addition continuous education programmes are required to improve quality of services, increase local content of health services and the need to observe ethical principles in managing people's health challenges, and in designing and implementing comprehensive health plans, services, and information and policies. (Venu Arora, 2015)

Studies show that African Americans have lower health literacy than whites. Low health literacy is associated with worse health outcomes and poorer health status (Paasche-Orlow, Parker, Gazmararian, Nielsen-Bohlman \& Rudd, 2005). For example, low health literacy among African American men is associated with diagnosis of prostate cancer (Bennett, et al cited in Berkman, Sheridan, Lohr \& Pignone, 2004). Authors concludes that low literacy may be a barrier to the diagnosis of early-stage prostate cancer among this population and recommended the development of culturally appropriate, low-literacy materials to improve diagnosis of early-stage prostate cancer. Similarly, another study recommended the development of culturally appropriate, low-literacy smoking cessation materials for African

American and Hispanic women to successfully promote tobacco abstinence (Safeer, Cooke \& Keenan, 2011).
(McKee 2004) also reflects similar views and says mass media can play a critical role in behavioural change communication (BCC) programmes for women. A study conducted in a dozen of countries throughout the world by the Centre for Communication Programs of Johns-Hopkins University (JH-CCP) reveals that communication change people's perceptions health behaviour as well as their attitudes. Women and men who have heard mass media or other programs that address reproductive health are more likely to use modern contraceptive methods to adopt safer sexual practice to seek family planning services and to discuss sensitive subjects with others than people who have not been similarly exposed.The perception of the rural women towards the radio health programs aired by the community radio stations is critical this can be achieved by the stations constantly carrying out surveys to get feedback from their listeners on their programming.

According to (Sharma, Kashyap2016) who studied the role of community-based radio for women's empowerment in India, observed that community-based radio programming could create awareness among the women about health issues. Radio programs can be designed to create awareness about dietary pattern among women with the help of nutritional experts and dieticians. Sometimes in the villages of India, old women have more knowledge about the proper diet at the time of pregnancy, so they would be able to give the radio straight talks on the nutritional diet.

A study by (Marcelus,Marques 2012) analyzed how the communication of public health risks takes place and the influence of these messages on the listener's lives, through community broadcasting " 8 de Dezembro" located in Vargem, Grande Paulista-SP and "Cantareira", located in Vila Brasilandia, Sao Paulo-SP) using statements by their listeners. Documents
produced by the broadcasters on health and health surveillance and quantitative interviews with 106 listeners were analyzed. Collective-Subject-Discourse (CSD), which combines the qualitative and quantitative aspects of research was the methodology used. Next, the data were tabulated using Qualiquantsoft software. It was concluded that community based radio could be a space for communication on public health, using Edu-communicative processes, it may play an educational role in the community, encouraging the communication of health risks in an efficient and democratic way.

There is other evidence that exposure to radio communication has an impact on health behavior. A study by Bankole, Ahmed, Neema, Ouedraogo and Konyani, (2007) showed that, among men in Burkina Faso and Uganda, those who were exposed to the radio were 1.4 and 1.5 times more likely, respectively, to know how to use condoms correctly than those who were not exposed to the radio. Correct condom usage was also directly proportional to the number of media sources to which an individual was exposed such as radio, television, and print media. The power of the radio and its influence in transmitting information to the masses was underscored by the study.with community radio becoming a powerful resource of information at the community level there is minimal evidence to show ways in which these stations are engaging their audiences especially rural women to understand their perceptions on the health programms currentyl being aired.

Women, both producers and listeners, have started to reflect on their abilities and aspirations and on other women's life; their capabilities to produce programs and interact with audiences have grown since they began. They have acquired confidence in speaking in public and inchallenging discriminatory traditions. Their ability to make informative choices is enhanced by an improved access to a vast array of information, including women's rights; they have also acquired or improved writing skills and familiarized with information technology and
media;to some reporters, CR represents a source of income and listeners increase their possibility to access employment opportunities through livelihood-related information; their consideration within family and community is improved.

A case study was conducted by Holy Cross College in 2008 to find out the reach and access of its CR and its role in the community development of the local slums found that $27 \%$ of the respondents participated in the Holy Cross CR programs and some women revealed that Holy Cross's radio programs in-creased their self-confidence, generated awareness about pollution, health and hygiene, and helped in their personality development (Nirmala, 2015)

Pondicherry University conducted a study in 2012 on the rural development of women through Community based radio stations R within the area of Pillaichavady village.The study found that through the Puduvai Vaani CR programs, nearly $87 \%$ of respondents felt it had contributed to their education. They also claimed to be better informed, especially about health issues. About $64 \%$ the respondents found that the programs' nutrition information useful even as more than half of the respondents said it contributed to an improvement in their attitude Balan \& Norman, 2012 as cited by (Nirmala, 2015)

According to Ryerson (2008), there is strong evidence that mass media, particularly entertainment broadcast through radio, have played a significant role in several countries in bringing about changes in reproductive behaviour and in promoting adoption of healthy lifestyles in general. Ushikwapo Shikamana (translates to 'when given advice, take it'), a programme that went on air in 1987 through KBC Swahili radio in Kenya, was aimed at opening the minds of men to allow their wives to seek family planning. The programme effectively linked family size with land inheritance and the resulting ability or inability of children to support their parents in their old age. The programme was the most popular programme in its respective media ever produced by the broadcasting company (KBC). By
the time the series had ended, contraceptive use in Kenya had increased by $58 \%$ and desired family size had fallen from 6.3 to 4.4 children per woman.

The third objective of this study was to establish the perception of the women towards radio helath programms aired by the four radio stations in Kakamega County. Meeting the sexual and reproductive health needs of the rural women in Kakamega County, to improve their health knowledge and change their health behaviours is important. Having pertinent information that will enable the women access information to help changetheir behaviour which include seeking required health services from the health care facilities should be crucial for the community-based radio stations.

## CHAPTER THREE

## RESEARCH METHODOLOGY

### 3.1Introduction

This chapter presents the research methodology used to realize the study objectives. It includes the research design that was applied and area of study as well as the population of study. Sample and sampling procedure, data collection methods, and data analysis is explained and justified. In addition, the logical connection between the study objectives and the research design for the study is outlined.

### 3.2 Research Design

Research design is the blueprint for the collection and analysis of the data. It is a plan and structure conceived to obtain answers to research questions (Cooper \& Schindler, 2008). Per Kothari (2004) research design is the plan, structure of investigation conceived to obtain answers to the research questions as validly, objectively, accurately, and as economically as possible.

The study adopted a mixed method research design,design. (John W. Creswell, 2018) define mixed method research as when a researcher combines elements of qualitative and qualitative approaches for the purposes of breadth and depth of understanding and corroboration. In this study the researcher employed the use of questionnaire's, in-depth interviews and content analysis in analysing the basis and rational of radio programming at the four communitybased radio stations, the relevance of the health programs aired and the perception of the women towards the radio health being aired by the four radio stations n in Kakamega county. Hancock (2003), states that qualitative research is about opinions, experiences and feelings of individuals. It produces subjective data. While quantitative research uses measurements and statistical principles and models this involves quantification of the phenomenon under study.

It is mostly used in cases where the phenomena under the study can be expressed in terms of quantity.

### 3.3 Study Area

The study was conducted in Kakamega County in Western Kenya. The County has a population of $1,660,651$ and an area of $3,033.8 \mathrm{~km}^{2}$ is found within the former Western Province of Kenya. The Luhya people are the main inhabitants.It constitutes 9 constituencies (Malava, Lugari, Mumias, Matungu, Lurambi, Shinyalu, Ikolomani, Butere and Khwisero. Kakamega Central, Kakamega North, Kakamega East, Kakamega South, Lugari and Mumias districts were mapped for the purposes of generating county estimates (Trillo,2013). Specifically, the study focused on parts of the rural areas of Kakamega which include; Malava, market, Lurambi, Shamakhokho and Shinyalu areas of Kakamega County (Figure 1).


Figure 1:The sub counties in Kakamega selected for the study.

The study was motivated by the need for health-related intervention in the rural areas of Kenya, to address the reproductive health challenges that affect women of reproductive age and contribute to the high maternal mortality cases in Kakamega County.The focus is on rural women who are the main decision-makers in terms of medical and treatment decisions; they are the main family care takers, and the driving force behind health information seeking in the family as they play a significant role in influencing the standard or quality of living from house hold to community level.

### 3.4 Population of the study

The study population comprised of personnel from the four selected radio stations, who included the chief producers, journalists and editors and women listeners of reproductive age between 15-49 years in Kakamega County. The target population comprised of 53 personnel from the four-selected radio stations. These included production managers, program producers, and head of radio programs, editor, and radio station presenters. These respondents helped to gather feedback on background information about their stations which include types of programs aired, duration of the programs, how scheduling is done, the language used in broadcasting at their stations and their main target audiences.

