INTERPERSONAL COMMUNICATION AS A TOOL FOR IMPROVING THE UPTAKE OF VOLUNTARY MEDICAL MALE CIRCUMCISION FOR THE PREVENTION OF HIV/AIDS IN SIAYA COUNTY, KENYA

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A thesis submitted to the School of Arts and Social Sciences in fulfilment of the requirements for the award of Doctor of Philosophy degree in Communication Studies in the School of Arts and Social Sciences, Masinde Muliro University of Science and Technology, Kenya

2021

DECLARATION

This thesis is my original work prepared with no other than the indicated sources and support and has not been presented anywhere for the award of a degree or any other award.

Signed …….……. Date……..……

Osir Otteng

BJM/LH/01-55571/2016

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance of Masinde Muliro University of Science and Technology this thesis entitled: "**Interpersonal Communication as a Tool for Improving the Uptake of Voluntary Medical Male Circumcision in Siaya County, Kenya."**

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DEDICATION

To my brother, Silvanus Otunge

ACKNOWLEDGEMENTS

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ABSTRACT

This study has explored interpersonal communication (IPC) as tool for improving the uptake of voluntary medical male circumcision in Siaya County, Kenya. It examined the specific IPC strategies employed in the voluntary medical male circumcision (VMMC) programme; assessed the level of IPC training and competence among the implementers; examined how specific demographic factors could impede effective interpersonal communication in the VMMC programme; and examined trends in IPC in health. Using a mixed-methods research design, the study employed the multi-stage sampling technique – with a mixture of purposive and snowball sampling methods to arrive at the desired study areas and groups. Two questionnaires were administered on male residents of Bondo and Rarieda sub-counties in Siaya; and on field officers directly involved in the VMMC programme implementation in the two areas. Two focus group discussions were conducted, first with men living or working in the same areas, and, second, women, also in the same vicinities. A further five key informant interviews were conducted with the programme's implementers at supervisory and managerial levels. Descriptive statistics were used to analyse quantitative data and findings presented through text, tables and graphs, while qualitative data were analysed iteratively. The findings indicate that there are specific IPC strategies, namely peer-based education, community engagement, counselling and telephone helpline. However, their use is haphazard, with no clear demarcation on the use of specific strategies. Besides, there is no existing communication manual to guide the programme's implementing teams. Only a small number of the programme's implementers have had formal training in communication, while the majority of those who are trained have not been trained for more than two months. Communication training is neither a prerequisite for recruitment at any level within the implementing agencies nor is there a structured communication training programme for staff. There are several barriers to IPC, including, time constraint, education levels, and attitude. The traditionally non-circumcising nature of the Luo community has significantly complicated interpersonal communication on VMMC. Although both the implementers and clients agree that livelihood enhancing projects are important entry points for disseminating health messages, the VMMC programme is implementing none. The study recommends, among other things, full involvement of communication experts to serve in the drawing and implementation of health communication strategy, and communication training for all cadres of implementers. It further recommends due attention to culture as a key factor in the health engagement, same as the inclusion of livelihood enhancing projects in the VMMC programme.

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LIST OF ABBREVIATIONS AND ACRONYMS

1. AAA	-	Age Appropriate Approach
2. AIDS	-	Acquired Immunodeficiency Syndrome
3. ASALI	-	A Sustainable Approach to Livelihood Initiative
4. BBC	-	British Broadcasting Corporation
5. CDC	-	Centre of Disease Control and Prevention
6. CHS	-	Centre for Health Solution
7. CHV	-	Community Health Volunteer
8. DIT	-	Diffusion of Innovation
9. EIMC	-	Early Infant Male Circumcision
10. FGD	-	Focus Group Discussion
11. GoK	-	Government of Kenya
12. HBM	-	Health Belief Model
13. HIV	-	Human Immunodeficiency Virus
14. IPC	-	Interpersonal Communication
15. KII	-	Key Informant Interview
16. KIPPRA	-	Kenya Institute of Public Policy Research and Analysis
17. KMTC	-	Kenya Medical Training College
18. KNBS	-	Kenya National Bureau of Statistics
19. MMUST	-	Masinde Muliro University of Science and Technology
20. MoH	-	Ministry of Health
21. MoPHS	-	Ministry of Public Health and Sanitation
22. MSM	-	Men having (engaging in) Sex with other Men
23. NACOSTI	-	National Council for Science, Technology and

		Innovation
24. NASCOP	-	National AIDS and STI Control Programme
25. NBS	-	National Bureau of Statistics
26. NCI	-	(United States) National Cancer Institute
27. NIH	-	(United States) National Institute of Health
28. PEPFAR	-	United States President's Emergency Plan for AIDS
29. PLWHA	-	People Living With HIV/AIDS
30. SDGs	-	Sustainable Development Goals
31. SEKU	-	South Eastern Kenya University
32. STI(s)	-	Sexually Transmitted Infection(s)
33. UHC	-	Universal Health Coverage
34. UNICEF	-	United Nations International Children's Education Fund
35. UNAIDS	-	United Nations Programme on HIV/AIDS
36. USAID	-	United States Agency for International Development
37. VCT	-	Voluntary Testing and Counselling
38. VMMC	-	Voluntary Medical Male Circumcision
39. WHO	-	World Health Organization

OPERATIONAL DEFINITION OF KEY TERMS

Attitude: An enduring organization of beliefs, feelings and behavioural tendencies towards socially significant objects, groups, events or symbols. A positive or negative evaluations or feelings that people have towards other people, objects, issues or events.

Behaviour adoption: Acceptance and continued use of an idea, innovation, a conduct or lifestyle.

Behaviour change: Transformation of modification of behaviour towards a health situation; efforts to change people's personal habits to prevent disease.

Beliefs: Assumptions held by individuals or group as true. Beliefs are contextual in that they arise from learnt experiences, resulting from the cultural and environmental situations we have faced.

Campaign: A series of actions or events that are meant to achieve a particular result, like adoption of voluntary male circumcision.

Circumcision: The removal of the foreskin of the penis through operation as a preventive measure for female-male HIV/STIs transmission.

Client: Any person who visits or is visited by a health practitioner for the purposes of getting or being given medical advice or treatment.

Communication: The art of conveying, imparting, disseminating or exchanging ideas, information or knowledge by speech, writing or signs.

Communication competence: Social knowledge about how and when to use utterances appropriately.

Culture: The social behaviour and norms found in a human society; a central concept in anthropology encompassing the range of phenomena that are transmitted through social learning in human society.

Cultural competence: A set of attitudes, behaviours and skills that enables a person to work successfully in a cross-cultural setting. Goes beyond being merely being aware of differences and refers to demonstrating attitudes and approaches required to work effectively cross-culturally, and involves valuing and adapting to diversity; being aware of one's own identity and cultural biases.

Health: The level and state of functional and metabolic efficiency of a human organism; a state of complete physical and mental wellbeing; a state of being free from disease or infirmity.

Health communication: The study and use of communication strategies to inform and influence individual and community choices and decisions that enhance health.

Health (service) provider: A person who works in the healthcare system, whether in hospitals or in the community, who comes in contact with clients or whose work influences healthcare.

Health (service) seeker: A person who goes to health provider or health facility for advice or treatment.

Interpersonal communication: the direct person-to-person interaction process where two or more people exchange information, feelings, and meaning through verbal and non-verbal messages.

Intervention: A programme or measure that aims to increase awareness by changing peoples' attitudes, by bringing a change in an identified behaviour.

Knowledge: The acquaintance with or understanding of male circumcision, its purpose and importance.

Mass media: A diversified collection of communication technologies that reach a large anonymous and heterogeneous audience.

Media: Various means of communication, such as television, radio, and the newspaper. Also used as a collective noun for the news reporting agencies. Mass communication) media are the various channels used in conveying information *en-masse* to the public. Used here to refer collectively to all media technologies, including the Internet,

television, newspapers and radio, which are used for giving information en-masse.

Perception: The opinion and conviction that a person holds with regard to risk of HIV infection or protective effect of male circumcision.

Prevalence: The proportion of individuals in a population having a disease. The number of cases of a disease present in a particular population at a given time.

Public health: The activities and services that are designed to improve the standards of health of the general population, often achieved through promotion of healthy lifestyles, researching disease and injury prevention, and detecting, preventing and promptly responding to infectious diseases.

Trends: The prevailing actions, events and practices that influence interpersonal communication in the management of healthcare

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents the background to the study and discusses some of the existing literature. It further presents the statement of the problem trying to establish the gaps in exiting research. Further, the chapter presents the research objectives, research question and proffers the justification, scope and limitations of the study.

1.2 Background to the Study

Kenya is ranked among the highest HIV burden countries in Africa with over 1,493,400 million people in the country living with HIV (NASCOP, 2018). In 2017, there were approximately 52,800 new infections across all ages, with 44,800 among adults aged 15 years and above and 8,000 among children aged less than 14 years. The epidemic is geographically diverse, ranging from a high prevalence of 21 percent in Siaya County, 20.7 percent in Homa Bay County, 16.3 percent in Kisumu County and 13.3 percent in Migori County – all in the former Nyanza province, to 0.8 percent in Garissa County, 0.2 percent in Mandera County 0.1 percent in Wajir County, respectively – all Kenya's north eastern region (MoH, 2018). With the highest prevalence rate nationally at 21 percent in 2017 (NASCOP 2018), Siaya County accounted for 123,107 of the 1,493,382 HIV positive Kenyans, 4039 of the 52,767 new infection in the country and 2,062 of Kenya's total of 28,214 AIDS related deaths.

Siaya, together with Nairobi, Kisumu, Homa Bay, and Migori alone contributed about 43 percent of the estimated total new infections and 38%of the new infections among children in 2017 (MoH, NACC & NASCOP, 2018).

It was number three among the only five counties in Kenya where new infections among young people aged 15 – 24 years was above 1,000, with 1,641; the others being Nairobi (2,587), Homa Bay (1,852), Kisumu (1,630) and Migori (1,143).

In light of substantial evidence that male circumcision significantly reduces a man's risk of acquiring HIV during sex and developing penile cancer, Kenya launched the Voluntary Medical Male Circumcision for HIV Prevention programme in 2008. The programme targeted to circumcise 860,000 men by 2013 to achieve a projected universal coverage of 80 percent (Auvert, Taljiarred, Lagarde, Sobngwi-Tambekou, Sitta, & Puren, 2005; Gray, Kigozi, Serwadda, Makumbi, Watya, Nalugoda & Kiwanuka, 2007). The country, thus, became one of the 14 countries in Eastern and Southern Africa – alongside Botswana, Central African Republic, Ethiopia, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe - to incorporate VMMC as a component of their national HIV/AIDS prevention programmes (WHO, 2016). Each of these countries, known in the WHO and UNAIDS circles as priority countries, has a high prevalence of HIV and a corresponding low prevalence of male circumcision.

In 2008, Kenya's ministry of health released the "National Guidance for Voluntary Male Circumcision in Kenya" targeting men aged between 15 and 49 years (MoPHS, 2009). Regions with the highest HIV prevalence of uncircumcised adult males as of the year 2008 were selected as Kenya's priority regions for the implementation of VMMC (CDC, 2012).They included Nairobi with 20.2 percent, a section of the Nyanza region with 17.3 percent, Rift Valley with 7.0 percent and former western province with 6.8 percent.

Behaviour change communication scholars recognise interpersonal communication (IPC) as a vital component in fostering attitude and behaviour change or adoption (Rogers, 2003; Pettegrew & Logan, 1987). IPC is considered a central pillar of health communication owing to its unique features, which enable it to engender compliance with key behaviour adaptation elements as well as deal with issues of cultural conflicts, discrimination and stigma (Schiavo, 2014). Effective IPC in health management will lead to a number of things: positive rapport between client and provider; disclosure by the client of sufficient information necessary for accurate diagnosis; an appropriate and acceptable treatment or action; an understanding by the client of his or her condition and prescribed course of action; and the commitment by both parties to fulfil their responsibilities during treatment and follow-up care (De Negri *et al.*, 1997).

Siaya County presents an apparent mismatch between knowledge and practice in that, while knowledge is considerably high, averaging above 90 percent, corresponding action is low (KNBS, 2020). Rogers (2003) refers to this as knowledge, attitude and practice gap.

While many people tend to rely on mass media to learn about new ideas, they depend on interpersonal networks to move from knowledge to trial, continued practice of a new behaviour, and sustained demand creation (Wang, Duke & Schmid,2009;Bertrand, O'Reilly, Denison, Anhang, & Sweat, 2006; Rogers, 2003; De Negri, Brown, Hernández, Rosenbaum, & Roter, 2006). This argument is supported by a study by Elderkin (1998) in the Lake Victoria region where Siaya is located, which found that despite mass media campaigns to inform the public about the HIV/AIDS pandemic and the various measures against it, desired behavioural changes are not being realised.

Interpersonal communication is, therefore, an important component if this programme is to succeed (Schiavo, 2014). Nonetheless, the success or otherwise of any interpersonal communication will, to a large extent depend on specific parameters. Such parameters include the choice of the right interpersonal communication strategies, training-adduced competence, as well as clear knowledge of possible inhibiting factors to the use of interpersonal communication in healthcare.

A number of strategies come to mind when considering interpersonal communication in healthcare. These include peer-based interventions, telephone help lines, counseling, community events and home visits. Studies (e.g. Ergene, Cok, Tümer, & Unal, 2005; Giménez-García, Ballester-Arnal, Gill-Llario & Salmerón-Sánchez, 2017) on the effects of peer education in health management have found that people exposed to peer education strategy exhibited better knowledge, attitude and behaviour than those not engaged in the strategy.

A systematic review and meta-analysis of peer education interventions in developing countries, including Kenya, Zambia and Zimbabwe in Sub-Saharan Africa, concluded that peer education strategies were associated with increased knowledge on HIV, reduced equipment sharing among injecting drug users, and increased condom use (Medley, 2009). However, not much research has been done in Kenya on the efficacy of peer-education as an interpersonal communication strategy for the VMMC adoption. This could be explained by the fact that VMMC as a health intervention is new in Kenya.

On its part, telephone helpline has been used successfully over the years in health management, particularly for such diseases as rheumatism and cancers (Hughes, 2003). However, their success or otherwise have been seen to rely significantly on the physical and social infrastructure (Centre for Medicare Education, 2002). While positive reports abound on the efficacy of telephone helpline (Hughes, Carr, Huggett & Thwaites, 2002); McCabe 2000; Linton, 2001), a number of limiting factors have nevertheless been cited with regard to the strategy, including costs and supporting structures. For instance, the cost of providing a helpline within each health outlet manned by medical practitioners can be out of the reach of the government or aid organizations, taking into account the cost of returned calls, health practitioners' time and additional consultations resulting from helpline contact (Hughes *et al*., 2002).

In other settings, helplines have been criticised for being time-consuming for the staff that run them (Dale & Crouch, 1997), particularly in situations where the helpline is provided as an additional clinical service, rather than being a stand-alone service with

dedicated staff. These challenges could prove even greater in resource-deprived countries like Kenya, where specialisation is generally lacking. With scanty literature on the use of telephone helplines in the management of healthcare in Kenya, it is hard to conclude that it is efficacious.

Counselling is another IPC strategy, whose potential to deal with a diversity of problems in medical health care is recognised by Karademas (2005). It is a specialty that emphasises building on a person's strengths, treating persons with respect and care, taking into consideration and incorporating environmental factors and resources, using psycho-education in treatment, employing the bio-psychosocial model for understanding health and managing health problems (Roth-Roemer, Kurpius & Carmin, 1998). Whitlock, Polen, Green, Orleans & Klein(2004) have argued that effective interventions that address personal health practices for primary prevention hold greater promise for improving overall health than many secondary preventive measures, thus, making a pitch for clinician counselling that leads to improved personal health practices.

Empirical studies abound on the challenges and opportunities for counselling as a strategy for interpersonal communication in healthcare. A multi-country study by Bott, Neuman, Helleringer, Desclaux, Asmar, Obermeyer & MATCH Study Group, 2014) on HIV counselling and testing in three sub-Saharan African counties, namely Burkina Faso, Uganda and Kenya gave more or less the same results for the three countries.

Their findings show that whereas HIV counsellors in the three countries experienced substantial rewards from their work, they faced serious resource constraints, including staff shortages, high workloads, lack of supplies and inadequate infrastructure. Counsellors also experienced difficulties such as lack of social support, poor counselling skills emanating from lack of training, and failure to cope with knowledge demand (Mkhabela, Mavundla & Sukati, 2008; Rujuma, Mbassalaki-Mwaka, & Ndeezi, 2010).

Another important factor in interpersonal communication for healthcare is training and competence, particularly among the health service delivery teams. Lack of training and competence in communication in general and interpersonal communication in particular, can only exacerbate the situation. Ideally, health care providers ought to be specifically educated to put aside their socio-cultural biases and work within the patient's cultural beliefs system (Schiavo, 2014).

Scholars such as Kim (1999) and Fallowfield (1998) have argued that it is not right to consider effective communication as a naturally occurring phenomenon. It is a product of proper education. Bernhardt (2004) avers that communicators are no longer viewed as detached bystanders but fundamental insiders and members of the public health or health industry teams. Communication is, thus, no longer considered a skill but a science-based discipline that requires passion and training and relies on the use of different vehicles (materials, activities, events, and other tools) and channels.

Saba (2006) says that in the past, and this is probably the most prevalent trend even today, health communication practitioners were trained “on-the-job.”

Training in health communication is largely missing in the syllabi of health training institutions in the developing countries in general and in Kenya in particular (South Eastern Kenya University, 2017). A look at the curricula indicates lack of depth in the treatment of health communication in general and interpersonal communication in particular. This view is supported by other studies, which have found that despite widespread acknowledgement of the value of interpersonal communication, the subject is not always emphasised in medical training (De Negri, Brown, Hernández, Rosenbaum & Roter, 2006). The lack of training in IPC lends credence to the finding by quality-of-care research that has been done (Nicholas, Heiby & Hatzell, 1991), which shows that health counselling and provider-client communication are consistently weak across countries, regions and health services.

The bulk of both theoretical and empirical studies are concentrated outside the African continent literature, showing a gap in study in this area in Africa (Schiavo, 2014; Corcoran, 2007; Dutta- Burgman, 2004). Moreover, the available literature appears biased towards mainstream health workers such as physicians and nurses (Norouzinia, Aghabarari, Shiri, Karimi & Samami, 2016; Park & Song, 2005). This leaves out non-medical healthcare operatives such as peer educators and community health volunteers, who form part of this study’s targets.

Effective consultations with health service seekers demand not only good communication skills, but also personal awareness of the likely barriers to effective communication (Maguire, 1985). The context and content of communication in healthcare often generate challenging and highly charged emotions resulting in poor or total lack of communication between healthcare providers and their clients. Corcoran (2007) argues that wrong content of health communication delivered in unsuitable context often generate challenging emotions, resulting in poor or lack of provider-client interaction, and, eventually, loss of confidence. Effective consultations with patients demand not only good communication skills, but also personal awareness of the likely barriers to effective communication.

A number of factors contribute to poor communication that gives way to such lack of understanding, usually with negative effects on health outcomes. These include time constraints, especially among service providers; differences in language and levels of education; cultural issues surrounding age and gender differences; the attitude of the different interactants in the interpersonal communication landscape; and the service providers' technical jargon.(Noruozinia, Aghabarari, Shiri, Karimi, & Samami, 2016; Park & Song, 2005). While these factors are likely to be an impediment in the general health management system in Siaya, like elsewhere in Kenya, as to whether they also apply to the communication programme for the VMMC project remains largely a matter of conjecture, as not much study has been done in this fairly new area.

In his study on interpersonal health communication and VMMC carried out in Siaya's neighbouring county of Busia, Emojong' (2019) did not focus on such variables as training, interpersonal communication strategies and barriers to IPC. He dwelt on information source attributes, communication context, and demographic factors. Moreover, Odwar's (2018) study, although carried out in Siaya, had a different focus, concentrating on target groups' perceptions on VMMC, and how IPC aids decision making. The three studies also differ in methodology, especially in the choice of sampling techniques and data collection tools. While this study embraced focus group discussions as an impotent data collection tool, Emojong' (2019) and Odwar (2018) avoided it instead choosing survey and key informant interviews. They also chose to conduct sampling using the random sampling technique, something that this study avoided, instead settling for snowball technique because of the sensitivity of HIV/AIDS and circumcision. At the same time, the two studies' samples were restricted to men who were the target clients and stakeholders for VMMC. They left out a significant segment of population, women, who this study considered crucial to the success of VMMC or any other intervention for prevention of HIV (Dutta-Burgman, 2005). Therefore, the foregoing disparities in the preceding studies and the conviction that factors such as communication strategies, training and communication competence, barriers to communication programmes are crucial to the success of VMMC programme in Siaya formed the basis of this study.

1.3 Statement of the Problem

Studies so far done in Kenya on the role of communication in the HIV and AIDS management programmes in general and VMMC in particular, have focused on the mass communication media. Although interpersonal communication is acknowledged as a key component of health communication, particularly when dealing with such sensitive issues that transcend the boundaries of health as culture, sexuality and stigma, there exists a gap in research as far as its efficacy or specific achievement are concerned. Equally lacking is study on the level of training in interpersonal communication among health providers who are implementing the VMMC programme in Kenya. Furthermore, there is little evidence on how implementers of VMMC and other HIV/AIDS-related campaigns have been able to navigate the complex linguistic and socio-cultural environment in which they operate. Although many people tend to rely on mass media to learn about new ideas, they depend on interpersonal networks to move from knowledge to trial and continued practice of a new behaviour. Thus, while substantial investments have been made to basic healthcare in developing countries over the years, relatively few studies have focused on interpersonal communication. This study therefore seeks to fill these gaps in the management of the HIV/AIDS epidemic in particular and public health in general.

1.4 General Objective of the Study

This study evaluates interpersonal communication in improving the uptake of voluntary medical male circumcision in Siaya County, Kenya.

1.5 Specific Objectives of the Study

Specifically, this study seeks to:

i. Determine the IPC strategies employed to enhance the uptake of VMMC in Siaya County;
ii. Establish the level of interpersonal communication training for those implementing the VMMC programmes in Siaya County;
iii. Determine how specific demographic factors serve as barriers to effective interpersonal communication in the VMMC programme in Siaya;
iv. Examine the trends in health campaigns that aid interpersonal communication for VMMC uptake in Siaya.

1.6 Research Questions

In line with its specific objective, the study sought to answer the following questions:

i. What are the IPC strategies employed to enhance the uptake of VMMC in Siaya County?
ii. What is the level of interpersonal communication training among the VMMC programme implementers in Siaya County?

iii. How do specific demographic factors serve as barriers to effective interpersonal communication in the VMMC programme in Siaya County?

iv. What are the trends in health campaigns that can aid interpersonal communication in the campaign to improve the uptake of VMMC in Siaya?

1.7 Significance of the Study

The global quest to attain optimal health for all has remained at the top of development agenda as espoused in several policy documents and pronouncements. The Sustainable Development Goal (SGD) Number Three is dedicated to ensuring healthy lives and promoting wellbeing for all. The African Union Agenda 2063 Third Goal focuses on healthy and well-nourished citizens. The Kenya Vision 2030 lays emphasis on an efficient and high quality healthcare system. In all the foregoing blueprints HIV/AIDS is a priority. It is estimated that, in high HIV-prevalence countries in sub-Saharan Africa, circumcising 80 percent of men aged 15 to 49 years would prevent 3.3 million HIV infections by 2025 (WHO, 2016). To achieve this coverage, UNAIDS (2016) pitches for accelerated scale-up through innovative approaches, such as the use of safe male circumcision devices, and employment of well-focused communication campaigns to increase demand for circumcision among populations with low circumcision rates and significant exposure to HIV. Moreover, there is a growing need to make healthcare more communicatively accessible, with the argument that cases abound where communication is at the core of breakdowns in healthcare delivery system.

Male circumcision is so far the only one-off prevention mechanism against HIV/AIDS (Ministry of Health, 2018b). Its success should therefore be a major concern to policy makers, scholars and workers in health management. Consensus exists among scholars that an interpersonal communication is capable of engendering community inclusion in health management (De Negri, *et al*., 2006; Roemer & Montoya-Aguilar, 1988; Prilutski, 2010). This study will therefore trigger and contribute to scholarly debates on the place of IPC in healthcare in Kenya.

In Kenya, Siaya is among the leading counties in HIV/AIDS prevalence (NASCOP, 2018). While the county's social and epidemiological characteristics of high HIV prevalence and a non-circumcising tradition calls for a multi-pronged approach, there is low investment in a specially tailored face-to-face communication strategy to fit the particular needs of the situation (County Government of Siaya, 2014).The findings of the study should therefore be useful in developing area-specific communication strategy for the implementation of VMMC.

Overall, this study sought to deal with these voids and broaden opportunity for policy input and dialogue; particularly on the way IPC might be leveraged to play its role in health promotion in general and, specifically, VMMC. It should thus lead to more focused employment of health communication strategies that engender better responses, hence improved rate of adoption of positive socio-cultural behaviour and enhanced VMMC uptake.

1.8. Scope of the Study

This study investigated the role of communication in healthcare management with specific focus on how interpersonal communication has been leveraged to improve the uptake of voluntary male circumcision in Siaya County, with Bondo and Rarieda as the specific foci. Four questions were asked, namely: what are the IPC strategies employed to enhance the uptake of VMMC in Siaya County? What is the level of interpersonal communication training among the VMMC programme implementers in Siaya County? How do specific demographic factors serve as barriers to effective interpersonal communication in the VMMC programme in Siaya County? What are the emerging trends in health campaigns that can aid interpersonal communication in the campaign to improve the uptake of VMMC in Siaya?

The study adopted a multi-stage sampling technique, first of the districts and secondly of the actual participants. Purposive sampling was used to select the county specific sub-counties to pitch the study. Within the selected sub-counties, proportionate sampling was employed to obtain the desired cases. Three sets of participants constituted the sample frame for this study. The first group consisted of 385 men aged 18 to 50 years living within Bondo and Rarieda sub-counties and mainly from the fishing community. The second group comprised 35 operational staff, including health workers working in the field to implement the programme. The third group of correspondents included five men drawn from Usigu in Bondo, who participated in the second focus group discussion. Also engaged in focus group discussion were five women drawn from the same locations.

The involvement of women in the study was informed by the fact that women fall in the category of what Fishbein and Ajzen (2010) call "significant others" in health campaigns. These are people who play an important role in the overall success of a health intervention although they are not the intended beneficiaries. While they are not targeted for the circumcision, women have an important role to play in the implementation of VMMC.

Firstly, as wives, women are relied on to provide economic and psycho-social support to their husbands in making the decision to go for the cut. Secondly, as mothers they hold a significant sway in nursing their sons who are also targeted for the VMMC. Moreover, as sex partners, they are likely to influence men's decision on whether to be circumcised or not. The third data collection method was key informant interview, where five staff of the implementing agencies at supervisory and managerial levels participated.

This study focused on one theory and one model, namely the diffusion of innovation theory (DIT), and the integrative model of behaviour prediction (IMBP). The study sought to demonstrate the relevance of behavioural theories for developing communications designed to promote healthy or change unhealthy behaviours, demonstrating how healthcare can draw from theory to navigate the complex interpersonal communication terrain to engender acceptance and continued use of VMMC as a healthcare innovation. It further explored the model's ability to provide the appropriate tools for predicting behaviour in health campaigns. The choice and combination of DIT, a largely

communication-oriented theory, and IMBP, a normative theory, is supported by Dutta-Bergman (2005), who advocates a polymorphic approach to such complex topics as health. The approach says that the marriage of DIT, a macro-level communication theory, with HBM, which is a micro-level behavioural model, would provide valuable guidelines for health campaign scholarship and practice. Moreover, the polymorphic manner of handling the study's theoretical framework is in consonance with the mixed-method approach adopted by the study at the methodological level with respect to data collection.

1.9 Limitations of the Study

In the course of this study a couple of challenges were realised. Key among these were reluctance among the target participants to fully be part of the study, unavailability of target study participants as well as time constraints. As a result of the sensitive nature of HIV and AIDS, there was clear unwillingness among the residents to speak freely with the researcher on issues touching on the disease. The same was evident about sharing views on male circumcision, considering that male circumcision is an alien practice among the Luo people. To ameliorate this challenge, the researcher enlisted the services of research assistants from the area, who was familiar with the target participants.

Another hurdle was with respect to getting the requisite numbers of participants to fill and return the questionnaires. This challenge was particularly rampant in the case of the target clients, most of whom were fishermen, who were not willing to spend their "precious" time with the research team filling the questionnaire at the expense of their

work. This was exacerbated by the fact that most of them were employees assigned to specific boats and thus had to stick to their work schedule. To take care of this, the research team extended the time of data collection from the earlier estimated two weeks to one month. The same was done in respect of key informant interviews. The researcher also spent some time to create a rapport with the different area leaders like the chief, assistant chiefs and beach leaders, a fact that made it easier to gain the confidence of the targeted participants.

1.10 Chapter Summary

This chapter has provided the background to the study, exploring the specific objectives and how they have been handled in other research undertakings. Existing gaps in each area have been discussed. The chapter has also brought out the problem of the study, showing the existing research gaps in health communication in general and interpersonal communication in healthcare in particular. The justification of the study has been presented mainly from among other things the policy and academic perspectives. Finally, the chapter has discussed the scope and limitations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the exiting literature on interpersonal communication in health management. It adopts a by-objective approach, and discusses the following areas: i) strategies and methods of interpersonal communication in healthcare; ii) training and competence in interpersonal communication; iii) barriers to effective interpersonal communication in healthcare; and iv) existing best approaches in employing interpersonal communication in health interventions. Finally the chapter discusses specific theories that are relevant to this research and also presents a conceptual framework that underpins this study.

2.2 Interpersonal Communication Strategies in Healthcare

Interpersonal communication (IPC) in healthcare involves the perception, comprehension and transmission of messages in the interaction between health service seekers and heath service providers (De Araujo & da Silva, 2011). It has two dimensions: the verbal, which occurs through the expression of spoken or written words, and the non-verbal which is characterised by the manner and tone of voice with which words are said; gestures that accompany the speech; looks and facial expressions; the body posture; and the physical distance of two or more people when transacting (Schiavo, 2014).

Interpersonal communication in health management has three elements, namely caring, problem solving and counselling. While the three elements will occur seamlessly and throughout an interaction, they often happen sequentially (De Negri *et al*., 2006). Thus, caring communication establishes a positive tone, then problem solving to diagnose, and, finally, counselling to provide relevant health education. When patients believe that the provider cares and is committed to their welfare, they are more likely to communicate effectively and engage in their own health (Nahm *et al*., 2014). Both verbal and non-verbal communication methods enable the provider to convey interest and concern to clients. This in turn engenders confidence in the health service seeker (Hull, 2007).

Effective employment of verbal and non-verbal communication techniques is vital in communication in healthcare (Vertino, 2014). In a healthcare encounter, the choice of words by health service providers and clients influences how well they understand each other. The medical jargon physicians use to describe symptoms and treatments can confuse patients (Norouzinia, 2016). At the same time, patients often communicate in their dialects, accents and slang, often making comprehension difficult for providers from different geographical and ethnic backgrounds or age brackets. Furthermore, patients often describe health problems in peculiar ways reflecting their unique perspective on the illness's origin, nature or severity (De Negri *et al.*, 2006, Corcoran, 2007).

Words, however, express only part of a message being conveyed, while tone, attitude and gestures convey the rest. Avoiding distractions such as answering the telephone during a patient's visit or scribbling notes on a different case, and appearing fully attentive communicate positive messages to clients (Schiavo, 2014).

Often, simple gestures by the provider such as a warm greeting can help put the client at ease and enhance IPC. Stewart *et al.* (2003) state that IPC in healthcare is effective when it leads to the following five outcomes: i) the patient discloses enough information about the situation to lead to an accurate diagnosis; ii) the provider, in consultation with the client, selects a medically appropriate treatment acceptable to the client; iii) the client has better understanding of his condition and the prescribed treatment regimen; iv) the provider and the client establish a positive rapport; and v) the client and the provider are both committed to fulfilling their responsibilities during treatment and follow-up care period.

Specific steps in the process of effective communication include encouraging a two-way dialogue, establishing a partnership between patient and provider, creating an atmosphere of caring, bridging any social gaps between provider and client, accounting for social influences, effectively using verbal and non-verbal communication, and allowing patients ample time to tell their story (De Negri *et al.,* 2006; Belle-Brown *et al.,* 2003).This study has discussed peer-based interventions, telephone help lines, counselling, community events and home visits as interpersonal communication strategies commonly employed in healthcare communication.

2.2.1 Peer-based Intervention

A peer is an individual who shares common characteristics with the 'targeted' group or individual, allowing him or her to relate to, and empathise with that individual on a level that a non-peer would not be able to do (Petkovic *et al*., 2016).

Common peers include: age, gender, sexual orientation, socio-economic status, religion, and ethnicity, place of residence, culture, education, and value system. Peer activity in healthcare is generally broad in spectrum, and, besides its primary focus of providing encouragement and empathic understanding, encompasses education and emotional support (Doull *et al.,* 2005; Dennis, 2004).

A key concept in peer interventions is that the peer is considered an equal within his or her group according to the characteristics being targeted by the intervention. A peer supporter for an alcohol rehabilitation programme could be someone who has successfully managed his or her own alcohol dependency (Petkovic *et al.,* 2016). Peer-based interventions have been shown to be useful in effecting change in health behaviours and interventions. Including a peer component in healthcare management has demonstrated considerable benefit in self-management programmes for patients with chronic disease (Weber *et al.,* 2010). Peer-based self-management interventions based on Bandura's self-efficacy theory (Bandura, 1989), have been found to promote psychosocial wellbeing and physical functioning among diabetes patients (Craig *et al*., 2008) and stroke survivors (Lo *et al.,* 2014).

Besides, theoretical proof, an array of empirical studies has borne out peer based interventions as effective in the interpersonal communication in healthcare. A study on the effects of peer education in HIV/AIDS knowledge and attitude among university students in Turkey found that both male and female students exposed to peer education strategy exhibited better knowledge and higher attitude change than those not engaged in the strategy (Ergene *et al.* 2005). In Spain Giménez-Garcia *et al*. (2017) found that peer-led education was as effective as expert-led campaign for HIV prevention among young people, where three preventive variables were tested, namely knowledge, beliefs and protective sex behaviour in virginal sex, anal sex and sex after drug consumption. On the contrary, a study by Kegeles *et al.* (1988) among American adolescents reported high consumption of mass media messages on the value of using contraceptives to protect against sexually transmitted infections. Yet females continued not to ask their partners to use condoms while the males' intention to use condoms decreased. Although they did not pinpoint any particular interpersonal communication strategy, they proposed a shift from mass communication media.

A meta-analysis of peer education interventions in developing countries, including Kenya, Zambia and Zimbabwe in Sub-Saharan Africa, concluded that peer education strategies were associated with increased HIV knowledge, reduced equipment sharing among injecting drug users, and increased condom use (Medley, 2009). The study also found that peer-education was an effective strategy for behaviour change among hard-to-reach, hidden populations such as commercial sex workers and people on injectable drugs.

In Zambian evaluation of the effectiveness of a peer sexual health intervention among secondary-school students found that a school-based peer sexual health intervention was effective in increasing knowledge, positive normative beliefs about abstinence and condoms, and personal risk perception (Agha, 2002).

However, a study to determine the effectiveness of peer-led HIV prevention intervention in secondary schools in Rwanda found limited effectiveness of peer education in increasing knowledge, changing attitudes and reducing sexual risk behaviour (Michielsen *et al.* 2012). It found, nonetheless, a significant reduction in enacted stigma as perceived by those exposed to peer-led intervention considered against the control group. Although another study in Rwanda, which evaluated a peer-education based HIV/AIDS prevention project in secondary schools in Bugeresa, found a positive nexus between peer education and behaviour change, it added a rider that "the peer-educators' exemplary behaviour positively influences the participation of students." Celis, 2011: 2).

In their study in Mombasa, Kenya on the impact of five years of peer-mediated interventions on sexual behaviour and sexually transmitted infections, Luchters *et al.* (2008) found that female sex workers who attended peer-education sessions more frequently showed a trend towards lower HIV prevalence. The study also reported, that compared to the first time period, women had a favourable attitude towards HIV testing and knowing their status.

At the same time, Kenya's ministry of education and other agencies focusing on the health sector and youth development have come up with peer-education manuals covering HIV/AIDS, family planning, commercial sex workers, as well as alcohol and drug abuse (NASCOP, 2017, FHI, 2010). However, it is not clear how efficacious peer-education is as an interpersonal communication strategy for the VMMC adoption. This could be explained by the fact that the voluntary medical male circumcision is a new health intervention in Kenya, having been introduced only in 2008.

2.2.2 Telephone Helpline

Telephone helplines are increasingly used in clinical practice to provide information and advice to patients and the general public on a wide range of diseases, treatment interventions and self-management techniques (Hughes, 2003). Their popularity reflects a societal trend towards more informed, empowered consumers who expect convenient and immediate access to relevant information (Dale & Crouch, 1998). This information can be made available to all who contact the helpline with no one being turned away (Patel, Dale & Crouch, 1997). For health service seekers telephone helplines can provide rapid and immediate access to information, advice and support (Sim & Golightly, 1998). They can also ensure that the information that is accessible to patients is accurate and reliable, thereby reducing the risk of morbidity or mortality and promoting compliance with treatment regimens (Lindsay, 1995).

Potential advantages of telephone helpline to healthcare include a better informed patient population, more appropriate use of healthcare resources and real cost savings (Hughes, 2003).

Hughes *et al.* (2002) and (Linton (2001) also suggest that the provision of specialist advice and support over the telephone may 'save' general practitioner consultations both in terms of time and monetary values. In Siaya county where health facilities are few and far between (KNBS, 2020), telephone helplines can be particularly useful as it can save those seeking medical advise the long distance walk in search of such services.

Empirical evidence on the efficacy of telephone helpline in disease management point to a mixture of positive and negative results, perhaps due to what McCabe *et al*. (2000) call lack of national guidelines in the case of England. In their activity analysis of Rheumatology telephone helplines in six centres, the researchers found that the helplines in the south west of England were the same only in name; lacking uniformity in delivery in care and access to relevant information.

In their study on the role, acceptability and cost-effectiveness of telephone helpline in the management of rheumatism, Hughes *et al*. (2002), surveyed patients reported that their enquiries were handled within timelines, the responses made were direct and satisfactory, with a number of them considering it a fitting alternative to seeking the help of general practitioners. In Sweden, callers expressed satisfaction with telephone helplines in three categories: constructive dialogue, specialised competence and applicability. The patients perceived dialogues as constructive when they were able to discuss their concerns with someone, receive emotional support, and felt reassured and satisfied with the information they got.

They perceived specialised competence when the nurses were experienced and skilful, gave advise that complemented information previously provided and patients felt more knowledgeable than they were before. Applicability, to them, meant telephone helplines were easy to access and offered different choices before, during and after the telephone calls.