Table 3.1: General Characteristics of Target Radio Stations

| Station <br> Name | Year <br> established | Language of broadcast | Region/broadcast <br> area | Staff <br> volume |
| :--- | :--- | :--- | :--- | :--- |
| Radio <br> Mambo | 2006 | Kiswahili/Luhya | Western/Rift Valley | 10 |
| Mulembe FM | 2005 | Kiswahili/Luhya | Western/Rift Valley | 15 |
| West FM | 2006 | Kiswahili/Bukusu /Teso | Western/Rift <br> Valley/Nyanza | 15 |
| Sulwe FM | 2008 | Kiswahili/Luhya/Bukusu | Western/Rift <br> Valley/Nyanza | 13 |

Source:Mulembe FM, WESTFM, Radio Mambo and Sulwe FM, 2015

Swahili and a mix of, Luhya Bukusu dialects and Teso are the main language of broadcast in all the four stations. The target population also constituted 355,000 women listeners of reproductive age between 15-49 years. This group was used primarily to ascertain the influence of the radio-based health information on women in Kakamega County.

### 3.5 Sample and Sampling Procedure

Different scholars have defined the term "sample" in several ways. For example, scholars like Mugenda (2003) define a sample as a part of the total population. Orodho and Kombo (2002) view a sample as a finite and representative number of individuals or objects in a population to be studied. On the other hand, Kothari (2004) describes a sample as a collection of units chosen from the universe to represent it. Gerstman (2003) state that a sample is needed because a study that is insufficiently precise is a waste of time and money.

### 3.5.1Sample Size for Women Listeners

The study used a formula advanced by Yamane model, (1967) and supported by Morgan, (1970), to calculate a sample size of women listeners (aged between 15-49 years) from Kakamega County. In this study, Yamane model was used to constitute the ultimate sample.
$n=\frac{N}{1+N(e)^{2}}$
$\boldsymbol{n}$ is the required sample size.
$\mathbf{N}$ is the population size $=355,000$
$\boldsymbol{e}$ is the level of precision i.e. 0.05 .
The sample size for women listeners was $400\left(355,000 / 1+355,000(.05)^{2}=400\right)$.

The study then used simple random sampling to select the 400 women of reproductive age form Kakamega County. Simple random sampling ensured that the study eliminated bias in its choice of respondents since every woman listener had a chance to be selected.

### 3.5.2 Sample Size for Radio Stations Personnel

Purposive sampling was used to identify the four community based radio stations WEST FM, Radio Mambo, Mulembe FM, Sulwe FM, based on their audience reach. The choice of the stations was since they had been in existence for at least five years (2005-2008), long enough to be well established and experienced in radio programming for their target audience. Further, the study purposively sampled one production manager and one presenter who has been previously been or currently presents health related programmes. Where there was more than one presenter, the researcher randomly selected one that was available at the time of data collection. Thus, the sample size for the interviewees from the four radio stations staff were 8 respondents.

### 3.5.3 Sample Size for the Radio Health Programs

In determining the sample size, the sampling consisted of the scripts of the radio health programs aired with a period of one year. sampling was done on radio scripts aired between January 2012 to June 2012. During this period 24 episodes had been aired through WEST FM, six in Radio mambo, 10 in Sulwe FM and 15 in Mulembe FM. 6 episodes were selected for the study. More specifically the researcher focused on content aired and appeal of the radio health programs

### 3.6 Data Collection Methods

Different data collection methods were employed in this research. The methods used in collecting data for this research included survey questionnaire, in-depth interviews with key informants, and audio content review.

General survey using structured questionnaires was used to collect primary data from 400 women listeners, as determined using (Yamane 1967) formula. The respondents were aged between 15-49 years. The questionnaires were administered within one month.The tool was used to establish age, marital status and level of education and demographic features of the women listeners. The women were identified as the main target audience for this studyand lack access to healthcare information on the best practices around their basic reproductive health care services through mass media and community channels. The second part of the questionnaire focused on media accessibility i.e. if they own a radio, how frequent they listen to radio, if they listen to community based radio stations, their favourite programs and if they have listened to any health programmes aired through the community based radio stations. The questionnaire also covered topics on how they rate the health programmes based on being appropriate, the content, the themes being discussed, recall of the key messages, if the
health programmes has influenced their perception about health issues and if they have learnt a lot through the various health topics (see Appendix 2).

The researcher used key informant interviews to collect primary data from the radio stations personnel. The key informant interviews were conducted within a span of three weeks. One to three interviews conducted per day. This allowed the researcher to focus entirely on one respondent at a time, keenly observing and noting their expressions when responding to the questions asked. For the interviews, the researcher targeted the selected radio stations personnel from each of the four radio stations. The data collected enabled the researcher to analyze the content of specific radio programmes and determined if they were geared towards empowering women by disseminating health information.

The key informant interview guide (Appendix I) was used to gather data from the chief executive officer, production manager, head of radio, editor, presenters, journalists, and technical staff from each of the four radio stations. This tool was used to collect data on: ownership of the radio station, the management, mission and vision of the station, radio programming, health education programming, health education targeting women, and challenges on dissemination of health care information for women in Kakamega County. region. Data processing and entry was undertaken immediately after the last day of instrument administration.

Content analysis to gain a deeper understanding of the relevance of the health programs aired and make valid inferences from text by the four community based radio stations was also conducted. The main justification for content analysis was to review the health content aired again the second objective on relevance of the health programs and be able to describe the trends and intent of each health episode aired. The researcher gained access to radio health programmes aired by the four radio community based stations between January 2012 to June
2012.During this period 24 episodes had been aired through WEST FM, six in Radio mambo, 10 in Sulwe FM and 15 in Mulembe FM. 8 episodes were selected for the study.

### 3.7 Validity and Reliability

### 3.7.1 Validity

Validity refers to whether a questionnaire is measuring what it purports to measure (Bryman \& Cramer 1997). Validity is the extent to which the interpretations of the results of a test are warranted, which depend on the test's intended use (i.e., measurement of the underlying construct). McMillan and Schumacher (2006) describe validity as the degree of congruence between the explanations of the phenomena and the realities of the world. While absolute validity is difficult to establish, demonstrating the validity of a developing measure is very important in research (Bowling, 1997).

This study used content validity which refers to how well the content material was sampled and measured and that it is valid (Doris McGartland Rubio, 2003).The content validity provided information on the representativeness and clarity of each item listed in the questionnaire in addition, the supervisors also offered concrete suggestions for improving the same measures. The supervisors evaluated the statements in the questionnaire for relevance and whether they are meaningful. Based on the evaluation, the instrument was adjusted appropriately before subjecting it to the final data collection exercise.

### 3.7.2 Reliability

Reliability as defined by Joppe (2000) and cited by refers to the extent to which results are consistent over time and an accurate representation of the total population considered to be reliable. Reliability refers to the repeatability, stability, or internal consistency of a questionnaire (Jack \& Clarke, 1998).

In this study, the questionnaire was tested on $5 \%$ of the sample of the sample population. Hence, the questionnaire was circulated to 20 women listeners who were selected randomly. Out of the 20, 16 were duly filled and returned for analysis. The length of time taken by the respondents to complete the questionnaires ranged between 15 minutes and 40 minutes. The collected data from the pilot survey was entered and sorted into SPSS version 21

### 3.8 Methods of Data Analysis

Data was analyzed both qualitatively and quantitatively. Data obtained from the questionnaire was analyzed using Statistical Package for Social Sciences (SPSS) software version 21. After entering data, data the analysis was accomplished through descriptive statistics, that involved measures of distribution (percentages) and measures of central tendency and dispersion (mean scores and standard deviations)was done.

The data analyses involved describing the findings in written text, making inferences from the analyzed data, and doing graphical presentations for illustration purposes. The graphical presentations involved the use of graphics such as frequency distribution tables, simple bar graphs and pie charts.

Qualitative data was analyzed and interpreted by using Atlas Ti. 8 This was done by generating codes in a systematic way, which helped reveal meaning analyzing the data according to specific objectives. The interviewer used tape recorders to capture the audio data from the key informants during the interview sessions. After each interview, the researcher transcribed the audiotape recording. The transcripts were arranged according to themes derived from the key informant guide. To ensure that key points were captured during the analysis of the radio scripts a data extraction software was used to help extract information.

Keywords related to the main research themes were derived which included title of the radio episode, definition of the title and the specific messages highlighted in the episode.

Content analysis, which refers to procedures for studying the content and meaning of messages, was carried out on 8 episodes selected from the radio stations. These eight programmes focused on topics on Importance of Ante natal care, Prevention of mother to child transmission of HIV, couple communication, Gender violence, Orphaned and vulnerable Children care, and importance of family planning. (Buddenbaum and Novak 2001) state that a well-done content analysis will produce findings that are reliable and valid. It is an empirical methodological technique for systematically describing written, spoken, or visual communication. It provides a quantitative (numerical) description

### 3.9 Ethical Considerations

All collected data was treated with confidentiality. The researcher ensured privacy and confidentiality during data collection, processing, and reporting. All the study protocols were shared with the supervisor who gave his approval All the respondents provided informed consent before taking part in the study. Informed consent included permission to be interviewed, access to records and documents at the station, inclusion of the name of the radio station in the report and other quotations associated with the study. In the absence of such consents, the radio station would not participate in the study.

## CHAPTER FOUR

## DATA PRESENTATION, ANALYSIS AND DISCUSSIONS

### 4.1 Introduction

This chapter presents results and discussions on the role of community based radio stations in disseminating health care information for women in Kakamega County, to enhance their knowledge and access to health care services. It comprises data collection details as captured from the production managers and radio presenters working in the sampled radio stations and the women listeners of reproductive age from Kakamega County, using questionnaires, interview guides and available secondary sources of data. Data has been summarized and presented in the form of tables, charts, and narratives. Analysis of data and corresponding discussions are included. Feedback from interviews was analyzed using content analysis and is therefore presented in narrative form.