There are a number of limiting factors associated with telephone helplines. Although they may generate cost savings, there are costs associated with their provision and organizational issues that need to be overcome (Hughes, 2003). For example, the cost of providing a helpline within each health outlet manned by medical practitioners can be out of the reach of the government or aid organizations, taking into account the cost of returned calls, health practitioners' time and additional consultations resulting from helpline contact (Hughes *et al*, 2002). In other settings helplines have been criticised for being time-consuming for the staff that run them, particularly in situations where the helpline is provided as an additional clinical service rather than being a stand-alone service with dedicated staff (Dale & Crouch, 1997). A further concern with disease-specific helplines is that they will increase demand for specialist consultations. In the case of HIV/AIDS or VMMC in particular, provision of a helpline can increase the number of out-patient consultations. (Hughes *et al*., 2002; McCabe *et al*., 2000).

Another drawback associated with helplines is the wide variation in their content and mode of delivery even within the same disease specialty. A study by McCabe *et al*. (2000) shows that although all helplines in the study were ostensibly manned by

rheumatology nurse practitioners or rheumatology practitioners, most used answer-phones to manage the calls and, in one, calls were received by the departmental secretary who passed on the message. According to Hughes *et al*. (002), there is also variation in the ways in which messages are recorded - from scraps of paper to systematic recording in a message book with transcription to patients' medical records. These variations make it difficult to establish a minimum standard of quality for helplines, which has implications for clinical governance and legal indemnity.

The above challenge might be more serious with the VMMC implementation programmes since a number of those involved are not specialists but trained on the job mainly for the purposes of performing the circumcision. Much of the reported dissatisfaction with helplines can be attributed to a lack of training on the part of the staffers who administer them. However, without enough existing literature on the use of telephone helplines in the management of healthcare in Kenya, it is hard to conclude that this strategy is efficacious. This study therefore seeks to fill this gap.

2.2.3 Expert Counselling

Counselling is a major component of the healthcare system, with the potential of dealing with a diversity of problems in medical health care (Karademas, 2005). Counselling emphasises building on a person's strengths, treating persons with respect and care, taking into consideration and incorporating environmental factors and resources. It prescribes use of psycho-education in treatment, employing the bio-psychosocial model for understanding health and managing health problems, and being familiar with interdisciplinary collaboration. (Roth-Roemer *et al*., 1998). Whitlock *et al*. (2004) have

argued that effective interventions that address personal health practices for primary prevention hold greater promise for improving overall health than many secondary preventive measures, such as routine screening for early disease. They have, thus, made a pitch for clinician counselling that leads to improved personal health practices, as a more valuable strategy than conventional clinical activities, such as diagnostic testing.

Counselling under the ambit of HIV/AIDS prevention or VMMC adoption interventions falls in the behavioural counselling interventions category, which seek to address individual behaviours to improve health outcomes. In behavioural counselling, the primary care clinicians or other healthcare staffer offer additional treatment to address barriers to changes, increase the patient's motivation and self-help skills, and help the patient secure the needed supports for successful behaviour change (Whitlock *et al.* 2002). Effective primary care interventions seek to teach, through counselling, self-management and engage problem-solving and coping skills, thereby enabling the patient to undertake the next immediate steps in the targeted behaviour change (Goldstein, De Pue & Kazuira, 1999). Those not ready to commit to making a specific behaviour change in the near future often benefit from assistance strategies that explore uncertainties and enhance motivation (Emmons & Rollnick, 2001). Additionally, the clinicians may provide assistance through referral to other health care staff within the clinic or outside in the larger health care system (Fiore, Bailey & Cohen, 2000).

Besides the theoretical underpinning discussed above, a number of empirical studies abound on the challenges and opportunities for counselling as a strategy for interpersonal communication in healthcare.

A study on counselling for HIV in Swaziland found that counsellors experienced difficulties such as staff shortage and lack of social support (Mkhabela, Mavundla & Sukati, 2008). In Uganda, Rujumba, Mbassalaki-Mwaka, and Ndeezi (2010) found that health workers providing counselling service to HIV positive children faced many challenges including lack of counselling skills, with 63 percent of them saying they had never attended any training on counselling; failure to cope with knowledge demand; and, like is in the case of Mkhabela *et al*. (2008), heavy workload and lack of other support services. As a result of perceived lack of skills, the counsellors in both studies expressed fear of low acceptability by their clients.

However, in their study on community health worker-delivered counselling for common mental disorders among chronic disease patients in South Africa, Myers, Petersen-Williams, van der Westhuisen, Lund, Lombard, Joska *et al.* (2019) reported that the counsellors were satisfied with their clients' acceptance and appreciation of their work, with "all of them able to provide concrete examples of how the patients applied the problem-solving skills they had learnt." They nonetheless thought that additional training would give them skills to better serve their clients. They too reported time inadequacy and workload as barriers to effective counselling services.

A multi-country study by Bott *et al.* (2014) on HIV counselling and testing in three sub-Saharan African counties, namely Burkina Faso, Uganda and Kenya gave more or less the same results for the three countries. These results were not very different from those ensuing from other similar studies.

Their findings indicate that whereas HIV counsellors in the three countries experienced substantial rewards from their work, including satisfaction from saving lives and gaining professional skills they faced serious resource constraints including staff shortages, high workloads, lack of supplies and inadequate infrastructure, and they expressed concerns about accidental exposure.

2.3 Training and Competence in Interpersonal Communication

Research shows that health counselling and education, as well as provider-patient interactions, can improve with adequate training (Fallowfield, 1998; Roter, 1998). A client's comprehension of health information is highly influenced by providers' attitudes toward the importance of sharing information with their patients, which, according to Lukoschek *et al.* (2003), is shaped by their experience during medical training. Schiavo (2014) says that, while it can be argued that for most health care personnel, helping others is a natural course of action, and is one of the primary reasons they choose their profession, it is not uncommon to find a few "misfits" within the wider fraternity of health practitioners.

Lack of training and competence in communication in general and interpersonal communication in particular can only exacerbate the situation. Ideally health care providers should be specifically educated to put aside their socio-cultural biases and work with the patient's cultural beliefs (Schiavo, 2014).

Scholars (Kim, 1999; Fallowfield, 1998) have argued that it is not right to assume that effective communication always occurs naturally. Acquiring effective IPC skills requires training, as research points to the reality that the length of practice and amount of experience as a physician is not related to the acquisition of communication skills (Kruijver *et al.,* 2001; Wilkinson *et al.*, 2003; Gysels *et al.*, 2004). More experienced professionals are thus not necessarily better able to deal with the problems related to communication with their patients because effective communication skills are acquired less with time than with adequate training. In their study on communication strategies used by healthcare professionals in providing palliative care to patients de Araujo and da Silva (2012) found that nurses trained in interpersonal communication gave better attention to the emotional dimension and often used more emotional and affectionate words after their training.

Bernhardt (2004) avers that communicators are no longer viewed as detached bystanders but fundamental insiders and members of the public health or health industry teams (Communication Unit, 2003b). Communication is thus no longer considered a skill but a science-based discipline that requires passion and training. Saba (2006) postulates that in the past, health communication practitioners were trained "on-the-job." Schiavo (2014) says however that the above scenario is no longer tenable as there is an increasing understanding that the level of technical competence of communication practitioners can affect outcomes.

A structured approach to health communications planning, a flawless programme execution and a rigorous evaluation process should be seen as the result of adequate training, a lifetime learning process, which should be facilitated by the continuous development of new training initiatives and tools.

A study done in America (Haskard, 2008) revealed a significant improvement in provider-patient understanding, leading to better health outcomes. Another study (Garzonis *et al.*, 2015) on the effect of communication training for health workers on health outcomes reported that there was general improvement in staff-client interpersonal communication.

However, a search for evidence on the value of communication training to health outcomes in Africa in general and Kenya in particular bore scanty result. The bulk of both theoretical and empirical are concentrated outside the African continent literature, showing a gap in study in this area in Africa. Moreover, the available literature appear biased towards mainstream health workers such as physicians and nurses leaving out non-medical healthcare operatives such as peer counsellor, community health volunteers, who form part of this study's targets.

This study began from the premise that training in health communication is largely missing in the syllabi of health training institutions in the developing countries in general and in Kenya in particular.

A look at the curricula indicates a scanty treatment of health communication and more scantily still interpersonal communication (SEKU, 2018). This view was supported by other studies which have found that, despite widespread acknowledgement of the importance of interpersonal communication, the subject is not always emphasised in medical training (De Negri *et al.*, 2006). The dearth of training in IPC lends credence to the finding by quality-of-care research that has been done (Nicholas, *et al.*, 1991), which shows that health counselling and provider-client communication are the weak links in many health systems, particularly in the developing countries.

2.4 Barriers to Effective Interpersonal communication in Healthcare

Effective consultations with patients demand not only good communication skills, but also personal awareness of the likely barriers to effective communication (Maguire, 1985). The context and content of communication in healthcare often generate challenging and highly charged emotions resulting in poor or lack of communication between healthcare providers and their clients. Communication difficulties have been known to impede the recruitment of patients to clinical trials, delaying treatments (Schiavo, 2014). Lack of effective communication between specialists and departments can also cause confusion and a loss of confidence within the team. A number of factors contribute to poor communication as discussed here.

2.4.1 Top-down Communication Approach

Lupton (1994b) argues that communication in the health context is traditionally conceptualised as a top-down approach with communication flowing from the centres of authority to peripheral locations. This approach leads to health communication being seen as political process, marked by power relations that determine the relationship between the bourgeoisie and subaltern classes. Defining power as "the ability to shape social contexts," (Wilkins & Mody, 2001: 198), see power as central to how problems are defined and solutions framed. Campaigns, in this context, are dictated by the capacity of those with power to "select and frame social conditions and groups as problematic, legitimising particular approaches to their resolution and not others" (Wilkins & Mody, 2001: 393).With its primary objective of persuasion, the epistemology of campaigns is based on a "desire for control and domination, for the act of changing establishes the power of the change agent over that other" (Foss & Griffin, 1995:3).

Most communication programmes put the decision makers at the centre of charting the path to behaviour adoption or change communication (Duta-Bergman, 2005). This leaves the targeted health message consumers at the periphery as far as message framing and delivery are concerned. As a result, those communication activities seeking to impart knowledge and skills and/or behaviour change often fail to realise the ultimate goal of behaviour change because the beneficiaries find no relevance in the activities. This approach runs the danger of rejection if divergent views appear particularly if such opposing views are from those who hold sway in that community or group.

Furthermore, the general orientation among patients of low education and low socio-economic status is that health service providers occupy higher status and are often seen as possessing a position of power (Lee *et al*., 1992). Such patients are, thus, not well disposed to discuss their situations with such doctors, whom they see as too high for them. In such scenarios, the health service seekers are often too scared to engage in meaningful interpersonal communication (Kreps & Kunimoto, 1994).

The above theoretical arguments are supported by various empirical studies. Bohren (2014), in his study on health facilitators and barriers to facility-based delivery in low- and mid-income countries found that at times women would avoid going to deliver in hospitals because of client-perceived condescending attitude of the nurses. In a similar study on factors that influence women's choice of places of delivery in rural Malawi, Selieskog *et al.* (2006) established that the difference in the level of education between the pregnant clients and the nurses was a major barrier to positive interaction, with the low-educated clients suffering from inferiority complex.

The above examples provide a glimpse into the client-provider relationships, in a structured hospital set up. However the VMMC programme under study provides a unique scenario in the sense that the campaign is being carried out outside formal health facility set up. Moreover, as an intervention, the VMMC programme is different from the above cases. Hereit is the health service providers who are tasked with persuading the target clients to adopt the intervention. It is therefore important to establish how the health service provider will behave in a "reversed role" scenario, where it is incumbent upon them to bring the target clients on board.

2.4.2 Time Constraints in Patient-client Interactions

Time is a crucial factor in health communication. Although many health care providers and public health professionals believe in the importance of optimal provider-client communications, data suggest that many interactions lack time. Belzer (1999) and American Medical Association (2005a) show, for instances, that in the provider-client interaction, the clients do not get enough time to present their story and are often interrupted midway. From the health service provider's perspective, the demands and long hours of work are often too burdensome to leave enough time for effective interpersonal interaction with clients. Yet allowing parties enough time to express their concerns and symptoms is likely to translate into a better provider-patient relationship as well as to fewer follow-up visits and shorter more focused interactions (Belzer, 1999). This ideal is hampered by the reality that primary health personnel are expected to deal with an increasing number of patients to satisfy healthcare policies in the face of cost-cutting interventions (Registered Nurses' Association of Ontario, 2007). Besides, a number of health workers are stressed and fatigued (Tabone, 2004), making provider-patient integration a real challenge.

In a study done in interaction between nurses and patients at the Alborz University of Medical Sciences Karaj, Iran, Norouziana *et al*. (2016) found that time was a major barrier to effective IPC, particularly among nurses. However the same study found that patients did not think time was a serious constraint. In their study on communication in nurse-patient interaction in healthcare settings in sub-Saharan Africa, Kwame and Petrucka (2020) found that excessive workload was a major hindrance to effective IPC

in healthcare settings in Africa. In Kenya, a study by Ojwang, Oguti and Matu (2010) showed that due to time constraints, nurses exhibit rudeness when dealing with patients. Another Study in Kenya found workload to be the main stressor among nursing staff in government health faculties (Lewa, Mutuku-Kioko & Lewa, 2017).

However, it is discernible from the above cited studies that the focus has concentrated on the interaction between nurses and patients. In this study, however the target clients are not patients in the strict sense of the term. On the contrary these are people who are well and going about their usual socio-economic activities. It is possible that their view on time may be different. Moreover, the healthcare staffers involved in this study are a mixed lot who include not only nurses, but also counsellors and peer educators with differing perceptions.

2.4.3 Cultural factors in Provider-client Interpersonal Communication

Culture refers to the underlying values, beliefs, and codes of practice that makes a community what it is; the totality of an organization or a society. Misunderstanding or misinterpretation often occurs when culturally different interactants bring into the communication process their own cultural norms governing the communication (Liu *et al.,* 2011). Dodd (1998) argues that perceived cultural differences alone can be a hindrance to successful communication outcome.

Effective healthcare delivery relies on clear, focused and effective communication, which is an essential element in every form of medicine and healthcare among all the individuals that are involved: patients, physicians, and other health care professionals.

Bakić-Mirić *et al*. (2012) argue that if, in any way, communication between healthcare providers and patients is not clear, the entire medical treatment process can be problematic. They cite differences in cultural backgrounds as one of the causes of such unclear communication engagements. Lavizzo-Mourey *et al*. (1996) and Betancourt *et al*. (2003) have characterised a culturally competent healthcare system as one that acknowledges and incorporates — at all levels — the importance of culture, assessment of cross-cultural relations, vigilance toward the dynamics that result from cultural differences, expansion of cultural knowledge, and adaptation of services to meet culturally unique needs.

Brislin (1993) suggested that healthcare providers can effectively communicate with clients from other cultures if they are "culturally sensitive," while other healthcare research confirms that cultural sensitivity is important in working with patients (Dutta, 2007; Majumdar, 1995). Cultural sensitivity involves a willingness to use cultural knowledge while interacting with patients and considering culture during discussions and recommendations for treatment (Dennis & Giangreco, 1996). A culturally competent system is also built on an awareness of the integration and interaction of health beliefs and behaviours, disease prevalence and incidence, and treatment outcomes for diverse patient populations (Lavizzo-Mourey *et al.,* 1996). There is need for conscious attempt by health professional to acquire cultural competence prior to moving to work within a community as opposed to learning as they move along, as the latter option can lead to misunderstandings and costly mistakes (Ulrey & Amason 2001; Wohl, 1989).

Lack of cultural sensitivity leads to miscommunication, which causes dissatisfaction and stress for both providers and patients (Kreps & Thornton, 1984). For instance, people from different cultures do not always report pain in the same ways, which easily leads to miscommunication regarding diagnosis and treatment (Lee *et al.,* 1992). Cultural insensitivity includes using culturally inappropriate language, lacking cultural knowledge, misunderstanding cultural values, and failure to consider culture in assessing patients and adapting treatment according to the cultural knowledge of a patient.

Further, the field of cultural competence has recognised the inherent challenges in attempting to disentangle "social" factors, such as socio-economic status, supports or stressors and environmental hazards, from "cultural" factors vis-à-vis their influence on the individual patient. As a result, understanding and addressing the "social context" has emerged as a critical component of cultural competence (Green *et al.,* 2002).The culture-focused approach to interpersonal communication in health management locates culture at the centre of theorising about communication processes. Communication theories, thus, develop from within the culture or community instead of originating from outside (Dutta-Bergman, 2004). Cultural and linguistic barriers between health care providers and medical care seekers can interfere with the effective delivery of services (Dorfman *et al.*, 2005). Empirical evidence abounds to show that culture, with its subtle nuances surrounding age, gender in relation to sexuality, diseases and human body parts, present potential difficulties in provider-client interpersonal communication.

In their study on factors affecting effective communication about sexual and reproductive health issues between parents and adolescents in South Africa, Motsomi *et al.* (2006) found that cultural beliefs acted as an inhibiter in mediating and addressing issues of sex and reproductive health. Parents or people of the age of parents found it hard to speak openly to the youth on matters sexual because according to the respondents: "our culture does not allow us as parents to directly talk to our children about issues of sexual and reproductive health…" Matters to do with sex are traditionally a taboo in our culture, such are private subjects, not befitting public discourse." Botchway (2004) recorded similar difficulties in his study on parent and adolescent male's communication about sexuality in the context of HIV/AIDS in eastern Ghana.

On their part Park and Song (2005) found generation gap as a barrier to communication between nurses and older patients due to the way culture dictates relationship across ages. In their study in Tanzania, Wamoyi *et al*. (2011) found that parent-child communication about sex and reproductive health was uncommon, and if it happened, was mainly delivered by mothers, and rarely fathers, because culture forbade father-to-daughter talks on sexuality. Another study by Lesch and Kruger (2005) in low-income areas of South Africa found that discussions about sex, if they happened, were invariably parent-led.

The above scenario is likely to pose a problem to interpersonal communication in the VMMC campaign in this study since the communication is led by young people, majority of whom are in the 24 to 35 year age bracket.

Norouziana e*t al.* (2016) say that patients are less acceptant of health service providers of different culture simply on account of language difference. This complicates interpersonal communication between the two groups. Kenya's employment policy upholds sensitivity to ethnic mix in employment in both public and private sectors (Constitution of Kenya, 2010). Moreover ethnic difference comes with dissimilarities in language, which, Anoosheh (2009), in his study on nurse-patient communication in Iran found to cause difficulty in establishing effective communication, observing that "if there is a difference in spoken language, the parties involved will even attach different meanings to non-verbal communication symbols."

2.5 Trends in Interpersonal Communication for Healthcare

Schiavo (2007) and Duggan (2006) argue that advances in medical and consumer health informatics are changing the delivery of health information, making health communication capable of contributing to all aspects of disease prevention and health promotion with increasing relevance in a number of contexts, including: health professional-patient relations; individuals' exposure to, search for, and use of health information; individuals' adherence to clinical recommendations and regimens; the construction of public health messages and campaigns; and the education of consumers on how to access public health and health systems. Interpersonal interactions, according to Thompson (2003), are central to the provider-patient relationship, where accurate diagnosis, understanding of the problem, likelihood of following treatment and recovery

process are influenced by the provider-patient interaction. This sections reviewed specific areas that constitute best approaches in health communication.

2.5.1 Individualistic Approach versus Collectivistic Approach

With their roots in the social psychological tradition, most health communication campaign theories typically focus on the individual (Duta-Bergman, 2005). A specific aspect of the individual's attitude, belief, or cognition is selected as the target of the behaviour change communication. The individual serves as the object of theory development and guides the health communication methodology, which, in effect assigns the decision making role to the individual.

For instance, although Fishbein and Capella's (2006) Integrated Model of Behaviour Prediction mentions the targeted individual's evaluation of the "important others" in the interpersonal network, it does not exhaustively tap into the complexity of the social fabric that constitutes the health behaviour (Duta-Bergman, 2005). Yet social influence goes beyond the realm of "a few important others" to the broader socio-cultural context of the community. This is particularly so in such a socio-culturally closely knit society as the Luo community, which was the focus of this study.