### 4.2 Rate of return of Research Instruments

Out of the 400 administered questionnaires to women listeners of reproductive age, 320 were duly filled and returned. This was a response rate of $80 \%$ which is 'very good' as postulated by (Saunders, Saunders, Lewis\& Thornhill 2007) who assert that a response rate of 50 percent is adequate, 60 percent is good and 70 and above, very good. In addition, interviews conducted with 8 key informants - the production manager and one radio presenter from each of the four radio stations -took place as expected, representing a $100 \%$ response rate. The results were interpreted based on the responses given by the respondents and the research questions.

### 4.3 Demographic Characteristics of Respondents

The study sought to determine various demographic characteristics of the women listeners. These included the age, marital status, and level of education.

### 4.3.1 Age of Women Listeners

The women listeners were asked to indicate their age. Results are as presented in Figure 4.1.

Figure24.1: Age distribution of the respondents


* Standard Deviation $=9.7$

Source: Survey data, 2015

Indications from Figure 4.1 above show that there is a mix of age group. Those aged 18 years and above representing $39.8 \%$ of the sampled population, were within the ages of 20-30.61 respondents representing 18.9 \% were within the ages of 16-19 years, 56 respondents representing $17.4 \%$ were within the ages of 31-40 years, 26 respondents representing $8.1 \%$ were aged 15 years while 51 respondents representing $15.8 \%$ were within the ages of 41-49 years. This therefore shows that majority of respondents fall within the age bracket of 20-30 and were mature enough to provide good judgment or responses to the questions posed in the
study. A respectable number of the women were therefore of reproductive age, seeing that the volatility of the sample, about age was low.

### 4.3.2 Marital status

The women listeners were also requested to indicate their marital status. The marital status of the respondents was considered an important variable in determining whether the marital status of women influenced their radio listening habits in relation to health related programmes. Results are presented in Table 4.1.

Table 4.1: Marital status of the Women Listeners

| Marital Status | Frequency | Percent |
| :--- | :---: | :---: |
|  |  |  |
| Single | 92 | 28.6 |
| Married | 230 | 71.4 |
| Total | $\mathbf{3 2 2}$ | $\mathbf{1 0 0}$ |

Source: Survey data, 2015.

Table 4.1 revealed that 230 respondents representing $71.4 \%$ were married while 92 respondents representing $28.6 \%$ were single. 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 since 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.

### 4.3.3 Level of education

The study also sought to establish the level of education of the women. Results are as presented in Table 4.2.

Table4.2: Level of education of women listeners of Kakamega County

|  | Frequency | Percent |
| :--- | :--- | :--- |
| Primary | 108 | 33.5 |
| Secondary | 132 | 41 |
| College | 74 | 23 |
| University | 8 | 2.5 |
| Total | $\mathbf{3 2 2}$ | $\mathbf{1 0 0}$ |

## Source: Survey data, 2015.

Results showed that education levels of the sampled population pointed to an elevated level of literacy with 132 respondents representing $41 \%$ having attained education up to secondary school, 108 representing $33.5 \%$ having attained education up to primary level, 74 representing $23 \%$ having attained education up to college level and 8 representing $2.5 \%$ having attained education up to University level. The elevated level of literacy amongst the women who were interviewed helps strengthen women's participation in the programs aired by the community based radio stations and helps ensure that women's voices are considered.

This result further lends credence on the research conducted by Lawrence (2012) which recognizes community-basedradio stations as an important tool in public health and economic development. Radio play its leading role in several ways such as exhibiting the benefits of behavioural change, encouraging the women to access health care information and demonstrating health care information for women and other related issues to public agenda. Moreover, by educating the women on health care, the media can create positive change towards women accessing health care information and services. Therefore, radio can be taken as one of the pathways of change and an influential power over the public.

### 4.3.4 Listenership of Community Based Radio by the Women

The study sought to find out from the women if they listened to community-based radio stations. Results are as presented in Table 4.3

Table 4.3: Listenership of Community Based Radio Stations in Kakamega County

| Response | Frequency | Percent |
| :--- | :---: | :---: |
| Yes | 270 | 83.9 |
| No | 52 | 16.1 |
| Total | $\mathbf{3 2 2}$ | $\mathbf{1 0 0}$ |

Source: Survey data, 2015

Table 4.3 above showed that 270 respondents representing $83.9 \%$ of the respondents confirmed that they listen to community based radio stations while 52 respondents representing $16.1 \%$ do not listen to community based radio stations. It is worth noting here that out of the $16.1 \%$ who indicated that they did not listen to radio, only 17 (32.7\%) stated that they did not listen to radio at all. The remaining 35 (67.3\%) clarified that even though they did not listen to community based radio, they listened to the mainstream, national radio stations. This shows that radio is a common medium of communication in Kakamega County and therefore attracts great listenership. The findings also show that majority of the respondents have shifted their allegiance to listening to community based radio stations this could be due to the innovative ideas and programs that are introduced with the community based radiostations, which are especially popular in the rural areas. This supports the report that states that Community based Radio Stations provide relevant and community-focused programming that address community specific issues and concerns. The local voices promote local issues, which foster the development of community dialogue around important topics, which have the potential of creating significant impact on health and development (Walters, James \& Darby, 2011).

### 4.3.4.1 Community Based Radio Stations that Rural Women Listen to in Kakamega County

The researcher sought to find out the community-basedradio stations listened to by the women in Kakamega County. Figure 4.2 illustrates the responses collected from the women.
figure 34.2: Community Based Radio stations listened to by the women in Kakamega County


## Source: Survey data 2015

Figure 4.2.indicate that the respondents listen more to Radio Mulembe and West FM at 33 percent each, followed by Radio Mambo at 18 percent and Sulwe FM at 13 percent. Only 3 percent indicated that they listened to Chitambe FM.

The above results show that vernacular radio stations have commendable listenership from the target audience. This could be because of the innovative ideas and programs that come along with these new stations which include live talk and shows call ins. This supports the Media Council of Kenya's report that community based radio stations are especially popular in rural areas with the majority listeners being older than 30 years (Media Council of Kenya, 2012).

### 4.4Basis and rationale of radio programming in community based radio stations in

## Kakamega County

Objective one sought to examine the basis and rationale of radio programming in the four community based radio stations in Kakamega County.

### 4.4.1 Radio Programmes Currently Aired by The Four Community Based Radio Stations in Kakamega.

The four radio stations' programs schedules were analyzed to establish content and subject matter of the aired programs

## Figure 44.3: Radio program subject at WEST FM



Source: West FM, 2015
At WEST FM radio station, music is played most of the time at $38 \%$, followed by programs on general issues at $17 \%$. Health related programmes are aired $3 \%$ of the 24 -hour radio time (Figure 4.3).

Figure 54.4: Radio programs' subject at Radio Mambo


Radio Mambo program schedule reveal a higher percentage slot for music at $31 \%$. General issues and current affairs follow at $18 \%$ and $10 \%$ respectively. Health matters are discussed $2 \%$ of the slotted time (Figure 4.4)

Figure 64.5: Radio programs' subject at Mulembe FM


Source: Mulembe FM, 2015
At Mulembe FM, music takes up $27 \%$ of the time. General discussions, through live talk shows and call-ins - touching on topical issues follows closely at $19 \%$. Family focussed
programmes are aired $12 \%$ of the time. Current affairs programmes are at $10 \%$, news. Health issues are featured $3 \%$ of the time.

Figure 74.6: Radio programs' subject at Sulwe FM


Source: Sulwe FM, 2015

Sulwe FM schedule reveal that music takes up most of the radio airtime at $43 \%$, followed by general discussions at $21 \%$. current affairs programmes 9\%, family and agriculture $7 \%$ and 5\% respectively. Health and market programmes are at 3\% respectively while sports, news and commercials are at $2 \%$ each.

From the above data,on the basis and rationale of programming at the four community-based radio stations, the stations dedicate a significant amount airtime playing music and hosting musical shows with the remaining time split between news, health, agriculture and other development programmes

### 4.4.2 Women participation in community-basedradio programming

The researcher sought to find out whether the community-based radio stations consulted the women listeners on the areas they wished to be covered in the radio health programmes. The

Table 4.4 represents their response when asked whether the radio stations consulted them or not.

Table 4.4: Women listeners' response on whether they are consulted by the four community based radio stations in Kakamega County

| Response | Frequency | Percent |
| :---: | :---: | :---: |
|  |  |  |
| Yes | 38 | 11.8 |
| No | 249 | 77.3 |
| Neutral | 35 | 10.9 |
| Total | $\mathbf{3 2 2}$ | $\mathbf{1 0 0 . 0}$ |

Source: Survey data, 2015

A larger percentage of the women interviewed 249 (77.3\%), indicated that they were not consulted on the topics covered in radio programmes only $11.8 \%$ stated that they had been interviewed by the community-based radio stations. while $10.9 \%$ of the respondents neither agreed nor disagreed. These mainly comprised of women who indicated that they did not listen to community-based radio. Although the data shows us that the four radio stations offer diverse programmes that cut across all ages and genders and represent the entire community, there is minimal consultation from the stations when it comes to programming, which implies that framing, to capture the specific needs of the target audience, which include their social demographics culture-social norms, their health priorities,values needs preferred health content and communication channels is not applied Emphasis is placed on program schedule and not content which captures the needs of the target audience.