At the same time, in dealing with a culturally sensitive behaviours like VMMC, the individuals may find that they are bound by the wider societal dictates rather than the narrower list of the "significant others."

They will thus engage in a particular behaviour because it is inherent in the broader collective morals of the community rather than simply being motivated to comply with the demands or wishes of those within his or her immediate family sphere (Duta-Bergman (2009). Traditionally the Luo community does not perform male circumcision and the practice is derided as an alien act (Ndeda, 2003).

Therefore, an individual Luo man may consider performing male circumcision a decision beyond him and instead "refer" the matter to the wider community network and not just a few important others, namely his wife. In a situation like this, the individualistic messages for behaviour change have the potential of running counter to the values of the collective (Duta-Bergman, 2005; Dutta-Bergman, 2004). Thus, even though such messages might create a high threat and so, high response efficacy with respect to VMMC, the prospects of adopting this behaviour will remain low because the practice does not resonate with the collective cultural morals of the Luo.

To emphasise the location of the collective at the core of health behaviour, scholars have introduced the concept of collective efficacy and applied it in the realm of health campaigns (Bandura, 1995; Sood, 2002). Bandura (1995: 33) defines collective efficacy as "people's beliefs in their joint capabilities to forge divergent self-interests into a shared agenda, to enlist supporters and resources for collective action, to devise effective strategies and to execute them successfully, and to withstand forcible opposition and discouraging setbacks." In culturally sensitive practices like VMMC among non-circumcising communities such as the Luo, a person would feel safer in a collective decision rather than an individual one. This, in turn, engenders collective

efficacy (Lupton, 1994; Wallack, 1989). Considered in this realm is a collectivistic culture in which the emphasis is on collective identity, and the barriers to action are located within this collectivistic context (Triandis, 1994).

Owing to the cohesive nature of the Luo community and the rural location of the community's members involved in this study, and also due to their strong cultural view of male circumcision (Ndeda, 2004), this study held the assumption that VMMC communication campaigns would get greater acceptance in the collective approach than the individual one. Interpersonal communication programmes could, thus, be modelled in the form of informal learning groups of men, which are then formalised into age appropriate learners.

Members of these largely homophilous groups would receive learning materials, discuss and own the content, charting new courses for action (Papa *et al*., 2000). This should culminate in stronger groups, with broader mandate including dealing with relevant socio-cultural issues touching broadly on HIV/AIDS including male circumcision and safe sex.

2.5.2 Client-centred Interpersonal Communication

Recent studies (e.g. Duggan, 2006; Belle-Brown *et al.*, 2003) point to shift in provider-patient interaction that promotes a relationship-centred perspective of physician-patient communication. Health research has identified information giving, interpersonal sensitivity, and partnership building as core communication skills that predict better results in healthcare (Street, 2003; Campion & Langdon, 2004).

Mira *et al.* (2012: 827) present three distinct models that have evolved overtime in the physician-client communication landscape. First is the most classical one, paternalist model, "where the doctor makes the decisions and sets the layout of the interaction, which will be adhered to" This is followed by the "informed" model, where the professional does what he or she can to include the patient's preferences in decisions. The third, and last, is the shared-decisions model, which aims to elicit the patient's participation and involvement in clinical decision making. Research provides evidence of the disadvantages of the paternalist model, giving greater weight to calls to promote patient-centred health care (Beach *et al*., 2005; Coulter & Magee, 2003; Hartzband & Groopman, 2009; Kassirer, 1994).

The Institute of Medicine (2001) has identified patient-centeredness as one of the fundamental attributes of quality healthcare, alongside safety, effectiveness, timeliness, efficiency, and equity. It defines patient-centeredness as providing care that is respectful of and responsive to individual patients' preferences, needs, and values and ensuring that patient values guide all clinical decisions.

This concept of patient-cantered care represents a paradigm shift from the traditional disease-oriented and physician-centred care, grounding health care in the subjective experience of illness and the needs and preferences of individual patients rather than the evaluation and treatment of diseases which emphasises on leveraging clinical expertise and evidence derived from population-based studies (Lim & Kurniasanti, 2015).

Rathert *et al*. (2013) Weine, 2013 (Nelson *et al*. (2014) and Kern, Edwards & Kaushal, (2014) show that orienting healthcare around the needs and preferences of patients holds promise for improved healthcare quality, patient satisfaction, and health outcomes. Achieving shared decision making depends on building a good relationship in the clinical encounter so that information is shared and patients are supported to express their views and preferences in the decision making process. Lim and Kurniasanti (2015) describe shared decision-making, a process by which healthcare providers and patients participate jointly in making health decisions as the pinnacle of a patient-centred healthcare system. Shafer *et al*. (2012) aver that shared decision making goes beyond the discussion of risks and benefits involved in the informed consent process; it also helps identify and takes into consideration the patient's circumstances, values, and informed preferences for the risks, benefits, and uncertainties associated with each alternative. The above scenario contrasts with the "traditional" decision-making approach, in which "clinicians decide for, rather than with, patients" (Lim & Kurniasanti, 2015:2).

Shared decision making recognises that both provider and patients bring to the table different but equally important forms of expertise and experience. The extent to which a provider or a patient takes responsibility for the decision-making process varies in different circumstances along a continuum between two extremes: clinician-driven decision making and patient-driven decision making (Kon, 2010).

However Lim and Kurniasanti (2015: 2) argue that shared decision making is only tenable in the presence of effective physician-client IPC. They stress that quality communication within the physician-client dyad is the single most important enabler of quality healthcare." Clear, respectful, and empathic communication between healthcare professionals and patients enables and supports information exchange, shared decision making, management of uncertainties and emotions, patient self-management, and meaningful clinician-patient relationship (Street, 2009).

Successful integration of these functions leads to increased access to care, greater patient knowledge and shared understanding, enhanced therapeutic alliances, better management of emotions, improved family and social support, enhanced patient empowerment, and higher quality health decisions.

This, in turn, improves patient satisfaction, treatment adherence, physical and emotional well-being, and, in the final analysis, health outcomes (White *et al.*, 2015; Zolnierek *et al*., 2009; Priebe *et al.*, 2007; Trummer *et al*., 2006). In contrast, gaps or lapses in physician-patient interpersonal communication can lead to clinical errors and other undesirable outcomes.

Despite acknowledged challenges and pitfalls in institutionalising patient-centred interpersonal communication (Couet *et al*., 2013; Olson *et al*., 2010; Greenfield *et al*., 1985), there is consensus among scholars (Lim & Kurniasanti, 2015; Duggan, 2009) that patient-centered care is central to the healthcare reform necessitated by the increasingly complex health delivery system.

A paradigm shift towards patient-centered care promises many gains, including improved healthcare quality and safety, increased patient satisfaction and adherence to treatment plans, improved health outcomes, and reduced cost of healthcare. Moreover, this study did not find any research adduced evidence on the effects of any of the above models of provider-client engagement in the management of voluntary medical male circumcision as a health intervention in Siaya County or anywhere else.

2.5.3 Incorporating Socio-Economic Programmes in Health Campaigns

By assuming that individual beliefs and perceptions hold the key to explaining health behaviours, it is easy to ignore the extraneous constraints that often obtain in the individual's environment, particularly in severely resource-deprived areas such as the so-called third world nations (Marmot & Wilkinson, 1999). Dutta-Bergman (2005) and McClelland (1991) have argued that access to basic resources, such as food, clothing and shelter, can be central to developing an understanding health communication in many resource-starved areas, such as rural and informal urban dwellings.

Unfortunately, many of the structural barriers experienced in marginalised populations in health interventions are not overtly related to the specific behaviour being advocated in health communication or do not present themselves directly to the scrutiny of the external observer (Mony *et al.*, 1999). Health decisions might be located in the capability of community members to gain access to some of these basic necessities. In their absence, engaging in higher order health behaviours such as having VMMC or safe sex may sound abstract and thus prove futile (Duta-Bergman, 2005).

Narayan *et al.,* (2000) show that communication-based approach that only focuses on benefits of or barriers to a given health intervention without addressing the key structural elements as barriers to the success of the intervention have little chances of success. This is particularly so in resource-deprived parts of the world, where individuals lack the basic necessities of life like food and shelter.

Empirical studies have established the link between focus on economically empowering the community and health outcome. A study by Hadi (2001) on the promotion of health knowledge through micro-credit programmes in Bangladesh demonstrated that such a programme could successfully serve as a conduit for disseminating health information among the hard-to-reach at-risk rural women.

UNAIDS (2018) reports that insufficient access to nutritious food appears to be more strongly associated with HIV risk behaviours among women in eastern and southern Africa. This report is in congruence with a recent systematic review of studies from Europe, North America and sub-Saharan Africa (Chop *et al.*, 2017), which concluded that food insecurity was associated with increased sexual risk-taking among women.
The same study found that hunger and food insecurity were barriers to initiating and adhering to antiretroviral therapy, a finding confirmed in another recent meta-analysis of data from North America, Brazil and Uganda (Aibibula *et al.*, 2017), where experiencing food insecurity resulted in a 29 percent lower rate of viral suppression. In south-eastern Zimbabwe, According to Pascoe *et al*. (2015), economic needs and food

insufficiency were strongly associated with unsafe sexual behaviours and heightened risk of HIV infection among young poor women (aged 18 to 22 years).

A similar association was seen among adolescents (aged 10 to 17 years) in South Africa where teenagers with the greatest socio-economic deprivation, including food insufficiency and inadequate housing, were found to be most at risk of HIV (Cluver *et al.*, 2016). An earlier study in Botswana and Eswatini by Weiser and colleagues (2007) found that women who had experienced food insecurity in the previous year were 84 percent more likely to have engaged in transactional sex and 68percent more likely to have had unprotected sex with a man who was not their primary partner than women who had not experienced food insecurity. While acknowledging the substantial success of the President's Emergency Plan for AIDS (PEPFAR), Evertz (2010) identified lack of socio-economic initiatives as a major factor retarding the programme's full success, and recommends community-based sustainable development models in the programme as a means towards scaling up PEPFAR's HIV interventions.

While studies abound on the nexus between rich or poor people and HIV prevalence as shown above, little empirical literature is available on how an individual's income or financial status influences his response to interventions for the prevention of the epidemic. In examining the trends of HIV/AIDS epidemic in Zimbabwe, Mbirimtengerenji (2007) tried to answer the question as to whether the prevalence of the HIV/AIDS epidemic was an outcome of poverty.

The conclusion, in the affirmative, however, does not lend any clue to the question of whether one's low or high income has the potential to hinder or motivate one's participation in health interventions. Two studies done in Tanzania (Shelton *et al*., 2005) and Kenya (Chin, 2007) found a positive correlation between HIV and poverty. But an investigation by Mishra *et al.* (2007) on eight high HIV burden countries – Kenya, Botswana, Malawi, Tanzania, Bukina Faso, Ghana, Lesotho and Uganda (Mishra *et al.,* 2007), yielded contradicting findings, to the effect that adults in the wealthiest quartile had higher HIV prevalence than those in the poorer rungs. However none of the above studies attempted to establish how or whether individual or community income status influences their ability to consume health interventions. Such a study would in turn inform the decision of health managers on whether to integrate livelihood enhancing and other socio-economic projects into health campaign programmes.

The establishment of the nexus between livelihood improvement and success of health intervention is especially important for VMMC, which requires the buy-in of others outside the individuals targeted for circumcision (MoPHS, 2009). Moreover, Siaya County, with a population of over 920,600 and an average growth rate of 3.1 percent per annum, (KNBS, 2019), falls within the fourth quartile in Kenya's by-county poverty index, with 38 percent of the residents living below the one-dollar-a-day mark (County Government of Siaya, 2014; KNBS, 2013). VMMC has a direct resource implication.

The loci of this study are the beaches where men, the principal breadwinners, are the key participants in the predominant economic activity, fishing (County Government of Siaya, 2014). Such men have to give due consideration to how the family will survive in the six week-healing period during which they will be off work. Moreover, the beaches are known hot spots for sex trade (Male Circumcision Consortium, March 2014), where women are said to engage in sex for their livelihood.

2.6 Theoretical Framework

To help understand the concept of interpersonal communication in the broader health management spectrum, this study discussed one theory and one model: the D*iffusion of Innovation Theory* (DIT), and the *Integrative Model of Behaviour Prediction* (IMBP). The study sought to demonstrate the relevance of behavioural theories for developing communications designed to promote healthy or change unhealthy behaviours, demonstrating how healthcare can draw from theory to navigate chiefly the complex interpersonal communication terrain to engender acceptance, adoption and continued use of VMMC as a healthcare innovation.

It further explored the model's ability to provide the appropriate tools for identifying the specific beliefs that need to be addressed in order to change the existing behaviour, namely non-circumcision and other behaviour that predispose the target clients to the HIV, and adopt and enforce the new behaviour - VMMC and other anti-HIV behaviours.

The choice and combination of DIT, a largely communication-oriented theory, and HBM, a normative theory, is supported by Dutta-Bergman (2005), who advocates a polymorphic approach to such complex topics as health, arguing that the marriage of DIT, a macro-level communication theory, with IMBP, which is a micro-level behavioural model, would provide valuable guidelines for health campaign scholarship and practice. Moreover, the polymorphic manner of handling the study's theoretical framework is in consonance with the mixed-method approach adopted by the study at the methodological level with respect to data collection.

2.6.1 Diffusion of Innovation Theory

With its foundation in communication the diffusion of innovation theory which was developed in 1967 and revised in 2003 by Everett Rogers, explains how a new idea or product gains momentum over time and spreads through a population or a social system. The theory underscores the fact that for an innovation, such as VMMC, to be adopted, the promoter and the targeted adopter must reach an understanding on the innovation's benefits, a fact that underlines the relevance of communication as a tool for fostering understanding between an idea's promoters and its target adopters.

The theory has been used successfully in many fields, including public health, agriculture, criminal justice, social work, and marketing (Sahin, 2006). In public health, DIT has served to fast-track the adoption of important programmes that aim to change the behaviour of a social system (Denis *et al.*, 2002).

A successful adoption of a health programme results from understanding the target population and the factors influencing their rate of adoption. The key to the adoption of a behaviour is that it must be perceived as new or innovative. It is through this that diffusion is possible (Rogers, 2003). The DIT theory is a macro level theory in which community-level innovations are adopted to change a health behaviour (Lien & Jiang, 2017).

2.6.1.1 Innovation-decision Process

For Rogers (2003: 177), adoption is a decision of "full use of an innovation as the best course of action available," and the opposite, rejection, is a decision "not to adopt an innovation." The diffusion of innovation theory states that the adoption of an innovation does not happen simultaneously in a social system; rather, it is a process, where some people are faster to 'fall in' than others (Sahin, 2006). The adoption or rejection of an innovation follows a clear and predictable process, called innovation-decision process. This is an information-seeking and information-processing development, where an individual is motivated to reduce uncertainty about the advantages and disadvantages of an idea (Sahin, 2006).

The process is divided into five distinct stages, each with its own characteristics and requirements, and which, typically follow each other in a time-ordered manner (Rogers, 2003). These are: knowledge; persuasion; decision; implementation; and confirmation.

a. *The Knowledge Stage:* The innovation-decision process starts with the knowledge stage, the step where an individual learns about the existence of an innovation and seeks information about it. The critical questions in the knowledge phase are "what the innovation is and how and why it works" (Rogers, 2003, p. 21). These questions will yield three types of knowledge, namely awareness-knowledge, how-to-knowledge, and principles-knowledge.

b. *The Persuasion Stage:* The persuasion stage follows the knowledge stage in the innovation-decision process (Sahin, 2006). Rogers (2003) explains that while the knowledge stage is more cognitive- (knowing-) centred, the persuasion stage is more affective- (or feeling-) centred. Thus, the individual is involved more sensitively with the innovation at this stage. The degree of uncertainty about the innovation's functioning and the social reinforcement from others (colleagues, peers, etc.) affects the individual's opinion and beliefs about the innovation. Close peers' subjective evaluations of the innovation that reduce uncertainty about the innovation outcomes are usually more credible to the individual (Dutta-Bergman (2005). Sherry (1997) postulates that while information about a new innovation "is usually available from outside experts and scientific evaluations, trusted friends' and colleagues' subjective opinions are most crucial" (p. 70).

c. *The Decision Stage:* At this stage, one chooses to adopt or reject the innovation (Rogers, 2003). If an innovation has a partial trial basis, it is usually adopted more quickly, since most individuals first want to try the innovation in their own situation and then come to an adoption decision. However, rejection is possible in every stage

of the innovation-decision process. Sahin (2006) suggests two types of rejection: active rejection and passive rejection. In an active rejection, an individual tries an innovation and thinks about adopting it, but later decides not to adopt it. A discontinuance decision, which is to reject an innovation after adopting it earlier, is an active type of rejection. In a passive rejection (or non-adoption) position, the individual does not adopt the innovation at all. In some cases, the order of the knowledge-persuasion-decision stages can be knowledge-decision-persuasion. This is especially so in collectivistic cultures such as among the Luo people (Ndeda, 2004), where group influence on adoption of an innovation can transform the personal innovation decision into a collective innovation decision (Rogers, 2003). In any case, however, the implementation stage still follows the decision stage.

d. The Implementation Stage: At this stage, an innovation is put into practice. However, an innovation brings the newness in which a certain degree of uncertainty is involved in diffusion (Sahin, 2006). Uncertainty about the outcomes of the innovation can still be a problem here. Thus the implementer may need technical assistance from change agents and communication experts to reduce the degree of uncertainty about the consequences (Sahin, 2006). In the VMMC campaign a man may adopt the innovation and, thus, take the cut. However he still needs technical assistance during the healing process; he requires counselling on how to conduct himself including avoidance of sex and observance of hygiene during the six-week healing period.

e. *The Confirmation Stage:* Here, the individual looks for support for his or her decision. This decision can be reversed if the person is "exposed to conflicting messages about the innovation" (Rogers, 2003: 189). However, the person tends to stay away from these messages and seeks supportive messages that confirm his or her decision. Thus, attitudes become more crucial at the confirmation stage. Depending on the support for adoption and the person's attitude, later adoption or discontinuance happens at this stage. Discontinuance may occur during this stage in two ways. First, the individual rejects the innovation to adopt a better innovation, thereby replacing it. This type of discontinuance decision is called replacement discontinuance. The other type of discontinuance decision is disenchantment discontinuance. In this, the individual rejects the innovation because he or she is not satisfied with its performance. Another reason for this type of discontinuance decision may be that the innovation does not meet the needs of the individual (Dennis, 2002).

2.6.1.2 Homophilous and Heterophilous Groups in Diffusion

A fundamental principle of human IPC is that the transfer of ideas occurs most frequently between individuals who are alike or homophilous. Homophily is the degree to which pairs of individuals who interact are similar in certain attributes, such as age, beliefs, cultural origin, education and social status (Rogers, 2003). The existence of homophilous behaviour was first brought into the realms of communication studies by Tarde (1903) who stated that social relations are much closer between individuals who resemble each other in occupation and education.

This principle suggests that individuals are more susceptible to the influence of people who are similar to them than of those who are different. When two individuals share common meanings, beliefs, and language, communication between them is more likely to be effective (Rogers, 2003). Most individuals enjoy the comfort of interacting with others who are similar, as talking with those who are totally different requires more effort and adjustment to make communication effective (Sahin, 2006).

Windahl and Signitzer (1999) agree that homophily and effective communication are mutually re-enforcing: the more communication there is between members of a dyad the more likely they are to become homophilous; and the more homophilous they are the higher the likelihood of their communication being effective. Individuals who break the homophily frontier and attempt to communicate with others who are different from them often face the frustration of ineffective communication due to differences in technical competence, social status, and beliefs, which contribute to heterophily in language and meaning leading to messages being unheeded.