The study also sought views from the key informants of the four radio stations if the women listeners were consulted on the areas covered in the radio programmes. They pegged their responses to 'scheduling' which is also referred to as day parting. It means dividing the day into slots, which are filled with specific radio programmes. They stated that scheduling of
programmes was most critical to the stations as it determined the level of listenership by the target audience, which was a strong basis to rate the level of success. One manager said:
'It is the schedule that allows broadcasters to position and sequence programmes in ways which might attract certain audience at certain times of the day and keep them listening for longer period", Anunda Sakwa, Production Manager Mulembe FM(personal communication, 2016).

The radio production managers at the four radio stations generally affirmed that scheduling of the programmes was mainly determined through understanding the target audience needs and preferences. However, they did not seek the input of their target audience before deciding on the radio health topics but rather engage the listeners during the broadcast of the programs via sms and the call ins.Overall, the four radio stations developed their programme schedule with relatively minor input from the local communities and/or based on what they perceived to be important The design of the programs failed to take into cognizance examining the environment in their target audience operate,determining the health problems they face ,their severity and causes, identify factors inhibiting or facilitating desired changes and context current players,programs and the key audiences. The current design shows a top down approach whereby the programmes only become more participatory during the live broadcasts, which are mainly through the talk shows.

Results revealed that the scheduling were based on what the health program producers perceived as the needs of the people in Kakamega County and the economic viability for the radio stations. The listeners' role in the design of such program was minimal. The findings are in contrast with recommended practice for effective community-based radio programming. Johnson-Turbes, Hall, Kamalu and Zavahir (2010) who state that when a radio message is developed, the target audiences need to be considered. Jallo (2012) argues that forcommunity based radio to achieve its developmental objectives, its programmes should be well researched, produced and presented in a manner that is comprehensible, with the
listeners' active participation.Considering the framing theory, the community based radio stations need to organize and present their ideas and topics they cover by first being able to understand their target audience characteristics, beliefs, attitudes, values, skills, their environment, and what matters to them (HEC,2008; Calabrese, 2016).Both the radio stations and the women acknowledge the need for improvement in involving the listeners in the initial design for the programmes and in the dissemination.

### 4.4.3 Format used to Present Radio Programs

The study sought to find out the format used by the community based radio stations to present the radio programmes. Table 4.5 summarizes the findings

Table 4.5: Formats used to present radio programs at the four community based radio stations in Kakamega County

| Format | Frequency | Percent |
| :--- | :--- | :--- |
| Call-in Shows | 212 | 78.5 |
| Personal On-air Interviews | 43 | 15.9 |
| Others | 15 | 5.6 |
| Total | $\mathbf{2 7 0}$ | $\mathbf{1 0 0}$ |

Source: Survey data, 2015

Respondents' feedback on the formats used by the community based radio stations they tuned into revealed that call-in shows were most common, with 212 respondents at $78.5 \%$ citing this format. 43 representing $15.9 \%$ of the women listeners alluded that the community based radio stations used personal on-air interviews to air their programmes. Further, 15 representing $5.6 \%$ of the women listeners indicated that the community based radio stations used other formats such as radio activations and music. The format used may also contribute to their effectiveness in disseminating the intended information. This is illustrated by a study conducted by (Johnson-Turbes, Hall, Kamalu \& Zavahir 2013), which established that social learning, and listener interaction through radio was effective in disseminating health information. This is in line with the framing theory, which emphasizes the need to capture
public reaction to the aired messages. Through live discussions, the listeners respond to the information, which reshapes their feelings and individual frame, and the framing process begins again (Calabrese, 2016).

The Call-in shows and personal on-air interviews are formats that are unique to radio and can be effective for promoting social learning, where people reciprocally learn from each other. Messages on such shows can be tailored to target audiences and designed to contain interactive elements customized to local community concerns. Radio provides a forum for 2way communication via live radio shows, during which listeners can engage messengers and each other to obtain health and other information.

Radio activations, where sponsors buy airtime and promote messages around a certain health topicare, yet another format used to air the health programmes. These activations are used to promote specific health messages during national, county, and international level health based initiatives or commemorations like the world malaria, AIDs, or tuberculosis day.

This way, radio provides a forum for 2-way communication via live radio shows, during which listeners can engage messengers and each other to obtain health and other information. They reiterated the women listeners' feedback regarding the formats used by the radio stations.

WEST FM's Head of Production, Robert Ilukol explainedthat radio stations have access to up-to-the-minute insight on the most pressing issues in their community and an instant form of evaluation of the quality of their programming. On the audience side, these formats allow them to have a voice in their community-basedradio. In the long-term this leads to greater democratization, as there is little restriction to who can call or text (as compared to who might be chosen to participate in panel discussions, for example), and thus promotes inclusion of a broad spectrum of opinions in debates.
(Baran \& Davis2009) and (Goffman1974),emphasize that the way news is presented creates a frame for that information and the audience can feel a sense of rapport-of closeness with the program being aired.The basis and rationale of programming at the four community-based radio stations show that the stations play a significant role in rural development through the provision of information, education and entertainment programmes around the clock to the listeners, in areas such as music health, education and agriculture, among others. Through applying program formats like the talk shows and live call-ins the voices of the voiceless are heard and are expected to be active participants in the development process. This type of programming signifies that the radios promote participatory broadcasting, which leans towards the philosophy of involvement and participation by the listener.However, in reality the $77 \%$ of the women who confirmed that they have never been consulted by the radio stations during the programming suggests that that listeners are passive in the process and are more on the receiving end of looking at what the radio can do for them. This clearly shows that the radio stations have not fully explored their role in the dissemination of health care information to women in Kakamega County. This can be achieved through actively engaging the women in the community to actively participate in determining the content of the programmes, radio activities and even the actual broadcasting, which in the long end enhances ownership and their participation. This conforms to the basis of framing theory, which states that the media focuses attention on certain events, and then places them within a field of meaning (Baran and Davis, 2009; Goffman, 1974). By achieving this the community based radio stations become instrumental in delivery of information on public health and health care services, improvement of health knowledge and transformation of health behaviors of the society that includes the poor communities (Zamawe, Banda \& Dube, 2016; Davies et al. 2006).

### 4.5 Relevance of Health Related Programs Aired by the Four Community Based Radio Stations to Women in Kakamega County

To examine the relevance of health related programs aired by the four community based radio stations to women in Kakamega County, the study sought to establish the radio programmes and their contents in relation to health. The bearing of the health related programmes on the lives of the women in Kakamega County from the perspective of the radio station and the women was necessary to determine the magnitude of impact of the disseminated health care information.
4.5.1 Overview of Health Related Programs at the Community Based Radio Stations An outline of the health programmes aired by the four community based radio stationsis provided in Table 4.6, as provided by the radio station staff that were interviewed.

Table 4.6: Health related programs aired by the four radio stations broadcasting in Kakamega County

| Station | program | Target Audience | Day | Time | $\begin{gathered} \hline \text { Duration } \\ (\mathrm{min}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Radio Mambo | Health tips | 18-35 | Mon-Fri | 10am-1pm | 5 |
|  | Health matters | Public | Mon-Fri. | 9am -1pm | 5 |
| SulweFM | Mundu no Mundu Know your health | 18-49 | Thursday | 8pm -9pm | 60 |
|  | Health tips | Public | Mon-Fri. | $1 \mathrm{pm}-4 \mathrm{pm}$ | 5 |
| Mulembe <br> FM | Ulukha Omulembe | Men \& women | Wed\&Fri | $8.15-9 \mathrm{pm}$ | 45 |
|  | Activations on Malaria, Diarrohea, VMMC | Public | Mon-Fri | 5am-9 am |  |
| $\begin{aligned} & \hline \text { WEST } \\ & \text { FM } \end{aligned}$ | Family planning activations | 18-49 | Mon-Fri | $\begin{aligned} & 11 \mathrm{am} \text { to } \\ & 1 \mathrm{pm} \end{aligned}$ | 30 |
|  | Radio spots on diarrhea | General pubic | Mon-Fri | $\begin{aligned} & \text { 11am to } \\ & 1 \mathrm{pm} \end{aligned}$ | 0.75 |
|  | Jua Afya Yako | 15-49 | Mon- Fri | 8pm to <br> 9 pm | 60 |
|  |  |  |  | TOTAL | 240.75 |

## Source: Radio Mambo, Radio Mulembe, West FM, Sulwe FM.

As illustrated in Table 4.6, WEST FM has a one-hour radio talk show aired on Mondays at 8.00-9.00 pm known as Jua Afya Yako meaning Know Your Health whose target audience is both men and women aged between 15-49 years. West FM also has several radio activations on health. Activations on Malaria, Diarrohea, Voluntary Medical Male Circumcision (VMMC) targeting the public last for 30 minutes between 5am-9am from Monday to Friday. Family planning activations last for 30 minutes between 11am-1pm from Monday to Friday.

The target audience is women aged 18-49 years. Radio spots on diarrhea targeting the public last for 45 seconds between 11am-1pm from Monday to Friday (Table 4.7).

Results also reveal that Sulwe FM has radio activations lasting for 5 minutes between 9:00 am to $1: 00 \mathrm{pm}$ on health matters from Monday to Friday. The target audience is the general public. In addition, Sulwe FM has a one hour radio talk show language "Mundu no mundus" meaning know your health every Thursday between 8.00 and 9.00 pm . The target audience for the show is men and women aged 18-49 years who reside in Western Kenya.

On Wednesdays, Mulembe FM has a 45-minute radio talk show known as Ulukha Omulembe, which goes on air between 08.15 pm to 9 pm . The target audience is men and women aged 18 to 49 years. Additionally, Mulembe FM has radio activations lasting for 5 minutes between 1:00 pm and 4:00 pm on health tips from Monday to Friday. The target audience is the public. Radio mambo does not have any talk show on health but has fiveminute radio activation on health tips that are aired every Mondays to Fridays between 11am1 pm . The target audience is men and women aged 18-35 years.

The overall percentage time used by the stations to air health related programmesis $16.72 \%$ representing coverage within a 24 -hour period. Out of this, WEST FM featured health related programmes $8.4 \%$ of the time within the daily schedule. Sulwe followed this at $4.5 \%$. Mulembe FM and Radio Mambo dedicated the shortest time to the health programmes at $3.5 \%$ and $0.4 \%$ respectively. $89.6 \%$, of the women interviewed also confirmed that the community-based radio stations air health related programmes while $10.4 \%$ disagreed.

The community based radio stations have developed schedules and have specific slots when they air their health programmes, which they use to create awareness about health issues affecting the women in Kakamega County. This is in line with the framing theory whose major thrust is that the media focuses attention on certain events and places them within a
field of meaning. In the way the four radio stations have framed their health programmes and have specific time slots they areable to influence the perception of the health programmes by the audience,where they not only tell the audience what to think about but also how to think about the issue.

### 4.5.2 Content analysisof the health related Programs aired by Radio Mambo, Sulwe FM, West FM, Mulembe FM

The study for content analysis covers six months of the radio health programmes aired by the four radio stations, which was from January 2012 to June 2012.During this period 24 episodes, were aired through WEST FM, six in Radio mambo, 10 in Sulwe FM and 15 in Mulembe FM. From these, 6 programs were randomly selected for analysis. Following is summary of the programmes which are:- Importance of ante natal care, Prevention of mother to child transmission of HIV, Exclusive Breast Feeding (EBF) Importance of Delivering at the health facility, Immunization, and Importance of family planning.

### 4.5.2.1 Enrollment of Prevention of Mother to Child Transmission (PMTCT) -WEST FM

This program episodefocusedon PMTCT.The program was a radio talk show, which had a one presenter (host) and two participants the guests who were both healthcare providers. In overall, the discussions focused on the importance of attending antenatal clinics so that pregnant mothers can know their HIV status and thus take required measures to avoid infecting their unborn child. The guests went ahead and explained to the listeners that HIV can be passed from a HIV-infected mother to her child during pregnancy, during labor and delivery or through breastfeeding. The guests also elaborated on how an HIV-infected mother can protect their child from being infected with HIV. This is in line with (Degefu's 2010) supposition that mass media plays a key role in communicating ideas about HIV/AIDS.

The guests further explained that during pregnancy and delivery: any pregnant woman should be tested for HIV, attend all 4 ANC clinics, eat and exercise well and practice good hygiene. The guests also stressed on the importance of breastfeeding exclusively for the first 6 months. Listeners could participate in the program by calling in or sending text. At the end of the program, the producers gave tips to the listeners and advised them to always visit the nearest health facility to get more information and assistance on issues related to PMTCT.

The content above shows that WEST FM as community based radio station is playing a key rolein disseminating health care information for the women in Kakamega County through engaging health experts to share their knowledge on preventing the spread of HIV from the mother to the child. In line with the framing theory the message on PMTCT was framed in a way to influence the choices a couple need to make when they are expecting a baby. By stressing on the advantages of going for PMTCT, delivering at the health facility, and exclusively breastfeeding for six months the media houses are not only telling their audience what to think about but also how to think about it. The use of health experts as guest also makes the information more credible as it comes from an individual who is knowledgeable in that field. This is supported by previous studies that have shown the centrality of the process of communication is based upon the pervasive roles communication performs in creating, gathering, and sharing "health information (Jackson \& Duffy, 2008).If the women in Kakamega County access such important health care information through radio, they can make informed decisions regarding their health. This will also translate to a reduction of the high maternal mortality cases recorded in the county. According to (Kreps 2008) health information is the most valuable resource in health care and health promotion because it essential in guiding strategic health behaviors, treatments, and decisions.

### 4.5.2.2 Understanding Family Planning (Mulembe FM)

The program focused on explaining about family planning.Besides the presenter, there was one guest who was a family planning expert and a man who had gone for vasectomy. The health expert sets the stage by explaining what family planning and its benefits is especially for couples that would wish to delay in having more children. The man sharing his life experience explains to the listeners on why he opted to go for vasectomy and how the wife was opposed to the idea saying he will become promiscuous. The use of a man who has undergone vasectomy, Mulembe FM is using the metaphor framing technique where the station is conceptualizing the importance of family planning through using a personal testimonial as a comparison.

The guest also explained to the listeners that family planning improves the health and wellbeing of men, women, children, families, and communities and it is a key component of sexual and reproductive health services. The guest also during the discussions highlighted the importance of the listeners to understanding how to choose the number of children and space them with the help of available family planning methods. Since women are the key to family development, family planning offers them more opportunity to participate in educational, economic, and social activities.

During the show, the health expert continues to explain the different family planning methods and mentions a few traditional methods. The use of health experts as guestspeakers shows that the community based radio stations and the Ministry of Health are jointlyworking together to create awareness on Family planning and as a result are undertaking the role of carrying out positive developmental programmes. The theory of framing is an important aspect where an issue can be highlighted to make sense of the events (Baran \& Davis, 2009). In this instance, the topic of family planning is being featured,to be able to change the
people's perception for them to accept it. As media plays a key role in the people's perceptions, any negative framing can create an enormous impact upon the people. Access to appropriate health information also enables the women in Kakamega County to access needed services, which is crucial in the promotion of their health and their families. Many research studies have demonstrated that having access to excellent quality and timely information enables women to access needed services and support (Pullen, Fiandt\& Walker, 2011; Schofield, Bloch, Herman, Murphy, Nankervis\& Singh, 2008).

### 4.5.2.3 Exclusive Breastfeeding-Jua Afya Yako (WEST FM)

The guests featured in the program emphasized that breast milk is the best first food for babies. They instructed the listeners to breastfeed their babies within the first 30 minutes of birth (whether delivered at a health facility or at home) since the first thick, creamy milk (colostrum) protects a baby from illness and is like your baby's first immunization. The guests also explained that all women could make enough breast milk to feed their babies for 6 months if they breast feed often.

The presenter asked the guest speakers to elaborate on the benefits of breast milk. In response, the guest said that there are several benefits to the baby, mother, the family, and the community. For the mother breastfeeding reduces blood loss after birth (immediate breastfeeding), no warming of the milk as it is always ready at the right temperature, breast feeding saves time and money, breast feeding makes night feedings easier, delays return of fertility(method of family planning) and reduces the risk of breast and ovarian cancer.

The content of the radio talk show showsthat thecommunity based radio stations appreciate the relevance of mothers learning about exclusive breastfeeding and being able to take the necessary steps to seek more information and practice the same. According to World Health

Organization \&UNICEF (2015), babies who are exclusively breastfed for six months will have higher chances to survive and thrive well.

Provision of excellent quality health information by framing specific topics like on exclusive breastfeeding can successfully substitute for consultation with health professionals on the same, thereby enhancing women in Kakamega County's sense of autonomy and potentially having positive fiscal benefits. A random household survey of 1,812 parents (mostly mothers), coordinated through Stanford University USA, demonstrated that the provision of excellent qualityhealth information decreased pediatric consultations with doctors in the following year (Wagner \& Greenlick, 2012).

### 4.5.2.4 Immunization (Radio Mambo)

In this program (health tips), the guest explained that immunization is the process of getting medication in the form of a vaccine through injection or oral swallowing of medicine to protect the child (and adults) against harmful infections before they meet them in the community. The guest also reiterated that there are type of diseases that can be prevented through routine childhood immunization, which includes - diphtheria, tetanus, whooping cough, poliomyelitis (polio), measles, mumps, rubella, and hepatitis B. All these diseases can cause serious complications and sometimes death. Further, the guest posited that immunization is given as an injection or, in the case of polio vaccine, taken as drops by mouth.

The presenter also asked the guest to explain why children get so many immunizations. In response, the guest reiterated that several immunizations are required in the first few years of a child's life to protect the child against the most serious infections of childhood since the immune system in young children does not work as well as the immune system in older children and adults as it is still immature. Therefore, more doses of the vaccine are needed.

The guest added that in the first months of life, a baby is protected from most infections by antibodies from her or his mother, which are transferred to the baby during pregnancy. When these antibodies wear off, the baby is at risk of serious infections and so the first immunizations are given before these antibodies have gone.