However communication between unlike people (heterophily) has a special informational potential even though it may be realised only rarely and is not particularly popular in interpersonal communication for innovation diffusion. Heterophilous networks often connect two cliques spanning two sets of socially dissimilar individuals. These interpersonal links are especially important in carrying information about innovations as implied in Granovetter's (1973) theory of "the-strength-of-weak-ties." Windahl *et al.* (1999) argue that homophilous communication may be frequent and easy

but heterophilous communication in diffusing innovations is equally important. Homophily can act as an invisible barrier to the flow of innovations within a system. New ideas usually enter a system through higher status and more innovative members. A high degree of homophily means that these elite individuals interact mainly with each other and the innovation does not "trickle down" to non-elites. Homophilous diffusion patterns cause new ideas to spread horizontally, rather than vertically, within a system. Homophily in this case therefore acts to slow down the rate of diffusion.

One implication of homophily as a barrier to diffusion is that change agents should work with different sets of opinion leaders throughout the social structure. Yet they do not. If a system is characterised by extreme heterophily, a change agent could concentrate his or her efforts on only one or a few opinion leaders near the top in social status and innovativeness. Available evidence suggests that interpersonal diffusion networks are mostly homophilous. For instance, seldom do those of highest status in a system interact directly with those of lowest status. Likewise, innovators seldom converse with laggards. Although this homophilous pattern in interpersonal diffusion acts to slow the diffusion of innovations within a system, it may also have some benefits.

For example, a high-status opinion leader might be an inappropriate role model for someone of lower status, so interaction between them might not be beneficial to the latter. Glen (1969) put it most succinctly thus: “communication takes place most effectively between people of common concerns, such concerns including residence, profession, church, or employment.

Communication takes place through confidence and professionals talk to professionals, doctors to doctors, engineers to engineers, educators to educators, churchmen to churchmen, politicians to politicians, the poor to the poor." (pp. 5). The principle has often been used in the diffusion of innovations especially where IPC is the key channel (Less, 2003). This should guide the selection of communicators and change aides in diffusion work. Peers are usually perceived to be more trustworthy than professional experts, although the latter are seen as more knowledgeable and competent (Rogers, 2003; Sahin, 2006; Civita & Dasgupta, 2007). LaCroix *et al.* (2014) affirm that peer education is an effective tool in AIDS prevention work. With this in mind, the communication planners in the VMMC programme may find it necessary to enlist the services of lay change aides to influence their peers.

The VMMC programme in Siaya would benefit greatly by combining the two approaches in the interpersonal communication for the diffusion of male circumcision. This stand is informed by the intricate nature of VMMC as an innovation. In view of the socio-cultural sensitivity that surrounds circumcision and HIV/AIDS the target adopter would be more comfortable in a homophilous environment.

However, the same prospective adopter may need confirmation and reinforcement of what they have heard from their peers from opinion leaders who are perceived as more technically competent than themselves.

One common reason cited for the effectiveness of homophilic communication is accessibility. When the receiver is open to communication about an issue, the usually present peer has a greater chance to influence than does the usually absent professional expert. But Chafee (1986) counters this with his paradox of "the strength of weak ties" theory, averring that "contacts between dissimilar people are rare ('weak'), but when they occur they are more likely than other contacts to result in information transfer ('strength')" (67).

Targeted adopters may regard professional expertise as less trustworthy because it generally reaches them through the mass media. The judgment regarding trustworthiness, then, would be a function of the channel, not the source credibility. This means that those planning IPC for the VMMC programme should not avoid a heterophilic communication relationship (service provider-client) when the channel conditions are favourable. As Windahl and Signitzer (1999) argue, interpersonal communication channel's advantages include perceived trustworthiness. As peers typically exert influence through interpersonal communication, expert sources such as counsellor community leaders also using interpersonal channels to diffuse VMMC might prove highly persuasive, both engendering trust through interpersonal interaction.

1.6.1.2 Attributes of Innovations and Application of DIT to the Study

Rogers (2003) describes the innovation diffusion process as "an uncertainty reduction process" (p. 232), and proposes fives attributes of innovations that help to decrease uncertainty - relative advantage; compatibility; complexity; trialability; and

observability. For an innovation to be adopted, something about it must make it worthy of consideration. It may, for instance, convey more status than the previous options or be easier to operate or cheaper (Windahl & Signitzer, 1999).

The cost and social status motivation aspects of innovations are elements of relative advantage. For instance, while innovators, early adopters, and early majority are more status-motivated for adopting innovations, the late majority and laggards perceive status as less significant (Sahin, 2006). Rogers (2003) categorises innovations into two types: preventive and non-preventive (incremental). A preventive innovation is a new idea that an individual adopts now in order to lower the probability of some unwanted future event. Preventive innovations have a slow rate of adoption, thus their relative advantage is uncertain. The VMMC intervention fits in the category of preventive innovations since the targets are exhorted to adopt the practice in order to lower the chances of contracting HIV. If men see that VMMC has value in their life, they will go for it (Finley, 2003; McKenzie, 2001). One clear comparative advantage of VMMC is that it is a one-off innovation in that it is done once, unlike condoms, pre-exposure prophylaxis (PreP) or post exposure prophylaxis (PEP) which a couple must use each time they engage in sex. To integrate the practice successfully into the HIV/AIDS prevention framework, the VMMC programme's communications experts should see the need of providing helpful experiences for the intended beneficiaries and those close to them (Yzer, 2012).

Sahin (2006) postulates that to increase the rate of adopting innovations and to make relative advantage more effective, direct or indirect incentives may be used to support the individuals of a social system in adopting an innovation. This argument is supported by Dutta-Bergman, (2005), and Marmot and Wilkinson (1999) who have argued that economic resources, and access to them, can be central to developing an understanding to health communication in many resource-starved areas like rural and informal urban dwellings. A communication programme that only focuses on benefits of or barriers to a given health intervention without addressing the lack of basic necessities of life such as food, clothing, and shelter, have little chances of success (Narayan *et al.,* 2000; Narayan, *et al.,* 2000; The Synergy Project, 2002). One of the objectives of this study was to examine the current trends in interpersonal communication in health management with a specific look at how livelihood enhancing projects have been infused into the communication programme.

Rogers (2003) says that an innovation should have a degree consistency with the existing values, past experiences, and needs of potential adopters. A lack of compatibility in a proposed practice with individual needs may negatively affect the individual's use of it (McKenzie, 2001). Hoerup (2001) says that each innovation influences the targeted group's opinions, beliefs, values, and views about the practice. If an innovation is compatible with an individual's beliefs, values and needs, uncertainty will decrease and the rate of adoption of the innovation will increase correspondingly.

Traditionally, male circumcision is considered alien to the Luo culture (Ndeda, 2004), and therefore runs counter to the people's beliefs, values and views. On account of this, adoption could be slow, making a case for the innovation's promoters to spend reasonable time and resources on interpersonal interactions with the target groups. The study thus looked at how cultural belief concerning circumcision had a bearing in the adoption and how interpersonal communication was employed to address the incompatibility.

Closely tied to compatibility of an innovation is complexity, the extent of an innovation's perceived relative difficulty to understand and use (Rogers, 2003). As opposed to the other attributes, complexity is negatively correlated with the rate of adoption (Sahin, 2006). Thus, excessive complexity of an innovation is a key obstacle to its adoption. If VMMC is viewed as complex by the target beneficiaries, it will face the danger of non adoption (Martin, 2003). The task of the communication planners and the entire VMMC programme hierarchy should be to determine and address the areas that make the innovation complex. For instance, matters such as time taken to perform the operation and proximity to health facilities should be addressed as possible aspects of complexity for potential VMMC adopters.

Another factor to consider in DIT is trialability, the degree to which an innovation may be experimented on a limited basis (Rogers, 2003). The more an innovation is tried, the faster its adoption is. An innovation that can be tried on a limited basis, without total commitment to its adoption, is more likely to be accepted. Re-invention may occur during the trial period.

Then, the innovation may be changed or modified by the potential adopter. Increased re-invention may create faster adoption of the innovation. However, according to Rogers (2003), earlier adopters see the trialability attribute of innovations as more important than later adopters. Rogers (2003) defines observability as "the degree to which the results of an innovation are visible to others" (p. 16). Role modelling (or peer observation) is the key motivational factor in the adoption and diffusion of technology (Parisot, 1997). The role of champions and peer confessions can aid observability in the VMMC programme.

1.6.2 The Integrative Model of Behaviour Prediction

The Integrative Model of Behaviour Prediction (IMBP) represents the view that changing beliefs underlying the intention to perform a behaviour ultimately results in changes in intention. The model proposes that any given behaviour is most likely to occur if one has a strong intention to perform the behaviour, if a person has the necessary skills and abilities required to perform the behaviour and if there are no environmental constraints preventing the performance of the behaviour (Fishbein & Capella, 2006).

If a person has formed a strong intention to perform a given behaviour and has the necessary skills and abilities to perform the behaviour, and if there are no environmental constraints to prevent the performance of that behaviour, there is a high probability that the behaviour will be performed (Fishbein, 2000; Fishbein *et al*., 2002).

One immediate implication of this model is that different types of interventions will be necessary for people who have formed an intention but are unable to act upon it, from those necessary for people who have little or no intention to perform the recommended behaviour. In some populations or cultures, the behaviour may not be performed because people have not yet formed intentions to do so, while in others, the problem may be a lack of skills or the presence of environmental constraints. If people have formed the desired intention but are not acting on it, a communication intervention will be directed either at skills building or at removing (or helping people to overcome) environmental constraints.

On the other hand if strong intentions to perform the behaviour in question have not been formed, the model suggests that there are three primary determinants of intention: the attitude toward performing the behaviour, perceived norms concerning performing the behaviour and self-efficacy with respect to performing the behaviour (Fishbein & Ajzen, 2010). The importance of these three psychosocial variables as determinants of intention will depend on both the behaviour and the population under consideration. For instance, one behaviour may be primarily determined by attitudinal considerations while another may be influenced by feelings of self-efficacy. Similarly, a behaviour that is attitudinally driven in one population or culture may be normatively driven in another.

Consequently before developing a communication programme to influence or change intentions, there is need to first determine the degree to which that intention is under attitudinal, normative, or self-efficacy control in the population in question.

The model also recognises that attitudes, perceived norms, and self-efficacy are all, themselves, functions of underlying beliefs about the outcomes of performing the proposed behaviour, the normative proscriptions of specific referents, and specific barriers to (or facilitators of) behavioural performance (Yzer, 2012). For example, in the case of VMMC as a behaviour, the more one believes that performing the behaviour will lead to "good" outcomes and prevent "bad" outcomes (HIV infection), the more favourable one's attitude should be toward performing the behaviour. Similarly, the more one believes that "specific others" think one should or should not perform the behaviour in question, and the more motivated a person is to follow those specific others, the stronger the subjective norm will be to perform or not perform the behaviour. Finally, the more one perceives that one has the necessary skills and abilities to perform the behaviour, even in the face of specific hurdles, the stronger will be one's self-efficacy with respect to performing the behaviour.

IPC has a crucial role to in VMMC campaign because, as Fishbein and Capella (2006) argue, although investigators can sit in their offices and develop measures of attitudes, perceived norms and self-efficacy, they cannot tell what a population or individual believes on performing a given behaviour. The investigator needs to personally interact with that population to identify salient outcome, normative, and efficacy beliefs.

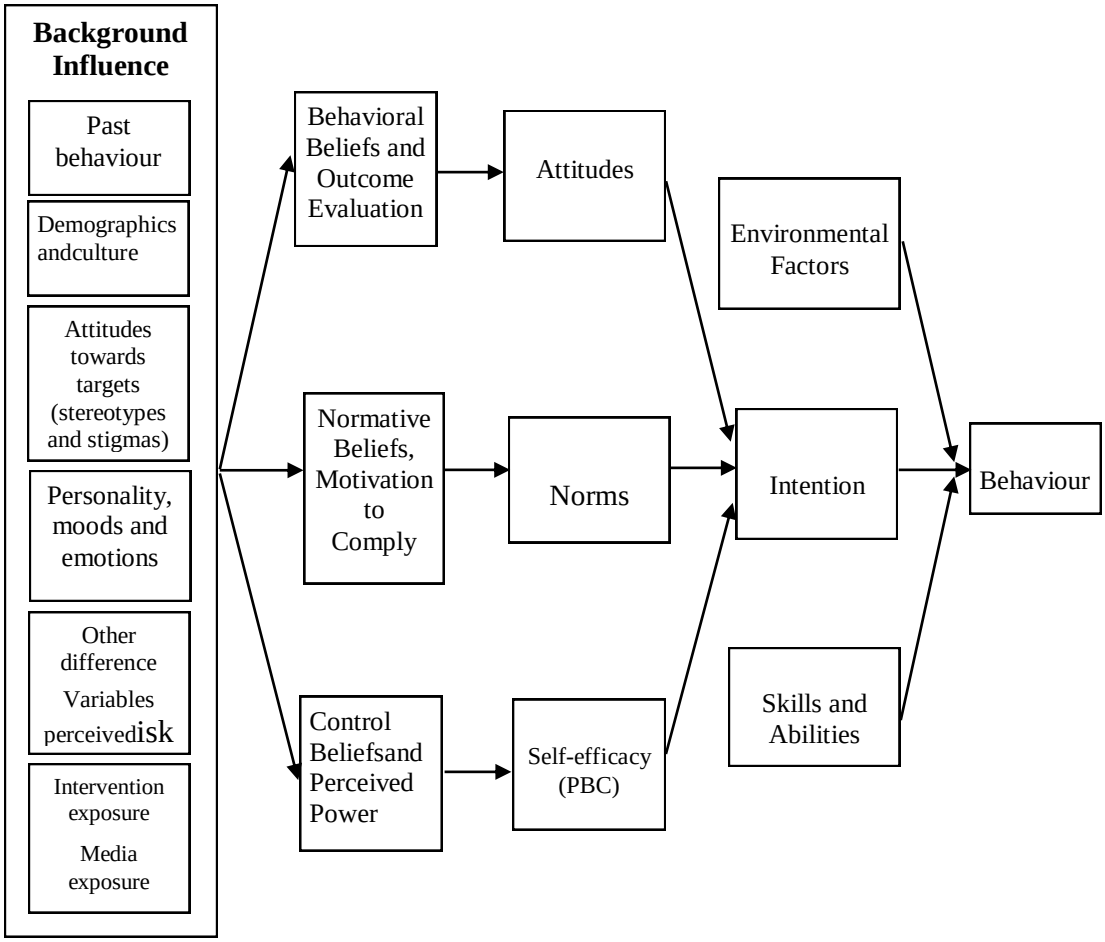

Figure 1.1: ***An Integrative Model of Behaviour Prediction (Adopted from Journals of Communication (2006)***

2.6.2.1 Critique and Application of the Model

This study considered Integrative Model of Behaviour Prediction a suitable model because of its applicability to the context and environment in which the voluntary medical male circumcision programme is being implemented. The understanding of the model's strengths and possible weaknesses would be necessary as a guide to developing communication strategies for VMMC.

With their roots in the social psychological tradition, health campaign theories and models typically focus on the individual (Wallack, 1989). In IMBP, a specific aspect of the individual's attitude, belief or cognition is selected as the target of the behaviour change communication. The individual serves as the object of theory development and guides the health communication methodology, effectively assigning the decision making role to the individual.

However the model mentions the targeted individual's evaluation of important others in the interpersonal network, it does not effectively tap into the complexity of the social fabric that constitutes the health behaviour (Dutta-Bergman, 2009). Yet social influence moves beyond the realm of "a few significant others" to the broader socio-cultural context of the community. This is particularly so in such a culturally close-knit society as the Luo community which is the focus of this study (Ndeda, 2004). Moreover, when dealing with a culturally sensitive behaviour like VMMC, the individual may find that he or she has to cast his net wider to include many more in his or her list of important others. The individual might engage in a behaviour because it is inherent in the broader collective rather than simply being motivated to comply with the important others within the sphere of his or her immediate family (Dutta-Bergman (2009).

Brown (2000) offers the example of cultures such as the Philippines and Thailand, where young men visit brothels as a rite of passage. He argues that in these instances, attitudes and beliefs regarding visits to brothels are not located in, or limited to, the important others. Instead, the source of influence is the broader community.

The importance of culture also significantly comes into play. When a campaign targets the individual, rather than the collective, that individual may be reluctant to adopt the behaviour for fear of being seen to breach the community norms. Traditionally, the Luo community does not perform male circumcision, a practice that is disparaged as an alien act (Ndeda 2003) Thus, an individual Luo man may consider the performing of male circumcision a decision beyond him and, instead, "refer" the matter to the wider community network and not just a few important others, namely his wife. In a situation like this (Dutta-Bergman, 2009), the individualistic messages of behaviour change developed through IMBP might fundamentally run counter to the values of the collective. Thus, even though the IMBP-based message might create a high threat and so high response efficacy with respect to circumcision, the prospects of adopting male circumcision will remain low because the practice does not resonate with the collective mores of the traditional Luo society.

To emphasise the location of the collective at the core of health behaviour, scholars (e.g. Bandura, 1995; Sood, 2002) have introduced the concept of collective efficacy and applied it in the realm of health campaigns. They propose the collective efficacy, which Bandura (1995) defines as "people's beliefs in their joint capabilities to forge divergent self-interests into a shared agenda, to enlist supporters and resources for collective action, to devise effective strategies and to execute them successfully, and to withstand forcible opposition and discouraging setbacks" (Bandura, 1995:33). In such a culturally sensitive practices like VMMC among non-circumcising communities like the Luo a person would feel safer in a collective decision rather than an individual one.

This in turn engenders collective efficacy (Bandura, 1995; Lupton, 1994; Wallack, 1989). Considered in this realm is a collectivistic culture in which the emphasis is on collective identity, and the barriers to action are located within this collectivistic context (Dutta Bergman, 2003). The behaviour then gets located in the characteristics of the collective and becomes a part of the collective being of the culture (Triandis, 1994).

Because of the cohesive nature of the Luo community involved in this study and also due to its strong cultural view of male circumcision, this study sought views outside the scope of prospective VMMC clients; casting the net wider to significant others like spouses or girlfriend and community leaders. This would help in understanding if VMMC communication campaigns would succeed through the individual or collective approach. In the collective approach interpersonal communication programmes could be developed in the form of informal learning groups of men with age appropriate structures. Members of these groups would receive learning materials, discuss and own the content, charting new courses for action (Papa *et al*., 2000). This should culminate in stronger groups, with broader mandate including dealing with relevant socio-cultural issues touching broadly on HIV/AIDS including male circumcision and safe sex. The ultimate aim of such a strategy would be to influence the entire community, including those who are ordinarily outside the VMMC scope.

Another important factor to consider as an aspect of the environment that has the potential to determine the outcome of a health intervention is the structural aspects of the population under consideration.

Given the fact that underserved populations are at maximum risk, it is especially important to orient health communication practice toward such populations. To get individuals to engage in behaviours such as using condoms and wearing seatbelts, campaign planners need to ensure adequate supply of the basic resources of food, clothing, and shelter. Elucidating the role of basic resources in human health, Sen (1992) articulates that capability building is the first and foremost step toward greater and better health of people and communities. Capability building involves providing participants with fundamental life resources such as food, clothing, and shelter, which members of at-risk communities need to continue living (Sen, 1992). Marmot and Wilkinson (1999) have argued that by assuming that individual beliefs and perceptions hold the key to explaining health behaviour, it is easy to ignore the seemingly peripheral constraints that often obtain in the individual's environment, particularly in severely resource-deprived areas such as the developing nations.