Access to health information on immunization assists the women in Kakamega County in making critical decisions regarding the various immunizations for the children, the tests involved and procedures. Access to health information through the community based radio stations increases the likelihood that women will undertake positive lifestyle changes. (Wagner \&Greenlick’ s 2012) corroborates this through their telephone study of 102 community-based rural women aged 65+. They measured women's health-promoting behaviors, including physical activity, nutrition, and stress-management behaviors and established that women with access to health information had lifestyles that are more positive and had made more attempts to make positive lifestyle changes.

### 4.5.2.5 Maternal Neonatal Deaths-Aired on Sulwe FM

On maternal and neonatal deaths, the presenter asked the guest to share the situational experience of maternal and neonatal health in Western province. In response, the guest reiterated that every day a woman dies of causes related to pregnancy or childbirth. "She is most likely to be young, already a mother, and from our homes". The guest also added that in Western province the fertility rate is at $5.8 \%$ higher than the national average rate of $4.9 \%$ according to the (KDHS2003)

This means that birthrate is high, and everyone should be concerned about the safety of all mothers to ensure a healthy community. The health and survival of mothers and their newborns are linked, and many of the same interventions that save maternal lives benefit their infants. According to the guest invited for the program it is important for both the
husband and wife to visit the nearest facility for antenatal care services where both are counseled and educated on the support and care the expectant mother needs.The presenter also asked the guest to explain the aspects that contribute to mother and child vulnerability to risks that result to their deaths. The guest said that there are several things that contribute to this namely: during pregnancy, a mother's body undergoes through various changes that endanger her health and that of the unborn child. The mother is required to visit ANC for observation and advice by the doctor from the nearest health facility. Failure to do so is dangerous to her health and that of the baby and puts their survival at a risk. Many pregnant mothers continue performing too much physical work that lead to problems during the pregnancy such as miscarriage, premature labor, or underweight infants. A pregnant mother should perform light duties and family members must take up other physical work, but this does not mean that she does not work and do regular exercises. When pregnant, a mother should ensure that she gets enough rest and in comfortable positions to improve blood supply for the baby. If the baby does not get enough blood supply, it might lead to complications and even deaths. Failure for one to visit ANC and utilize the opportunity to know her HIV status and any infection of STI is dangerous. If the mother is living with the virus then she should be enrolled to PMTCT as HIV can be passed from a HIV-infected mother to her child during pregnancy, during labor and delivery or through breastfeeding. If a mother does not get enough food, it leads to serious complications for her and the baby. Couples and families expecting a child have continued to ignore preparedness for childbirth.

The content aired by Sulwe FM on maternal neonatal deaths shows that the radio station is focusing its attention on one of the major health challenges in Kakamega County and then placing it within a field of meaning to be able to influence its target audience and increase the knowledge and level of awareness and change the mind-set. Kakamega County was ranked
$5^{\text {th }}$ out of 15 counties that account for $98.7 \%$ of the total maternal deaths in the country during the 2009 Kenya Population and Housing census (UNFPA, 2014).This has been attributed to the fact that majority of the mothers prefer to deliver through unskilled birth attendant due to lack of information of the dangers involved.

Thus, using community-based radio programmes as platforms for creating awareness on/for women will facilitate access to important information and give a voice to the traditionally voiceless women. In addition, it is an avenue through which the women voice issues that affect their lives and shift them from the domestic and marginalized life into the outside world.

### 4.5.2.6 Delivery at the Health Facility-Sulwe FM

A guest was asked to explain why it is important for a pregnant mother to ensure that she delivers at a health facility and under skilled attendance. The guest explained that; when a couple is expecting a baby, it is very important for the father and mother of the unborn baby to visit the ANC clinic where they can learn more on ensuring safety of the mother and the baby. The ANC opens the maternal health system by checking the health of the mother during pregnancy and treating any infections or problems during pregnancy, giving preventative injections and medications, counseling on nutrition, checking the foetus, helping the mother prepare for child birth and giving advice on breastfeeding and caring for self and the newborn. Delivery under skilled attendance helps in knowing whether labor has gone on for too long and how to get medical help and ways of reducing risks of infection, what to do if the baby is in wrong position, what to do if the mother is losing too much blood, when to cut the umbilical cord and how to care for it. In addition, what to do if the baby is not breathing right away, how to care for the baby after birth. The health workers help avoid complications associated with child birth such as excessive bleeding, retained placenta,
maternal/foetal distress or death and contamination .The skilled attendants also ensure the new born receives first immunization and prevention of eye infection and mother gets family planning information.

It is clear from the above analysis that the community-based radio stations broadcast health topics that are relevant to the rural women in Kakamega County. Given their plight and the fact that ignorance has hindered their access to the media, using the radio as a platform to create awareness about health care issues affecting them is crucial. The framing theory by Goffman (Baran and Davis, 2009) suggests that how something is presented to the audience influences the choices people make about how to process the information. The four community based radio stations have framed the content of the health messages to promote effective communication about some of the common health challenges facing women in Kakamega County and promote positive effect.The four radio stations have well-organized their framing in a way that their target audience both men and women 15-49 can understand the significance of the health issues highlighted and take appropriate action seeking for health care information at the health facility. Howeveras mentioned earlier the radio stations rarely consulted the women on the type of health information they required. Seventy$\operatorname{seven}(77 \%)$ of the women interviewed confirmed that they have never been consulted by the radio stations during the programming.The findings reveal that listenersare not in control over message placement and production quality, which helps ensure that the intended audience is exposed to the messages with sufficient frequency and allows for the optimal timing and placement of those messages. Ensuring that the rural women are exposed, may maximize the probability that the audience will pay attention to them and elicit the intended emotional impact. According to Rhodes Journal cited in (Dunu, 2015), community stations
can contribute to diversity in programming with alternatives of scope and type if the community can directly influence the programming content.

### 4.6 Perception of women towards existing radio-based health care information aired by the four community-based radio stations in Kakamega County

The women who we interviewed also answered questions about their perceptions towards existing radio-based health information aired by the four community based radio stations. To help achieve this, independent views of women on various indicators were sought. The indicators included information appropriateness of the health messages broadcasted, rating of the content and themes for the radio health programmes. Findings on each of these were as presented in Table 4.7.

Table 4.7: Rating of the radio health programmes aired by the four community based radio stations of Kakamega County

| Channels | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :---: | :---: | :---: | :---: | :---: |
| The content of the <br> radio programmes is <br> appropriate | 270 | 1 | 5 | 3.4148 | .83497 |
| Radio <br> programmesbased on <br> content | 270 | 2 | 5 | 3.4000 | .76498 |
| Rate the radio <br> programmes in terms <br> of their health related <br> content | 270 | 2 | 5 | 3.000 | .76827 |
| Valid N | 270 |  |  |  |  |

## Source: Source: Survey data (2015)

The summary Table 4.7 shows that in all measurement indicators used were rated at the moderate (mean $=3$ ) with closer concentration of individual observations (standard deviations less than 1). 1 was equivalent to very poor, 2-poor, 3-neutral, and 4-good, 5excellent. Majority of respondents remained neutral on whether the radio programmes are appropriate (3.418);themes discussed (3.4052) and the basis of health related content (3.000)

The aggregate mean score was found to be 3.1 representing 0.89 scores, which was in the midpoint. This would imply that majority of the respondents could neither agree that the content for the radio programmes was appropriate or not, or the themes discussed were relevant or if they could rate the content that was being aired. As mentioned above. These was further established through the interviews with the radio station staff or key informants, who confirmed that their radio stations had never done an audience survey to establish if the health programmes they broadcast resonated well with their target audiences.

Majority of the women listeners also confirmed that the health based radio programmes had influenced them to take some form of action regarding their health or that of their family members. Their responses are presented in Figure 4.7.

Figure 4.7: Influence of Existing Radio-based Health Information women listeners, perception of health issues


## Source: Survey data (2015)

More than half the number of respondents, as shown in Figure 4.4, at $64.4 \%$ strongly agreed that the radio programmes had influenced their perception about health issues. $7.8 \%$ agreed while those that were neutral were $11.9 \% .10 .4 \%$ disagreed, while 5.6 strongly disagreed. This shows that the community based radio stations can influence listeners to take positive action for improved standards of living. (Pullen, Fiandtand Walker 2011) and (Schofield et al. 2008) substantiates this by stating that access to appropriate health information enables women to access needed services, which is crucial in the promotion of the health of women and their families. There is need for greater participation of women and representation of their perspective in the media. Thus, promoting communication media such as community based radio programmes on/for women will facilitate access to valuable information and give a voice to the traditionally voiceless women.

The respondents who listened to health related programmes were also asked if they had acquired new knowledge through the aired health programmes or topics. This helped to
determine the impact of the currently aired health related programmes from the various radio stations. Results are as presented in Table 4.8.