Researchers (e.g. Dutta-Bergman, 2005; Marmot & Wilkinson, 1999; McClelland, 1991) have argued that structural resources and access to them can be central to the development of an understanding to health communication in many resource-starved areas such as informal urban dwellings. A communication-based approach that only addresses the benefits or barriers by providing information does not address the key structural elements of barriers to the enactment of behaviour in particularly resource-deprived parts of the world, where individuals lack the basic necessities of life such as food, clothing, and shelter (Narayan, Chambers *et al.*, 2000; Narayan, Patel *et al.*, 2000; The Synergy Project, 2002).

Many of the structural barriers experienced in marginalised populations in health interventions are not overtly related to the specific behaviour being proposed or do not present themselves directly to the scrutiny of the external observer (Mony, Salan *et al.*, 1999; Sarkar *et al.*, 1997). Health decisions might be located in the capability of community members to gain access to some of these basic necessities. In their absence, engaging in what higher order health behaviours such as having VMMC or safe sex may prove futile. Health programmes implementers, thus need to have more than a fleeting understanding of the economic situation of the people they are involved with.

Narayan *et al*. (2002) and Nyamwaya (2003) propose a fundamental shift in prioritisation in health communication programmes, including the application of a bottom-up approach that puts the community at the centre of decision making and focuses on equipping it with basic resources. According to Dutta-Bergman (2009), multiple public health campaigns that emphasise the importance of addressing poverty and undernourishment in marginalised communities have developed poverty and food-based components as the first step to creating healthy communities. Such economic interventions may come in various forms, including micro-credit programmes, tied to grassroot poverty reduction programmes that give collateral-free credit to poor rural women, accompanied by support services such as group meetings, skills training, basic literacy, and primary health care services. A study by Hadi (2001) demonstrated that such a programme can successfully serve as a conduit for disseminating health information among the hard-to-reach at-risk rural women.

Sen (1992) says that capability building is the first step towards greater and better health of people and communities. It involves providing cultural participants with fundamental life resources such as food, clothing, and shelter, which they need to continue living. Theoretical approaches to health campaigns ought to locate mitigation of poverty and lack of basic resources at the centre of human behaviour and communicative choice. (Dutta-Bergman 2009).

The focal point of the structural approach is not just the targeted individual, but also the individual's social network of partners; family members; friends; communities; the infrastructure and the institutions in his or her environment; and the legal, political, and economic realities that surround his or her life (Senderowitz, 2000; Sweat & Denison, 1995). This model is supported by Scott H. Evertz (2010: 1-3), who, while acknowledging the considerable success of the President's Emergency Plan for AIDS (PEPFAR) in "saving many lives and profoundly shaped the global response to HIV", identifies lack of socio-economic initiatives as one of the factors slowing down the programme's full success. He recommends community-based sustainable development models in the programme as a means towards scaling up PEPFAR's HIV interventions.

This approach is especially important for VMMC, which requires the buy-in of others outside the individuals targeted for circumcision. Significantly, the issue of poverty or other forms of economic deprivation seem to have eluded the designers of the communication programme for the Lake Victoria region (Nyanza), who in their

situation analysis, only saw possible barriers to adopting the recommended behaviour (VMMC) as fear of pain, stigma, or clinical complications. The paper says:

> To date there has been a heavy (and necessary) focus on information dissemination**.** With such information, some individuals, groups, or communities may be empowered to act. For most people, however, information is not enough. VMMC may make rational sense, but there are many reasons why a person may not be keen to undertake the process, including fear of pain, stigma, or clinical complications. (Republic of Kenya, Ministry of Public Health and Sanitation, 2010:10)

Siaya County falls within the fourth quartile in the by-county poverty index. It is one of the poorest counties in Kenya, with 38 percent of the residents living below poverty line. Siaya has a population of over 920,600, according to the 2019 national census (KNBS, 2020), with an average growth rate of 3.1 percent per annum. Economic challenges within the community include low farm productivity, high unemployment rates and resource-constrained health facilities.

A large majority of the residents are resource poor, living below the one-dollar-a-day mark. The VMMC has a direct resource implication. The locus of this study are the beaches where men, the principal breadwinners, are the key participants in predominant economic activity, fishing. Such men have to give due consideration to how the family will survive in the six week-healing period during which they will not be working. Moreover, the beaches are known hot spots for sex trade (Male Circumcision Consortium, March 2014), where women engage in sex for their livelihood. The state of affairs in this study area makes a strong case for economic empowerment forming an integral part of any health intervention especially VMMC which targets men.

An economic project for the wives of the targeted men would earn the women's buy-in, thereby guaranteeing continued economic wellbeing of the families during the men's healing period.

2.7 Conceptual Framework

This study holds that a combination of IPC strategies, IPC training, the various barriers to interpersonal communication as well as the emerging trends in health management have a significant bearing on the adoption and uptake of VMMC in Siaya. They were therefore identified as the independents variables, which anchor the outcome of the VMMC programme. The dependent variable in the study is the improved uptake of voluntary medical male circumcision. The study participants' age, ethnicity, education, marital status, economic status and media exposure were identified as the intervening variable. The effectiveness of the independent variables and their eventual impact on the dependent variable could be affected by these intervening variables as represented in the model below *(Figure 2.2):*

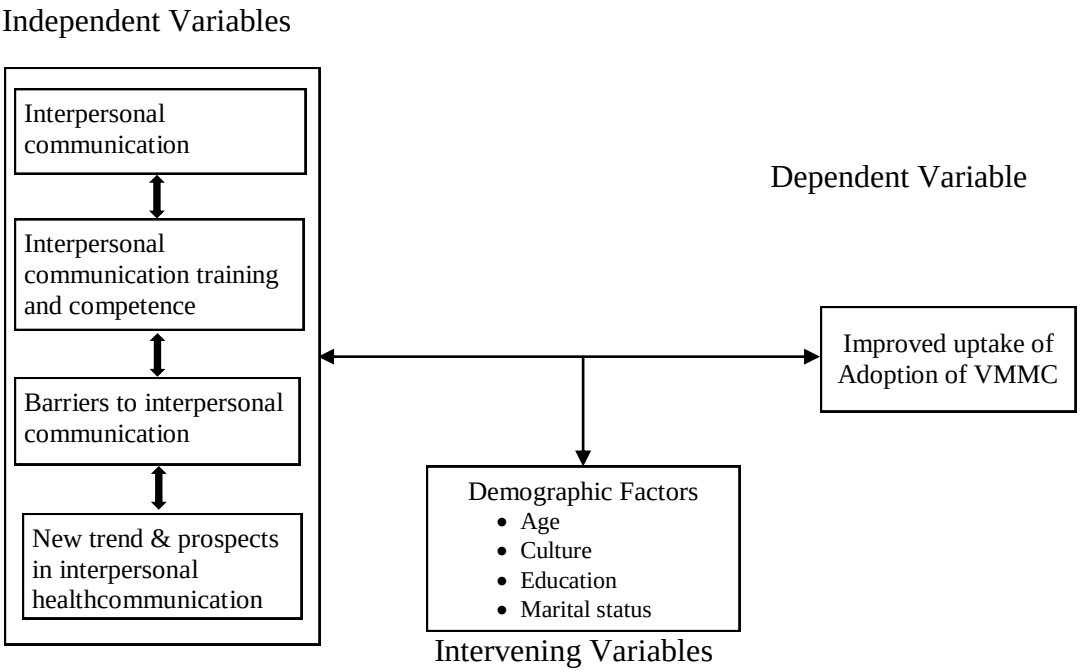

Figure 2.2: Conceptual Framework Showing Interactions and Relations of the Various Variables. **Sources: Author, 2021**

This study held the view that the perception, attitude and knowledge of the target VMMC clients and their eventual adoption of the intervention were dependent on the interpersonal communication strategies, interpersonal communication training among the programme's implementers and how the same implementers deal with the possible barriers to interpersonal communication and implementation of extra communication projects such as social economic activities. However, to a considerable proportion, they will also be influenced by factors such as the age, culture, education, marital status, economic status and media exposure. To establish their possible influence on the voluntary medical male circumcision programme's final outcomes, these variables were built into the study by including them in the data collection instruments.

2.8 Research Gaps in Reviewed Literature

The World Health Organisation says that there have been 13 years of good progress since VMMC was recommended in 2007 by UNAIDS and WHO as a key HIV prevention intervention in high-prevalence settings, particularly for countries in the 15 high priority countries of the eastern and southern Africa region. Nearly 27 million males have accessed VMMC services in high priority countries since then. However, the pace of scale up has varied across the countries, with the highest, Uganda, at 5,350, 707, and the lowest, Ethiopia with 141,075. Kenya is in the top five performer at number five with over 2,065 people so far circumcised (UNAIDS & WHO, 2021)

Although this progress in VMMC programme scale up remains impressive, recording the peak of 83 percent of the annual recommended target in 2018, more intensified efforts are required to reach men at higher risk of HIV infection, especially in countries that are lagging behind. Moreover, health authorities are worried that in the countries where early demand for the procedure had been observed, greater demand appears to be among those between 10 and 14 years rather than men in their 20s and above who are most likely to be sexually active and at high risk of HIV infection (Mwandi *et al*., 2011). The group of men aged between 20 and 49 years is mostly married and consequently sexually active hence a target population for VMMC (Emojong', 2019).

To achieve the desired coverage among the right age brackets, the UNAIDS (2016) has vouched for accelerated scale up through innovative approaches, including the employment of well-focused demand-creation communication.

Although heralded as good for creating awareness, scholars have pointed out an array of weaknesses of mass media as channels for demand-creation, mainly due to their non-interactive nature (Hoffman-Goetz & Friedman, 2005). This is confirmed by Kegeles *et al*. (1988) in their study among American adolescents who confirmed high consumption of mass media messages on the importance of using contraceptives to protect against sexually transmitted infections; yet there was no corresponding demand by the female adolescents on their sex partners to use condoms, while the males' intention to use condoms decreased. On its part interpersonal communication has been acknowledged as important in health communication, especially when dealing with sensitive behavioural issues that transcend the boundaries of health like sexuality, culture, stigma, and discrimination. Dutta-Bergman (2005) argues that current trends in communication campaign research direct us to new vistas beyond mass media messages, arguing that mediated messages fail in certain scenarios and are limited by structural barriers, especially when marginalised groups are addressed. The target population of this study is considered economically marginalised basing on earlier studies on similar demographic characteristics.

This study therefore set out to establish the impact of IPC in the implementation of VMMC in this target population. Although previous studies have examined the influence of interpersonal communication in health interventions, specific areas have been left out, thus prompting this study. Although focusing on peer education as a communication strategy two studies among university students in Turkey and Spain were based on HIV/AIDS knowledge, attitude and belief, and not VMMC.

In his study on IPC and VMMC carried out in Siaya's neighbouring county of Busia, Emojong' (2019) did not delves into the role of such variables as training, interpersonal communication strategies and barriers to IPC, instead focusing on information source attributes, communication context, and demographic factors. Moreover, although Odwar (2018) carried out her study in Siaya, she took different contextual dimensions, focusing on target groups' perceptions on VMMC, and how IPC aids decision making. The three studies also differ in methodology, especially in the choice of sampling techniques and data collection tools. While this study embraced focus group discussions as an important data collection tool, Emojong' (2019) and Odwar (2018) did not use it, instead choosing questionnaires and key informant interviews. They also chose to conduct sampling using the random sampling, something that this study avoided, instead settling for snowball technique. This choice was guided by the sensitivity of circumcision, which has serious cultural undertones and HIV/AIDS, with inherent traces of stigma and discrimination.

At the same time, Odwar's sampling was restricted to men who were the target clients and stakeholders for VMMC. Significantly, they left out a segment of population, women, who this particular study considered crucial to the success of VMMC or any other intervention for prevention of HIV (Dutta-Burgman, 2005). The foregoing gaps in the earlier studies and the documented suggestions that factors such as communication strategies, training and communication competence, barriers to communication programmes are crucial to the success of VMMC programme in Siaya, formed the basis of this study.

2.9 Chapter Summary

This chapter has conducted a critical review of literature on behavioural communication and its function in health management. Taking an objective-to-objective approach, it has discussed the various interpersonal communication strategies that have been used at different times and geographical locations in championing health campaigns; and reviewed issues and challenges that obtain in training and competence particularly for those charged with implementing health interventions. It further discussed the various barriers to interpersonal communication in healthcare; and finally reviewed some of the new trends and best case scenarios in improving health communication in general and, in particular, interpersonal communication in healthcare. The review took a systematic approach, first, considering the theoretical perspectives that underpin the various variables under consideration, then discussing some of the empirical studies so far done in the respective areas and, finally, identifying the existing gaps to make a pitch for this study.

The literature review shows that while much has been done on the areas under review, namely interpersonal communication strategies, IPC training, barriers to interpersonal communication and best practices and approaches to improving health communication, these studies are geographically skewed both from the theoretical and empirical perspectives. For instance, little has been done on the role of training and competence in interpersonal communication as a tool for improving health delivery. While much investigation has been done on the counselling for HIV literature is lacking on counselling for VMMC.

Most of the existing studies on barriers to interpersonal communication in healthcare have featured nurse patient interactions; leaving out para-medical players such as community health workers, peer-educators and community mobilisers, who formed the core of this study. Finally, the chapter has discussed one theory and one model as relevant to this research and also presented a conceptual framework that underpin this study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter focuses on the methodology of this study. It covers the philosophical underpinning of the study, namely the research philosophy and paradigm. The chapter further looks at the research design and approach, data collection methods, sampling techniques, data collection instruments, data analysis, and data interpretation. Also considered here are validity, reliability and research ethics as they applied to the study.

3.2 Philosophical Paradigm of the Study

The choice of research methodology, according to Holden and Lynch (2004), should be related to the philosophical position of the researcher and the social science phenomenon under investigation. Each researcher is guided by his or her own approach to the research itself. Žukauskas, Vveinhardt, andAndriukaitienė (2018) characterise research philosophy as a system of the researcher's thought, following which new, reliable knowledge about the research object is obtained. It is the basis of the research, which involves the choice of research strategy, formulation of the problem, data collection, processing, and analysis. In order for researchers to select the most suitable methodologies for their works, they need to choose certain research paradigm or paradigms that will help them to provide a justification for the context while at the same time attempting to understand the phenomenon at hand (O'Neil & Koekemoer 2016). This study adopted the pragmatist research paradigm as explained below.

3.2.1 Pragmatist Paradigm

This study adopted pragmatism as the appropriate research paradigm because of the methodological approach it took to deal with the various research questions. The study adopted the mixed method research design, thus employing both the quantitative and qualitative data collection methods, a design which is in line the pragmatist paradigm. Proponents of the pragmatist research philosophy recognise that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture and that there may be multiple realities (Maarouf, 2019; Ghiara, 2019). Thus methods are chosen that enable the collection of credible, well-founded, reliable and relevant data that advance the research (Kelemen & Rumens, 2008).

In choosing pragmatism as the philosophy underpinning this research, it is recognised that the factors under investigation like HIV/AIDS and circumcision are sensitive issues that require careful interrogation to come up get exhaustive results. A times this requires that the researcher stand aside for subjects to give their independent views. It was, therefore, prudent to use the mixed method as advocated by pragmatists. It, thus, approached the research questions from both the positivist and interpretivist philosophical standpoints as a continuum thereby lending the advantage of complementary strengths (Sale, Lohfeld, & Brazil, 2002). Taking the pragmatist approach also strengthened the study though triangulation, whose purpose was to enrich and strengthen research results by using different methods of data collection and analysis.

Moreover, as Maarouf (2019) posits, research questions vary in their nature and therefore the way they are treated in order to get appropriate results demand different philosophical approaches. In this study while it was easy to determine the VMMC programme implementers' level of communication training quantitatively; it required interactive sessions with the same implementers to discern their IPC competence. Further, the study used the positivist approach to understand demographic factors such as gender, age, level of education and income levels; but employed focus group discussions to understand how these demographics affected the interpersonal interactions between the implementers and target clients in the VMMC programme campaign. Thus, as advised by Tashakkori and Teddlie (1998), this study adopted positivism and interpetivism as a continuum rather than as opposing paradigms – hence the pragmatism. Moreover, Maarouf (2019) argues that besides the role of each approach in developing knowledge, the two approaches have contradicting advantages and disadvantages. For instance, the positivist approach has the advantages of providing quantitative precise results and being relatively quicker in data collection and analysis.

However, theory and hypotheses tested in the quantitative research may disregard some important variables and do not reflect the local social understanding. From the other side, qualitative research is useful in examining a limited number of cases in depth. It is also very helpful in addressing complex phenomena as it can provide rich details. For instance, it was only through a focused discussion that the researcher was able to find that, other than the parents, a boy's paternal grandmother had a major say, on his circumcision, and failure to seek her consent for a boy (who is traditionally her

"husband") to be circumcised was recipe for a serious clash. As Maarouf (2019), (Creswell (2014), and Johnson and Onwuegbuzie (2004) postulate, pragmatism has come in to solve the problem of quantitative and qualitative approaches being seen as two discreet opposite approaches, rather than representatives of two ends of a continuum – with the pragmatist philosophy in the middle of this continuum.

3.3 Study Design

This study adopted the mixed-method approach, which involves the use of more than one method in collecting, analysing and interpreting data at various stages of the research process, within a single study, to understand a research problem more completely (Tashakkori & Teddlie, 2003; Wimmer and Dominick, 2006). The rationale for mixing is that neither the quantitative nor qualitative method on its own can adequately capture the trends and details in the complex psychosocial and cultural issues around HIV and AIDS, sexuality and circumcision (Du Plooy, 2009; Nair, 2010). As Creswell (2014) posits, when used together in a single study, both the quantitative and qualitative methods prove useful in that each complements and overcome the limitations of the other (Creswell, 2014).

The quantitative research approach employs statistical methods to study empirical world and to deduce numerical data (Castellan, 2010; Wood & Welch, 2010). It allows use of systematic statistical tools to study specifically determined samples to generate numerical data where the subsequent findings are generalised to the population.

Hypotheses based on certain theories are generated and tested empirically through deductive reasoning (Castellan, 2010). The quantitative research approach allows for the testing of the relationships between variables to establish, elaborate and validate facts; stating causes and effects; and predicting outcomes through randomisation of samples and controlled research methods (Castellan, 2010; Kura; 2012). Conversely, studies using the qualitative approach employ inductive inquiry to gather non-statistical data from the social world (Babbie & Mouton 2001). Qualitative researchers use a naturalistic approach to study their subjects in their natural settings using various methods and techniques such as case studies, ethnographic studies, field studies, interviews and focus groups, with a view to eliciting deeper insight into the phenomenon under investigation (Wood & Welch, 2010).

The mixed-method approach was thus adopted in order to adequately capture the trends and details in the complex psychosocial and cultural issues around HIV and AIDS, sexuality and circumcision. Both the quantitative and qualitative methods played a complimentary role of bringing out the complex issues in the study such as cultural and other bio-psychosocial issues in the study. The use of quantitative approach enabled the testing of relationships, elaborating and validating facts. By using the qualitative approach through key informant interviews and focus group discussion the study was able to delve deeper into issues emerging from surveys conducted through questionnaires.

3.4 Study Area

Siaya County is one of the six counties in the Nyanza region (formerly Nyanza Province) in the southwest part of Kenya. It is bordered by Busia County to the north, Kakamega and Vihiga counties to the northeast and Kisumu County to the southeast. It shares a water border with Homa Bay to the south. Siaya County is divided into six administrative sub-counties of Alego-Usonga, Bondo, Gem, Rarieda, Ugenya and Ugunja. The land and water surface areas are approximately 2,530km² and 1,005 km², respectively. The county lies between latitude 0° 26' to 0° 18' north and longitude 33° 58' east and 34° 33' west. The study zeroed in on two sub-counties of Bondo and Rarieda, with research sample drawn from around fishing areas of the two sub-counties.