Table 4.8: New knowledge through the aired health programs by the four community based radio stations in Kakamega County

| Response | Value | Frequencies | Percentage |
| :--- | :--- | :--- | :--- |
| Strongly disagree | 1 | 20 | 7.4 |
| Disagree | 2 | 25 | 9.3 |
| Neutral | 3 | 17 | 6.3 |
| Agree | 4 | 29 | 10.7 |
| Strongly agree | 5 | 179 | 66.3 |
|  | Total | $\mathbf{2 7 0}$ | $\mathbf{1 0 0}$ |
| N | 270 |  |  |
| Mean | 4.19 |  |  |
| Standard Deviation | 1.32 |  |  |

Source: Survey data (2015)

Results revealed that, majority of the respondents (66.3\%) strongly agreed that they had learnt a lot from the health related programmes. Only $10.7 \%$ of the respondents agreed that they had not learnt a lot from the health related programmes. The respondents who were neutral were $6.3 \%$ and $9.3 \%$ disagreed that they had learnt a lot from the health-related program. Only $7.4 \%$ strongly disagreed that they had learnt a lot from the health related programmes. This implies that the women in Kakamega County receive and appreciate the information passed through the community-based radio regarding their health issues. This is an indication that radio plays a key role in improving and managing health system among the people of Kakamega County. The more they listen to health-related programmes the more they become educated on health issues. In addition, the radio becomes an avenue for women to voice issues that affect their lives and shift them from the domestic and marginalized life into the outside world.

These results are consistent with those of (Tsegyu and Asemah 2013) who asserted that community-based radio broadcasting could be used to bring about positive attitudinal change
among the rural areas. Its programming reflects local interests and contributes towards the development of rural women by educating them about banking, child health and government policies amongst other issues.

The women also answered questions about their perceptions about health issues and learning of various health issues. Their respective measurements are presented in Table 4.9.

Table 4.9: Measurement of influence of the radio health programs by the four community based radio stations in Kakamega County

| Measurement Indicator | Mean | Std. Deviation |
| :--- | :---: | :---: |
| The radio programmes influenced my perception about health <br> issues. | 3.3778 | .947 |
| Through the radio programmes I have learnt a lot on various <br> health issues | 3.6741 | .869 |

## Source: Survey data (2015)

Using a Likert scale grading of 5 - Strongly agree, 4-agree, 3-neutral, 2-disagree, 1-strongly disagree was used, women in Kakamega County were neutral in terms of the health messages they can recall from the radio health programs aired through radio, (3.6741 mean score), as shown on Table 4.6. The second rating was observed based on recall of the radio health programmes ( 3.481 mean score, .860 standard deviation). The least index was recorded on if the radio programmes influenced their perception about health issues, (3.377 Mean, . 947 standard deviation.) In aggregate, the satisfaction index among the women was 3.01 within the moderate score of 3 . The findings show majority of the women remain neutral neither confirming if they were active or not and whether the radio health programmes positively influenced them or not.

The four radio stations have well-organized their framing so that their target audience both men and women understand the significance of the health issues highlighted and take
appropriate action of going for health care services at the health facility.However, within this data it is important to note that there are significant segments of the rural women in Kakamega County who could neither agree or disagree that the radio programmes were appropriate or not, or if the themes discussed were relevant. Overall, $66 \%$ agreed that the radio health programmes had influenced their perception about health issues with $34 \%$ disagreeing. The findings reveal that the community based radio stations are playing a significant role in influencing the women through the radio health programmes. However, their role in disseminating health care information to women in Kakamega County has not been fully explored. This could be attributed to the timing of the health programmes, the content aired might not be relevant or the way the message is being delivered does not meet their expectations. Thus, in the rural areas of Kakamega County it will be critical for the radio stations to develop innovative strategies that will ensure the women become active participants in production development and decision making of the health programmes for them to have more influence. Specifically ensure that messages meant to be received by women are relevant to their health priorities and are suitably presented and broadcasted at the appropriate times, repackage information in appropriate forms suitable for rural communities.

## CHAPTER FIVE

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1. Introduction

This chapter covers summary of the study findings, conclusions and recommendations for implementation and further research in analysing the role of community based radio stations in the dissemination of health care information to women in Kakamega County.

### 5.2 Summary of Findings

The study sought to determine the role of community based radio stations in disseminating health care information to women in Kakamega County. Representatives from four community based radio stations. West FM, Radio Mambo, Mulembe FM and Sulwe FM and the rural women in Kakamega County were interviewed to meet the specific objectives of the research. These included analyzing the basis and rationale of radio programming in community based radio stations; the relevance of health related programmes aired by the four community based radio stations to the rural women of Kakamega County; and the perception of women towards existing radio-based health care information aired by the four communitybased radio stations in Kakamega County . The framing theory was adopted in analyzing the role of community-based radio stations in disseminating health care information to women in Kakamega County.

### 5.1.1 Basis and Rationale of Radio Programming in Community Based Radio Stations

 The first objective was to examine the basis and rationale of radio programming in the four community based radio stations in Kakamega County. The objective shows that the stations play a significant role in rural development through provision of information, education and entertainment programmes around the clock to the listeners, in areas such as music health,education and agriculture, among others. However, the $77 \%$ of the women who confirmed that they have never been consulted by the radio stations during the programming symbolizes that listeners are passive in the process and are more on the receiving end of looking at what the radio can do for them. This clearly shows that the radio stations have not fully explored the use of evidence-based and the context specific programming in the dissemination of health care information to women in Kakamega County.

### 5.1.2 Relevance of Health Related Programs Aired by the Four Community Based Radio Stations

The second objective of the study was to examine the relevance of health related programmes aired by the four community based radio stations in Kakamega County.The study found that the four community based radio stations played an important role of educating the public on various topical health issues. The emphasis on awareness creation through community-based radio shows that all the key stakeholders within the community recognise that communitybased radio is an important tool in public health and economic development. By educating the women on health care, the media is helping create positive change towards women accessing health care information and services.

### 5.1.3 Perception of women towards existing radio-based health care information aired by the four community-based radio stations in Kakamega County

The third objective focused on the perception of the women towards existing radio-based health care information aired by the four community-based radio stations in Kakamega County.Majority of the respondents remained neutral on whether the radio programmes were appropriate (3.418); themes discussed (3.4052) and the basis of health related content (3.000). Majority of the women listeners also confirmed that the health based radio programmes had influenced them to take some form of action regarding their health or that of their family members. More than half the number of respondents at $64.4 \%$ strongly agreed and $7.8 \%$
agreed that the radio programmes had influenced their perception about health issues while those that were neutral were $11.9 \% .10 .4 \%$ disagreed, while $5.6 \%$ strongly disagreed

### 5.2 Conclusions

The following were the conclusions for the study aimed at analyzing the role of communitybased radio stations in disseminating health care information to women in Kakamega County.

### 5.2.1 Basis and Rationale of Radio Programming in Community Based Radio Stations

The findings showed that the stations play a significant role in rural development through the provision of information, and entertainment programmes around the clock to the listeners, in areas such as music health, education and agriculture, among others. Through applying program formats like the talk shows and live call inns. This type of programming signifies that the community based radios promote participatory broadcasting, which leans towards the philosophy of involvement and participation by the listener. However,the $77 \%$ of the women who confirmed that they have never been consulted by the radio stations during the programming symbolizes that listeners are passive in the process and are more on the receiving end of looking at what the radio can do for them. This clearly shows that the radio stations have not fully explored evidence-based and context specific programming in the dissemination of health care information to women in Kakamega County. Including women in the design of programs and conducting periodic research are some recommended ways to ensure evidence-based and context specific programming which will give a voice to the traditionally voiceless women in Kakamega County and boost their uptake of healthcare services

### 5.2.2 Relevance of Health-Related Programs Aired by the Four Community Based Radio Stations

An analysis of the community-basedradio stations' health topics shows that they are relevant to the rural women as they address health matters that affect them directly and indirectly. Given the plight of the rural women and the fact that ignorance has hindered their access to the media, using the radio as a platform to create awareness about health care issues affecting them in the rural areas is crucial.

### 5.2.3 Perception of women towards existing radio-based health care information aired by the four community-based radio stations in Kakamega County

Sixty-six(66\%) agreed that the radio health programmes had influenced their perception about health issues with $34 \%$ disagreeing. The findings suggest that that the radio health programmes aired by the community-based radio stations have significantly influenced the women's perception about health issues however; there is still a considerable number of the women who disagree with this position. This may suggest that that the communitybasedradio stations have not fully explored their options in disseminating health care information for the rural women in Kakamega County. This might be attributed to the timing (airing) of the health programmes, the content aired might not be relevant or the way the message is being delivered does not meet their expectations. Including women in the design of programs and conducting periodic research are some recommended ways to ensure evidence-based and context specific programming which will guide the stations to determine if the radio programs aired are influencing their target audience.

### 5.3 Recommendations

Considering the reviewed literature, the research findings and conclusions made in this chapter and the use of the framing theory, the researcher recommends the following:
i. To develop content and structure programmes that are effective, the radio stations should strive to develop evidence-based and context specific programming by engaging the women the women in the program design and encouraging them to air their views and opinions in light of the framing theory, the radio stations should factor in the values, opinions and needs of the community that includes matters health.
ii. Secondly, innovative strategies that ensure that women become active participants in production development and decision making of the programmesshould be developed. This way the programmes will be more relevant and so have greater influence and impact on the lives of the rural women.
iii. Lastly, to increase their perception the community based radio stations should factor in the needs of the women, their capabilities and consolidate this with their technical capacities to develop message frames that will be effective. The involvement of the women in the production and determination of content and structure of the health related programmes is therefore inevitable.

### 5.4 Suggestions for further Research

Further research is proposed to consider appropriate structures and policies needed for the above recommendations to be implemented. The present study focused on one county (Kakamega) but it would be interesting to compliment this case study with a wider analysis of community broadcasting on health care information for women in other developing countries. The aim of this would be to identify existing policy, training and organisational models which already favour the kind of radio output that elicits women's health interest, and the kind of participatory involvement which seems necessary if radio is to contribute to meaningful education and development for women, and to draw lessons from them.

It would be of interest to do a long-term ethnographic reception study of the day-to-day listening of radio programmes by the women in Kakamega County. This will be to try to isolate and analyse some of the hidden messages woven into these programmes

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## APPENDICES

## APPENDIX I: INTRODUCTION LETTER

Dear (Respondent)

## RE: INFORMANT CONSENT

I am a master's student at Maseno University undertaking a research project on, "the role of Community based Radio stations in Provision of Health Care Information for Women in Kakamega County." As part of my academic requirements, I am conducting case studies among radio stations in Western region of Kenya to better understand the role they play in contributing to the provision of information to women in the community to enhance their knowledge and access to health care services.

Confidentiality and consent: "Your radio station has been selected to participate in this study because of your presence and wide listenership audience that you command in the region. Consequently, with your consent you will be supposed to respond to this interview guide. Most of the questions in this guide relate to the functions of the radio station in general and are not personal in any way. However, I assure you that your responses are completely confidential and will be treated as information provided by the station and will not in any way personally be linked to you. I therefore encourage you to honestly answer the questions to help me better understand your radio station's contribution to the empowerment of women through radio health education and programming. I would appreciate your help in responding to this study. This discussion will take about 1 hour to complete. Would you be willing to participate?"

Thank you very much for agreeing to take part in this study.

## APPENDIX II: QUESTIONNAIRE FOR WOMEN LISTENERS

Date of Data Collection $\qquad$ 1 $\qquad$ 1 $\qquad$
Type of settlement $\qquad$
Sub County /County $\qquad$

## Instructions

Respond honestly to all the questions and be as objective as possible. Information supplied will be treated with confidentiality. Information supplied is for research purposes only.

## SECTON A: Background information (Tick appropriate box)

1. Age: $\square 15 \quad \square 16-19 \quad \square 20-30 \quad \square$ 31-40 $\square 41-49$
2. Marital status: $\square$ Single $\square$ Married
3. Education: $\square$ Primary $\square$ Secondary $\square$ University $\square$ Tertiary $\square$ None

## SECTON B: Basis and Rationale of Radio Programming

4. Do you listen to a community based radio station? $\square$ Yes
$\square$ No
5. If yes, which community radio station do you listen to?
6. Were you consulted on the areas you wish the radio stations covered in their radio programmes? $\quad \square$ Yes $\square$ No
7. If yes, please elaborate the areas you were consulted on.
..
$\qquad$
8. Are the programmes presented using a local language?
$\square$ Yes
$\square$ No
9. What format do the community based radio stations use to present their radio programmes? (Please tick all that apply) $\square$ Call-in shows $\quad$ Personal on-air interviews $\square$ Other
10. If 'other', please specify which $\qquad$
$\qquad$
SECTON C: Relevance of Health Related Programs
11. Do the community based radio stations air health related programmes? $\square$ Yes
12. If yes, do the health related programmes target women? $\square$ Yes $\square$ No
13. Does the health related programmed aired by community based radio stations help to change the behavior of the women listeners?
$\square$ Yes
No
14. If yes, what are the new behaviors that women listeners have adopted? $\qquad$
$\qquad$
$\qquad$
15. What is the impact of the new behaviors to the health of the women listeners?
$\qquad$
$\qquad$

## SECTON D: Influence of Existing Radio-based Health Information

16. How do you rate the radio programmes based on being appropriate?
$\square$ Very poor $\quad \square$ Poor $\square$ Neutral $\quad \square$ Good $\quad \square$ Excellent.
17. How do you rate the radio programmes based oncontent?
$\square$ Very poor $\quad \square$ Poor $\square$ Neutral $\quad \square$ Good $\quad \square$ Excellent.
18. How do you rate the radio programmes in terms of their health related content?
$\square$ Very poor $\quad \square$ Poor $\square$ Neutral $\quad \square$ Good $\quad \square$ Excellent.
19. Does the radio based health information availed to you influence your health awareness? $\quad$ Strongly Agree $\square$ Agree $\square$ Neutral $\square$ Disagree $\square$ Strongly Disagree
20. Have you acquired new knowledge through the aired health programmed or topics? $\square$ Strongly Agree $\quad \square$ Agree $\quad \square$ Neutral $\quad \square$ Disagree Strongly Disagree

END<br>THANK YOU

# APPENDIX III: KEY INFORMANT INTERVIEWS FOR RADIO STATION PERSONNEL 

Interview Schedule

Personal Interview Protocol
i. The researcher thanks the interviewee for availing an appointment or taking time for the interview.
ii. Researcher introduces herself.
iii. The researcher explains the purpose of the interview.

The following are the questions that were asked to the selected radio stations personnel during the interview that the researcher conducted.

## Basis and Rationale of Radio Programming in Community Based Radio Stations

1. Do you consult with the local listeners on the areas they wish to be covered in the radio programmed?
2. Do you present the programmes using the local language?
3. What format does your radio station use to present the radio programmed? Please explain the effectiveness the various programming formats in conveying information to the listeners?

## Relevance of Health Related Programs Aired by Community Based Radio Stations

4. Does your radio station air health related programmed?
a. Do the health related programmed target women? What section of women do you target (in terms of age, health, social economic status, marital status)?
b. Kindly discuss the content of the programmedabout the health topics covered?
5. Does the health related programmed aired by your radio station help to change the behavior of the women listeners?
i. What are the new behaviors that women listeners have adopted?
ii. What is the impact of the new behaviors to the health of the women listeners?

## Influence of Existing Radio-based Health Information

6. Does the radio based health information availed to women listeners influence their health awareness?
7. Please explain what kind of health awareness has the women listeners received?
8. Please explain the effect of the attained health awareness on the health of the women listeners?

Thank you very much for taking your time to provide this very important information

## APPENDIX 2: OVERVIEW OF THE FOUR COMMUNITY BASED RADIO STATIONS,MULEMBE,WEST FM,RADIO MAMBO,SULWE FM.

## 1) West FM 94.9 and 104.1FM.

Launched in 2006, West FM is an independent community based radio station based in Bungoma County. The station offers comprehensive programs. It focuses on issues that affect the Western region thus; speaks to the community directly as well as giving them a platform to tackle issues affecting their daily lives on radio. West FM is an innovative information communication and technology company with investments in terrestrial radio, converged media, print media and a digital television. Its vision is to lead the Western region in achieving vision 2030 through innovative use of communication and technology. The mission is to contribute to the social and economic development of Western Kenya and North Rift through innovative use of technology. The radio station is based in Bungoma and covers the whole of Western region, North Rift and Eastern Uganda. Its target is broad but specificity determined by each individual program, content and design.

## 2) Mulembe 89.6 FM

Mulembe FM is a Luhya station that targets the Luhya community together with those interested in the Luhya lifestyle. It broadcasts to the entire Western province on 89.6 FM. The target audience includes both male and female who aspire for information for socio-economic development (pre-dominantly medium and small scale agricultural producers). The programs are clearly segmented. Mulembe FM's target audience includes both male and female aspiring to get information for their socio-economic development. The listeners who are aged between 20-45 years are pre-dominantly small and medium scale agricultural producers. They form the mass market and reside in the rural and urban areas. Mulembe broadcasts in the whole of the Western region and can be received in the Rift-Valley region 94.0 FM.

## 3) Radio Mambo 89.1 FM

Launched in July, 2006, Radio Mambo is a private radio station owned by Kool Communications Limited. The station airs its programs in the national language, Kiswahili and the local vernacular, Luhya to reach its target audience in the region. It is located in Webuye town where it broadcasts in the Western province of Kenya and parts of Rift Valley from a transmitter that is based at Webuye. The vision of Radio Mambo is "to be the leading media house in Western Kenya". The mission is "to promote the highest quality programming with great advertiser support strategy based upon total, no compromise customer satisfaction". Radio Mambo offers complete packages of up to date value added solutions aimed at meeting its customers' needs. Radio Mambo values above all, its long term customer relations.

Radio Mambo transmits its services 24 hourly via 91.7 FM and is located at Dina junction, opposite United Millers factory in Webuye town, along the Eldoret-Malaba Road. Its main target audience is the people living and working in the Western and Rift Valley regions, Bukusu, Sabaot and Kabra's speakers. The primary target audience is $18-35$ years. Its listenership consists of farmers, college and university students, professionals, small and medium scale and established business people from around the region.

## 4) Sulwe FM

Sulwe FM covers the whole of Western region parts of Siaya, Eldoret and some parts of Uganda. The station's vision is 'to enable us reach and unite people in Western Kenya', and mission is 'to impact change and bring the community into development'. The target audience are people aged between 18 and 40 who reside in the urban and rural areas. These comprise mainly of large-scale farmers who grow maize and sugarcane and are known to be careful spenders, development minded and social. They have a passion for the radio and
mainly enjoy listening to 'salaams' programs. The radio listeners have seemingly embraced technology as witnessed by their use of mobile phones to access the Internet. Sulwe FM listeners prefer the simple life style - characterized by funerals, weddings, church and cultural festivals. They uphold family values by staying in constant touch with relatives and engaging in small-scale trade trading cereals and vegetables.