Several factors informed the choice of Siaya County as the general area of the study and Rarieda and Bondo sub-counties as specific study location. Firstly, at 21 percent Siaya has the highest HIV prevalence nationally (NASCOP, 2018). Save for the 2018 estimates, the county's prevalence has remained on an upward trend, moving from 17.8 percent in 2011 (MoH, 2014) to 24.8 in 2015 (NASCOP, 2015). Secondly, Siaya is found in the Lake Victoria region of western Kenya, and is predominantly inhabited by the traditionally un-circumcising Luo community. It is estimated that nearly half of all uncircumcised men are found in this region where circumcision prevalence is only 48.2 percent against the national average of 85 percent NASCOP, 2012). Rarieda and Bondo, Siaya's only sub-counties that border the waters of Lake Victoria, lead the other sub-counties in HIV prevalence (County Government of Siaya, 2014).

There is significant variance in HIV prevalence between fishing communities and their immediate neighbouring populations. A study in Uganda by Opio *et al*. (2013) revealed that HIV prevalence in the fishing communities was 22 percent, three times higher than the estimated HIV prevalence of 7.3 percent for the general adult population in Uganda, showing that fishing communities are at a higher risk of acquisition or transmission of HIV infection. The VMMC programme in Siaya County has invested substantially more resources in the beaches compared to the inland areas, with higher concentration of anti-HIV/AIDS activities on the fishing communities (County Government of Siaya, 2014).

3.5 Study Population

The target population for this study consisted of male residents of Siaya County. Mugenda and Mugenda (2003) define population as the entire set of individuals, events or objects with common observable characteristics. The Kenya Bureau of Statistics 2019 population and housing census estimated the total population of Siaya County to be 965,103persons comprising 456,441 males and 507,949 female (KNBS, 2020). The populations of Bondo and Rarieda were estimated at 180,487and 154,175, respectively, bringing to 334,662 persons the total population of the two neighbouring sub-counties by the year 2018. The total population of male residents of the two sub-counties was estimated at 161,488, with Bondo having 87,616 and Rarieda 73,872 male residents.

Table 3.1 ***Population Distribution of the Study Sub-Counties***

District	Male	Female	Total	Area (Km^2)
Bondo	87,616	92,871	180,487	593.0
Rarieda	73,872	80,303	154,175	403.4
Total		173,174	334,662	996.4

Source: Kenya National Bureau of Statistics, 2019

3.6 Inclusion and Exclusion Criteria

The study included:

i. All men aged between 18 and 50 years and residents of Rarieda and Bondo, who have undergone or are eligible for VMMC.
ii. All women residents of the two sub-counties of Bondo and Rarieda.
iii. All workers under the employment of Ministry of Health and Centre of Health Solution and attached to the VMMC programme in the two sub counties of Rarieda and Bondo

Excluded in the study were:

i. Male and female residents of the two sub counties below 18 and above 50years of age
ii. Men or women not living in the county at the time of the data collection.

3.7 Sampling Procedure

The study adopted a multi-stage sampling technique, first of the county and secondly sub-counties. Purposive sampling was used to select the specific sub-counties to pitch the study. Purposive sampling technique was employed because the researcher knew where to obtain the required information with respect to the objectives of the study and participants selected because they possessed the required characteristics (Mugenda & Mugenda, 2003; Peil, 1995). Within the selected sub-counties of Bondo and Rarieda, proportionate sampling was employed to obtain the desired cases as advised by Borg and Gall (1993). Four sets of participants constituted the sample frame for this study. The first group consisted of men aged 18 to 50 years living within Bondo and Rarieda sub-counties and mainly from the fishing community. Although the VMMC programme target males form age zero to 60 years, this study confined its scope to age 18 to 50 because of the reported key target age bracket. While a large proportion of VMMC clients were among boys aged 10 to 14 years, this age group is no longer prioritised in WHO's guidelines (2020) due to concerns regarding safety, and informed consent.

The second group comprised the operational staff including health workers in the field. The third group comprised women residents of the two sub-counties similar to those in the first group. Although not targeted for the circumcision, women have particularly important role to play in the implementation of VMMC, falling in the category that Fishbein & Ajzen (2010) refer to as "significant others." Firstly, as wives, women are relied on to provide economic and psycho-social support to their husbands in making the decision to go for the cut.

Secondly, as mothers they hold a significant sway in nursing their sons who are also targeted for the VMMC. The final group had the officials of the agencies that were implementing the programme in Siaya at supervisory and managerial levels.

To get the respondents in the first three groups, the snowball sampling technique was used. This method was chosen for this study because of the sensitive nature of the subject in question – HIV/AIDS and circumcision. Because of the issues of secrecy and stigma surrounding these particular health issues (MoH, 2014, Agne, *et al.*, 2002; Ndeda, 2004), some people could be reluctant to participate in the study. This fear is borne out by an earlier study conducted in Nairobi County by Laibon *et al.* (2017) among male sex workers on antiretroviral therapy. They employed the snowball techniques citing the stigma and discrimination associated with HIV and AIDS. According to Alvi (2016) snowball sampling technique is often used to find and recruit "hidden populations." These are groups not easily accessible through other sampling strategies.

3.8 Sample Size

In this study, the probability formula by Mugenda & Mugenda (2003) was adopted to determine the sample size as follows:

$$n=\frac{z^2pq}{d^2}$$

Where:

n = desired sample size

z = the standard deviation required confidence level

p =proportion in the target population estimated to have characteristic being measured.

q = 1-p and

d = level of statistical significance

The total number of male residents of the two sub counties is 161,488, out of who about 83,700 representing 51.8 percent are aged between 18 and 50 years. The study sample has been drawn from this age bracket. The desired sample (n) has been calculated thus:

$$n = n=\frac{z^2pq}{d^2}$$

$$= \frac{(1.96)^2\ (0.5)\ (0.5)}{(0.05)^2}$$

$$= \frac{3.8416)\ (0.25)}{0.0025}$$

$$= \frac{0.9604}{0.0025}$$

$$= 384.16$$

= 385

The other set of target respondents consists of about 70 operational staff directly involved in carrying out the VMMC. In view of their small number a questionnaire was administered on 35 staffers, representing half to total population. The snowball sampling technique was used to arrive at the sample.

3.9 Data Collection Methods

This study employed a mixed-methods approach in data collection. The choice of this approach was informed by the need to understand the various phenomena in the study form different perspectives. It was understood that, given the sensitivity and inhibitions that surround issues like sexuality, disease and cultural relationships, desirable results be best obtained with the combination of quantitative and qualitative methods. The two complement each other in navigating complex psychosocial and cultural terrain in which HIV/AIDS and circumcision exist.

3.91 Questionnaire

Two questionnaires were used to collect data from two sets of respondents, namely VMMC target clients and VMMC service providers. The questionnaires were administered with the help of two research assistants, who were trained prior to the commencement of the exercise. Since they were largely based on the research objective, the two questionnaires did not have significant variations in terms of contents.

The two instruments were pre-tested in order to give a first-hand experience in administering the tools, assess the clarity and logic and gain some insight into how the data would be analysed. On a pilot basis the first questionnaire was administered on 40men within the 18 to 50 years age bracket, selected from Bondo sub-county using the snowball sampling technique. The second questionnaire was pre-tested on five operational staff implementing the programme.

The aim of the pilot study was to establish the relevance and understanding of the items therein. All those pre-tested were of the same characteristics as those targeted for the actual test.

The same research assistants took part in the pilot study after being trained, and were, therefore, familiar with the environment and conversant with the work at hand. The respondents were asked to fill in the questionnaire upon reading and understanding, while the researcher and the research assistant remained within the vicinity to assist them throughout the exercise.

The respondents were nevertheless left on their own to carry out the exercise at their own pace and time. Nonetheless, the researcher and the assistants remained within the reach of the participants to help with explanations where required. The questionnaires were in English as the pilot study had revealed that the target population understood the content – after adjustments to the appropriate level of English, based on the findings of the pilot study.

The pilot study helped the researcher to identify anomalies such as lack of clarity in the questions and repetitions. The results also helped to identify areas that needed adjustments in terms of objectives and the overall aim of the study. Further, through the pilot study the researcher was able to gauge the research assistants in terms of ability to conduct the data collection process.

3.9.2 Focus Group Discussions

The study used focus group discussions with specific segments of the population under study, with a view to gaining an in-depth understanding of the dynamics involved in a complex phenomenon of male circumcision and HIV/AIDS, which are replete with stigma, secrecy and cultural inhibitions (Creswell, 2014). It was considered useful for generating information on collective views, experiences and beliefs of the members of the community (Gill *et al,* 2008).

Two sets of focus group discussions were conducted each comprising five participants. The first group consisted of men working or living around Usenge, one of the beaches in Bondo, and had been circumcised under or outside the VMMC programme or who were eligible for circumcision. The second group was composed of women working or living along Uhanya beach in Bondo sub-county. In both instances, the snowball sampling method was used to get the five participants in each case as recommended by Laibon *et al.* (2017). The research assistants who were residents of the areas approached and recruited the first prospective participants, who then brought in the rest. This ensured that the participants were familiar with each other, a fact that guaranteed dealing with people who shared experiences and enjoyed the comfort and familiarity of each other, making the discussions interactive and cordial (Browne, 2005).

The FGDs were moderated by the researcher assisted by an assistant who took notes. Permission was sought from participants to record their voices and images using a tape recorder and video recorder respectively.

FGDs were intended to achieve four objectives. Firstly, to explore the nature of power relations between VMMC service providers and their clients; secondly, to establish the influence of women as spouses or girl friends over men in the latter's decision concerning circumcision; thirdly, to provide information for subsequent refining of the preliminary information on IPC strategies used in the campaign as well as in identifying the existing barriers to effective interpersonal communication, and finally to explore best practices in IPC.

3.9.3 Key Informant Interviews

Five key informant interviews were conducted to collect additional qualitative data. As in the case of focus group discussions, key informant interviews were conducted to enable the researcher to explore in detail the various issues that could not be brought out through the questionnaires (Boyce& Neala, 2006). Three officers of the Centre of Health Solutions, including one manager and two supervisors as well as two senior officers from the Ministry of Health, in Bondo, were purposively selected to participate in the interviews. The interviews were conducted in a hotel setting conducive for discussions. The office setting was avoided to ensure there were no interruptions. The interviews with the managers and supervisors helped the researcher to round up the issues raised in the surveys and the focus group discussions. They provided the opportunity for the researcher to delve deeper into issues touching on policy as raised in the preceding data collection processes.

The study took the general interview guide approach also known as guided interview, with a basic checklist to ensure that all relevant topics were covered (Terre-Blanche, Durrheim, & Painter, 2006). The interviews were kept flexible with the interviewer probing through questions deemed pertinent to the studies objectives and theoretical framework. The same interview guide was used for all the respondents to trace the points of convergence and divergence on specific issues.

3.10 Data Analysis and Presentation

Questionnaires returned from the field were coded and keyed into SPSS computer software for analysis, and data screened using the sort functions. Normality of the study variables was then assessed using skewness and Kurtosis values. The range of -1.96 to 1.96 for skewness and -3 to 3 Kurtosis as suggested by Ghasemi and Zahediasl (2012) was used to detect the existence of skewness and Kurtosis respectively. Distances of cases from the centroid of remaining cases created at the intersection of means of all variables were used to inspect multivariate outliers. Consequently, Mahalanobis Distances were calculated via PSS Regression by evoking Mahalanobis D2 values. Screened data were analysed using SPSS version 22.0 by means of both descriptive and inferential statistics.

3.10.1 Descriptive Statistics

The descriptive statistical analysis, which is mainly used to identify statistical facts and patterns in data (Creswell, 2013), was applied to quantitative data collected from two respondent categories, namely the health staff in the field who interact with the clients

and perform the operations, and the male VMMC clients in the two sub counties under the study. First, a data code sheet was developed and data transferred to IBM SPSS Statistics 22 computer software. Secondly, data cleaning was undertaken prior to analysis to identify outliers and remove any errors in the data feeding process. The data were then analysed using descriptive statistics such as frequency distribution, percentages, averages and mean values.

3.10.2 Thematic Analysis

Thematic content analysis is widely used in qualitative research, particularly in case study methodology (Attride-Stirling, 2001). It involves identifying recurrent patterns or extracting themes from the data and then using these to explain the phenomenon under investigation (Fereday & Muir-Cochrane, 2006). Thematic analysis encompasses the search for and identification of common threads that extend across an entire interview or set of interviews (De Santis & Noel-Ugarriza, 2000). Braun and Clarke (2006) recommend the technique as flexible and a useful research tool that provides a rich and detailed, yet complex, account of the data under scrutiny.

Thematic content analysis was applied to qualitative data obtained from focus group discussions conducted with VMMC programme beneficiaries and potential beneficiaries, besides the programme's implementers, and in-depth interviews with two programme managers. Thematic content analysis was done under qualitative data analytical framework as postulated by Mertens (2010).

In-depth key informant interviews and focus group discussions generated a large volume of raw qualitative data captured through note taking and audio recordings in English and Dholuo languages. A step-by-step data analysis was done as recommended by Mertens (2010). The first step involved transcribing the recordings verbatim and translating the raw data into English. The researcher then read through all transcriptions and field notes, availing himself of this immersion process to have a greater feel and understanding of the data. It also enabled the researcher to take notes or mark ideas on emerging patterns for coding (Riessman, 1993).

The codes identified a feature of data that appeared to be of interest to the study and referred to the most basic segment, or element of the raw data or information that could be assessed in a meaningful way regarding the phenomena (Boyatzis, 1998). The process of coding is part of data analysis and involves organising data into meaningful groups that are later categorised into themes (Tuckett, 2005; Miles & Huberman, 1994). The data generated from qualitative and quantitative sources were presented according to the research objectives to obtain comparison and relationships amongst them. Table 3.2 below shows the research matrix for data analysis.

Table 3.2 ***Research Matrix for Data Analysis***

Objective	Independent variable	Dependent variable	Tools for data collection	Method of analysis
Discuss clients' perceptions on HIV/ AIDS and VMMC and the influence of such perceptions on the IPC programmes in the VMMC campaign	IPC strategies	Uptake of VMMC	• Questionnaire • KII • FGD	• *Quantitative* (frequencies, percentages, mean, standard deviation, correlations and regression) • *Qualitative* (Thematic analysis)
Examine the different IPC methods employed in the VMMC programme campaign in Siaya County	IPC strategies	Uptake of VMMC	• Questionnaire • KII • FGD	• *Quantitative* (frequencies, percentages, mean, standard deviation, correlations and regression) • *Qualitative* (Thematic analysis)
Assess the level of IPC training and competence among the VMMC programme implementers in Siaya County	Health communication training and competence	Uptake of VMMC	• Questionnaire • KII • FGD	• *Quantitative* (frequencies, percentages, mean, standard deviation, correlations and regression) • *Qualitative* (thematic analysis)

Determine barriers to effective IPC to enhance VMMC uptake in Siaya County	Barriers to IPC	Uptake of VMMC	• Questionnaire • KII • FGD	• *Quantitative* (frequencies, percentages, mean, standard deviation, correlations and regression) • *Qualitative* (thematic analysis)
Examine emerging trends in IPC to enhance VMMC uptake in Siaya County?	Best IPC practices healthcare	Uptake of VMMC	• Questionnaire • KII • FGD	• *Quantitative* (frequencies, percentages, mean, standard deviation, correlations and regression) • *Qualitative* thematic analysis

3.11 Validity and Reliability

In order to enhance the credibility of results the study used triangulation. Further, to ensure validity, the instruments were subjected to scrutiny by social science experts led by the supervisors in this study, whose feedback was put into consideration. Such feedback touched on the consistency of the formatting of the questionnaires with the variables of the study. Furthermore, to ascertain that the research instruments were reliable and valid in meeting the study objectives, a pre-test was conducted prior to the main study on male residents of Rarieda sub-county.

The first questionnaire was administered on a test sample of 40 participants, representing 10.38 percent of the total sample of target clients (n=385), while two respondents were subjected to the service providers questionnaire, representing 5.7 percent of the total sample of 35. One key informant interview was conducted with one employee of the implementing agency at the supervisory level. Those who had been subjected to the pre-test were not involved again in the main data collection exercise. Steps were taken to address the shortcomings noticed in the questionnaires and interview guides. The gaps included incomplete statements, ambitious or unclear questions and repetitions. Adjustments made in the questionnaire included removing repetitive questions, merging questions and omitting unnecessary ones, and introducing new questions. Two research assistants were enlisted to administer the questionnaires alongside the researcher. They were trained beforehand on all aspects of the study to familiarise themselves with the subject matter under investigation. The patients used in the pre-test did not form part of the actual study.

3.12 Ethical Considerations

Studies on diseases and human behaviour are about human relations and, like other social sciences, deal primarily with human beings, who are sensitive to various ethical and privacy-related matters (McKeown & Weed, 2004). Moreover, this particular study focused on such sensitive subjects as sexuality, circumcision, HIV and AIDS that are replete with socio-cultural sanctions, stigma and discriminations, and which require careful approach in dealing with all parties concerned (MoH Kenya, 2014; Laibon *et al.*, 2017).

Prior to carrying out interview or discussions, or administering questionnaires, respondents' consent was sought besides their being fully informed about the purpose of the research, its processes, and possible outcomes. It was explained to the respondents that their participation in the research was voluntary with no obligations before, during, or after participation. Respondents were not forced to answer any questions they did not wish to. Equally, they were informed of their right to decline to be audio- or video-recorded during the data collection if they did not feel comfortable. In a nutshell, the study ensured compliance with all ethical guidelines of Masinde Muliro University of Science and Technology. In particular, a regulatory research clearance was obtained from the Directorate of Postgraduate Studies, Masinde Muliro University of Science and Technology (MMUST), while a research license was granted by the National Commission for Science, Technology and Innovation (NACOSTI). Further, letters of authority to carry out data collection were sought and obtained from the following:

i. County Commissioner, Siaya,
ii. County Director of Education, Siaya,
iii. Deputy County Commissioner, Maranda,
iv. Director, Centre for Health Solutions, a non-governmental organisation implementing the VMMC programme with the Ministry of Health, and
v. County HIV/AIDS Control Coordinators, Siaya.

Moreover, all respondents in the study gave voluntary and informed consent prior to the interviews, while they were also informed in advance that their participation in this study was voluntary. The privacy of all informants was observed through strict

application of the anonymity and confidentiality rule and the study ensured no harm was inflicted in any way on the participants throughout its entire course.

3.14 Chapter Summary

The chapter has presented a detailed the processes towards the collection and analysis of data. It has discussed the theoretical underpinning of the study, explaining the choice of pragmatism as the appropriate research philosophy given its encompassing nature. It opted for the mixed method research design and employed both the quantitative and qualitative data collection methods, a design which is in line with the pragmatist paradigm. Siaya County was chosen as the general study area with Rarieda and Bondo sub-counties as specific study locations. The county was chosen due to its high prevalence of HIV.

The study adopted a multi-stage sampling technique first of the county and secondly sub-counties, and use of purposive sampling to select the specific sub-counties to pitch the study. Two questionnaires were administered: the first on male residents (n=385) of the selected areas of the two sub-counties in Siaya; and the second on field officers (n=35) directly involved in the programme in the two sub-counties. Further, two FGDs were conducted first with men (n=5) living or working in the same areas and second women (n=5) also in the same vicinities. Finally, five key informant interviews were used to obtain data from the programme's implementers at supervisory and managerial levels. The selected interviewees were considered suitable because of their hierarchical position which could enable them to shed light on policy issues.

Descriptive statistics were used to analyse quantitative data, and findings presented through text, tables and graphs, while qualitative data were analysed based on the process of description, analysis and interpretation, and emerging themes extracted.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter covers the research findings drawn from the analysed data. Both the quantitative and qualitative data were collected through triangulation of administered questionnaires - for survey, moderator-guided focus-group discussions, and key informant interviews. The section, therefore, details the results of the study conducted among implementers and target clients of the voluntary medical male circumcision programme in Siaya County. The results are presented by objective as presented in chapter one and discussed in chapter two.

4.2 Questionnaire Return Rates

Out of the 385first questionnaires, 251 were filled and returned, showing a response rate of 65.19%.Mugenda and Mugenda (2003), and Orodho (2009) describe a response rate of 50% as adequate for analysis and reporting; a rate of 60 per cent as good and a rate of 70 per cent and over as excellent. This study's response rate was, therefore, very good. The second questionnaire targeted the staff of the agencies implementing the VMMC programme in the selected sub counties of Bondo and Rarieda. The set of targeted respondents consisted of about 70 operational staff directly involved in carrying out the voluntary medical male circumcision. Of these, the study selected a sample of 35 representing the total workforce in the desired staff category.

All the participants returned their questionnaires, representing a 100 percent return rate, which is excellent (Mugenda & Mugenda, 2003; Orodho, 2009).

4.3 Factor Analysis

Factor analysis was adopted in order to reduce the number of indicators or factors under each research variable and retain only those indicators relevant for explaining the study variables, and as advised by Field (2005), to help make decisions on whether the variables under investigation explain the dependent variable (Field, 2005).Tabachnick and Fidell (2007) provide a range of ratings that define the basis for accepting factor loadings that range from 0.32 (rated as poor), 0.45 (fair), 0.55 (good), 0.63 (very good) or 0.71 (excellent). Cronbach's alpha was applied in order to measure the reliability of the data gathered. An alpha coefficient of 0.7 or higher indicates that the gathered data is reliable as it has a relatively high internal consistency and can be generalised to reflect opinions of all respondents in the target population (Zinbarg, 2005). Table 4.1 shows the reliability results for the study variables.

Table 4.1: ***Reliability Statistics***

Variable	Cronbachs' Alpha	Number of Items
Interpersonal Communication Strategies	.922	11
Interpersonal Communication Training and	.820	7
Competence	.836	18
Barriers to interpersonal communication	.973	7
Trends and approaches to IPC in health campaigns		

The results in Table 4.1 show that all the factors related to interpersonal communication strategies, interpersonal communication training and competence, barriers to interpersonal communication, as well as new trends and approaches to IPC in health campaigns, were found to have a factor loading of 0.4 and above. Therefore, they were used in the subsequent analysis. Further, the results in table 4.1 show that all the factors related to interpersonal communication strategies, interpersonal communication training and competence, barriers to interpersonal communication, as well as new trends and approaches to IPC in health campaigns, had a Cronbach's alpha of 0.7 and above. They were, therefore, also used in the analysis of data for this study.

4.4 Correlation Results for Study Variables

Crossman (2013) notes that correlation analysis results give a correlation coefficient which measures the linear association between two variables. Mugenda and Mugenda (2003) explain that correlation analysis tests the strength of association or relationship between different research variables.

4.4.1 Correlation Results for Target Clients

This study used correlation tables to show the correlation analysis results. Rumsey (2012) provides a basis for interpreting correlation coefficients results by indicating that if the points cluster in a band running from lower left to upper right, there is a positive correlation (that is, if X increases Y increases). Alternatively, if the points cluster in a band from upper left to lower right, there is a negative correlation - if X increases Y decreases. Finally, when a straight line is drawn or curve through the data, it should fit

as well as possible. The more points cluster closely around the line of the best of fit, the stronger the relationship between two variables.

The results below indicate various correlational relationships with regard to the role of interpersonal communication as a tool for improving uptake of voluntary male circumcision. Evidently, as trends to IPC in health campaigns and barriers had a very high positive correlation coefficient index of .754. Going by the positive correlational index of .754 as indicated in Table 4.2, which shows that the p-value = .000 and this meets the threshold for acceptance since $p<0.05$. The positive relationship was represented by correlation coefficient of .754, and the number of respondents considered was 190. These findings indicate that when new trends and approaches to IPC in health campaigns are applied then the barriers that hinder uptake of VMMC are addressed in the same measure, and this makes it possible for more people to consider going for the VMMC.

Table 4.2: ***Correlation - Service Seekers***

Correlations

		IPC Effectiveness	Best Practice	TG	IP Competence	Barriers
Effectiveness of IPC Strategies	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	218				
Best Practice	Pearson Correlation	-.017	1			
	Sig. (2-tailed)	.865				
	N	206	214			
IPC Training &Competence	Pearson Correlation	.028	-.073	1		
	Sig. (2-tailed)	.764	.442			
	N	218	214	230		
Barriers to IPC	Pearson Correlation	-.010	.754**	.123	1	
	Sig. (2-tailed)	.924	.000	.216		
	N	190	190	202	202	

4.4.2 Regression Analysis for Target

As advised by Green and Salkind (2003), this study carried out regression analysis to establish the statistical significance relationship between the independent variables notably, interpersonal communication strategy, interpersonal communication training and competence, barriers to effective interpersonal communication, and new trends and approaches to IPC in health campaigns. The regression analysis results were presented using regression model summary tables, Analysis of Variance (ANOVA) table and beta coefficients tables.

The model Y = β1X1 +β2X2 +β3X3 + β4 X4 + ε explained .167 change in the dependent variable as per *Table 4.3.* This presents the regression model on uptake of VMMC in view of IPC strategies and other variables, namely interpersonal communication training and competence, barriers to interpersonal communication and new trends and approaches to interpersonal communication in health campaigns. As presented in *Table 4.3,* the coefficient of determination R square is 0.167 and R is 0.409 at 0.05 significance level. The findings indicates that 16.7 percent on the variation of the uptake of VMMC is influenced by interpersonal communication strategies, trends in interpersonal communication in health campaigns, interpersonal communication training and competence, and barriers to interpersonal communication. This implies that a unit change in IPC strategies, trends in IPC in health campaigns, IPC training and competence, and barriers increases uptake of VMMC by 16.7 percent.

Table 4.3: ***Model Summary***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.409[a]	.167	.112	1.619

a. Predictors: (Constant), IPC Strategies, Best Practice, IPC Competence, Barriers

Table 4.4 presents the results of Analysis of Variance (ANOVA) on effectiveness of interpersonal communication strategies, best practices in interpersonal communication, interpersonal communication training and competence, and attention to barriers to IPC and uptake of VMMC. The ANOVA results for regression coefficients indicate that the model fit is significant at p=0.000, F=0.015 with 181 degrees of freedom. This implies that effectiveness of IPC strategies; trends in interpersonal communication in healthcare, interpersonal communication training and competence, and paying attention to barriers to IPC have a significant and positive combined effect on the uptake of VMMC.

Table 4.4: ***ANOVA for Circumcised under the VMMC Programme***

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.904	5	7.981	3.046	.015[b]
	Residual	199.120	196	2.620		
	Total	239.024	181			

a. Dependent Variable: circumcised under the VMMC programme

b. Predictors: (Constant), IPC Strategies, Trends in IPC Best Practice, IPC Training Competence and Barriers to Effective IPC.

The overall model as shown on Table 4.5 indicates that New Trends and Approaches to IPC and Barriers were highly significant at p=.037and p=.004, respectively. However IPC Training and Competence, and IPC Strategies were significant at p=0.736 and p=0.115. The fitted model was $Y=-.274X_1+0.231X_2+0.037X_3+0.151X_4-0.165X_5$

Table 4.5: ***Coefficients[a] for Those Circumcised under the VMMC Programme***

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-2.392	3.837		-.623	.535
	Emerging trends in IPC	-.274	.129	-.381	-2.128	.037
	IPC Training and Competence	.037	.110	.037	.338	.736
	Barriers	.151	.050	.515	2.986	.004
	Effectiveness of IPC strategies	-.165	.103	-.169	-1.596	.115

4.4.3 Correlation Results Service Providers

Table 4.6: ***Correlations – Service Providers***

		IPC Strategies	CTIPC	Cultural Competence	Barriers	Best Practices
IPC Strategies	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	35				
CTIPC	Pearson Correlation	-.155	1			
	Sig. (2-tailed)	.468				
	N	24	24			
Cultural Competence	Pearson Correlation	-.006	-.095	1		
	Sig. (2-tailed)	.974	.683			
	N	30	21	30		
Barriers	Pearson Correlation	.492*	.015	.072	1	
	Sig. (2-tailed)	.028	.958	.778		
	N	20	15	18	20	
Best Practices	Pearson Correlation	.237	-.192	.246	.723**	1
	Sig. (2-tailed)	.264	.444	.281	.003	
	N	24	18	21	14	24

The results in Table 4.6 indicate various correlational relationships with regard to the role of interpersonal communication as a tool for service providers to improve the uptake of voluntary male circumcision. Evidently, trends in IPC in healthcare, and barriers had a very high positive correlation coefficient index of .723.

Going by the positive correlational index of .723 as indicated in Table4.6, which shows that the p-value = .003. This meets the threshold for acceptance since $p<0.05$. The positive relationship was represented by correlation coefficient of .723, and the number of respondents considered was 35. These findings indicate that when best practices are used, the barriers that hinder uptake of VMMC are addressed in the same measure. This, therefore, allows more people to consider taking up VMMC.

4.4.4 Regression Analysis for Service Providers

The regression analysis results for this study have been presented using regression model summary tables, Analysis of Variance (ANOVA) table and beta coefficients tables. The model, $Y = \beta1X1 + \beta2X2 + \beta3X3 + \beta4\ X4 + \varepsilon$ explained .512 change in the dependent variable as per the *Table 4.7*, this presents the regression model on uptake of VMMC in view of IPC effectiveness – in particular the interpersonal communication strategies as employed by VMMC staff and other variables, which include Communication Training and Interpersonal Communication Competence, Trends in IPC, Barriers and Cultural Competence. As presented in the table, the coefficient of determination R square is 0.512 and R is 0.715 at 0.05 significance level. The findings indicate that 51.2 percent on the variation of the uptake of VMMC is influenced by Effective Application of IPC, which include Trends in IPC, IPC Competence, Cultural Competence and Barriers. This implies that a unit change in IPC Strategy in terms of Trends, IPC Competence, Cultural Competence and Barriers increases uptake of VMMC by 5.12 percent.

Table4.7: ***Model Summary***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.715[a]	.512	.186	3.69418

Table 4.8 presents the results of Analysis of Variance (ANOVA) on IPC effectiveness in Strategies Best Practice, IPC Competence, Cultural Competence and Barriers and how they affect uptake of VMMC. The ANOVA results for regression coefficients indicate that the model fit is significant at p=0.000, F=0.295 with 30 degrees of freedom. This implies that Best Practice, IPC Competence, Cultural Competence and Barriers and uptake of VMMC have significant and positive combined effect on uptake of VMMC.

Table4.8: ***ANOVA – Service Providers***

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.755	4	21.439	1.571	.295[b]
	Residual	81.882	26	13.647		
	Total	167.636	30			

The overall model as shown on Table 4.9 indicated that Barriers was highly significant at p=.052.

$$Y=-0.334X_1-0.428X_2+0.377X_3-0.473X_4$$

Table 4.9: ***Coefficients[a] for IPC Strategies***

Coefficients[a]

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	22.956	16.385		1.401	.211
CTIPC	-.334	.507	-.205	-.658	.535
Cultural Competence	-.428	.569	-.221	-.752	.480
Barriers	.377	.156	.988	2.414	.052
New Trends & Approaches	-.473	.308	-.637	-1.533	.176

4.5 Demographic Data

Table 4.10: ***Respondents' Demographic Information - Target Clients***

Variable	Frequency/Percent	
Current occupation or source of income	Student	2 (0.7%)
	Fisherman	161 (64.2%)
	Businessman	42 (16.8%)
	Government employee	17 (6.6%)
	Private business employee	22 (8.8%)
	Other	8 (3.0%)
Average income per month	< 1,500	9 (3.7%)
	1,500 – 5,000	60 (23.9%)
	5,001 – 10,000	103 (41.0%)
	10,001-15,000	71 (28.3%)
	>15,000	8 (3.1%)
	Don't Know	63 (25.0%)
	1,500-5,000	87 (34.5%)
	5,001 – 10,000	58 (23.1%)
	10,001-15,000	26 (10.5%)
	>15,000	17 (6.9%)
Sub-county of origin	Bondo	114 (45.6%)
	Rarieda	86 (34.4%)
	Alego Usonga	8 (3.3%)
	Ugunja	6 (2.2%)
	Ugenya	3 (1.1%)
	Gem	6 (2.2%)
	Outside Siaya County	28 (11.1%)
Age	18–27	72 (28.7%)
	28–37	135 (53.8%)
	38–47	37 (12.6%)

	48–57	4 (1.4%)
	58 and above	9 (3.5%)
Marital status	Single	89 (35.4%)
	Married	108 (43.0%)
	Separated	23 (9.1%)
	Divorced	12 (4.9%)
	Widowed	5 (2.1%)
Highest level of education	University	9 (3.5%)
	Secondary	86 (34.3%)
	Primary	126 (50.3%)
	College	19 (7.7%)
	None	11 (4.2%)
Highest professional qualification	Graduate	4 (1.5%)
	Certificate	63 (25.2%)
	Diploma	17 (6.7%)
	Undergraduate	6 (2.2%)
	None	161 (64.4%)

Table 4.11: ***Respondents' Demographic Information – Service Providers***

Variable		**Percentage**
Gender	Male	18 (52.0%)
	Female	17 (48.0%)
Age	18–28	9 (25.7%)
	29-39	19 (54.3%)
	40-50	7 (20.0%)
Marital Status	Single	13 (38.6%)
	Married	19(53.3%)
	Separated	2 (4.9%)
	Divorced	0 (0.0%)
	Widowed	1 (3.2%)
Level of Education	Primary	2 (6.1%)
	Secondary	13(36.2%)
	College	18(51.5%)
	University	2 (6.2%)

4.5.1 Economic Activity and Income for Target Clients

From the above findings (Table 4.10), the majority of the respondents were fishermen, accounting for 64.2 per cent (n=161) of all the total number of respondents. The rest, represented by a consolidated 35.8 percent (n=90), were engaged in economic activities that supported fishing such as transport, sale of fishing gear, fish loading and food vending. The findings further show that the respondents were primarily from resource poor backgrounds with a consolidated 68.6 percent (n=172) earning KSh10,000 and below per month, while only 28.3 per cent (n=71) fell in the KSh10,000 to 15,000 bracket, and a paltry 3.1 percent (n=8) above Ksh15,000.

The income distribution among the respondents' spouses indicates that 34.5 per cent (n=87) of the spouses earned between KSh1,500 and 5,000. Those who earned between KSh5,001 and 10,000 represented 23.1 percent (n=58) of the respondents' spouses, while only 10.5 percent (n=26) earned between KSh10,001 and 15,000, and a small 9.6 per cent (n=24) of the spouses earned above KSh15,000 per month. This finding shows that the men's spouses earned relatively lower. The situation was the same for the women participants of the focus group discussions, where those who were married reported that their husbands were the main economic pillars of their households.

> *What I get from my small fish vending business is very little. It is his earnings that keep us going. Otherwise, we would starve without his support* [FGD2-2].

The findings on income is in consonance with other studies among the residents of the same Lake Victoria region (Omwega, *et al*., 2006; Evens *et al*., 2014) which put those living especially along the beaches in the low income brackets below the poverty line. Further, the finding on women's income vis-à-vis that of men supports the earlier study by Kiriti and Tisdell (2003), which reported gender disparity in Kenya as being in favour of men. Another study (Chant, 2010) also reported a global gender bias, with women, especially those found in rural areas, constituting the vast majority of those in absolute poverty.

These findings on gender-specific economic disparities have a direct relevance to this study in that there is a correlation between income and health negotiations, as borne out by a comparative study on Indian and Nigerian women. The study found that economically empowered women had greater say on health decisions, with a direct and significant influence on the reproductive health practices. The study did not seek to establish the service providers' levels of earning as it was considered not important.

4.5.2 Gender Distribution for Service Providers

As show in Table 4.1, the respondents were almost equally distributed in terms of gender, with men taking the higher slot at 52 percent (n=18) and women 48 percent (n=17). The distribution of the staff for specific functions was further done on the basis of suitability. For instance, the mobilisation work involved more men as opposed to counselling, which had more female staff.

The key informant interviews revealed that the gender distribution was deliberate with a view to ensuring that proper matching was done especially for those engaged in the persuasion stage of the communication programme, which according to Roger's (2003) Diffusion of Innovation Theory, is the most crucial stage of the behaviour change and behaviour adoption process.

> *Because of the sensitivity of the matter at hand, I mean sex or circumcision, we are keen on ensuring that we do not create communication barriers as a result of cultural considerations. Things related to sex are not easy to deal with when you have a lady dealing with a man…discussing circumcision, or HIV/AIDS in general* [KII-03].

The above observation supports the findings of a study (Wamoyi, *et al.*, 2010) conducted in the Sukuma ethnic community of Tanzania on parent-child communication about sexual and reproductive health, which established that discussing sex between family members of different genders was frowned upon as culturally inappropriate.

The reasoning above further support the principle of homophily, a central plank of Roger's (2003) Diffusion of Innovation Theory, which states that the transfer of ideas occurs most easily between individuals who are alike (homophilous). This principle suggests that in interpersonal communication, individuals are more susceptible to the influence of people who are similar to them than of those who are dissimilar.

Thus since, according to DIT, acceptance of an idea is most difficult at the knowledge and persuasion stages, male staffers would be better suited to convince fellow men to adopt VMMC.

4.5.3 Sub-County of Origin

The study established that majority of the target client respondents were from Bondo Sub-county (45.6 percent or n=114) and Rarieda (34.4 percent or n=86), which were the loci of this study. The remaining four sub-counties of Siaya, namely Alego Usonga, Gem, Ugunja and Ugenya, combined, had under 10 per cent (n<25), while those from outside Siaya County accounted for 11.1 percent (n=28).

The male FGD participants were from different sub-counties of origin, namely Rarieda, Bondo and Gem in Siaya, and neighbouring Kisumu and Homa Bay counties. However all of them had lived in Siaya for the past one year. The female participants were all from Bondo and Rarieda either by birth or by marriage. With regard to service providers, the findings show that 59.4 percent (n=21) of the respondents were from the Luo ethnic community, the locus of the study, while 40.6 percent (n=14) were from other ethnic communities.

The establishment of the service providers' ethnic identity, hence cultural orientation, was important to this study, because of the possible effect of cultural differences between health intervention interactants on the final health outcome. Studies have shown a strong connection between service providers' cultural orientation and that of the clients when it comes to health communication (Dutta, 2007; Majumdar, 1995).

In his study on treatment of black adolescent drug users in America, Moore (1992), found that communicating health messages can be disastrous if the interactants from different cultural backgrounds are not culturally sensitive. According to the Integrative Model of Behaviour Prediction, cultural belief of target clients and cultural factors surrounding the health problem or health intervention are part of the environment that determines whether they accept or reject the prescribed behaviour.

In their conceptual construct on health communication across cultures, Bakić-Mirić *et al*. (2012) have cited diversity of cultural backgrounds as one of the causes of unclear health engagement, while Norouzinia *et al*. (2016) in an empirical study on nurse-patient engagement, established that patients are less acceptant of health service providers with different languages and cultures. Bakić-Mirić *et al*. (2012) say that lack of cultural competence on the part of health service providers is one of the impediments to interpersonal communication in healthcare management, and put the responsibility of ensuring effective communication with people from diverse cultural backgrounds on the healthcare provider.

This argument is compatible with Roger's (2003) Diffusion of Innovation theory, which posits that individuals are more susceptible to the influence of people who are similar to them than of those who are different. Thus, when individuals share common meanings, beliefs, and language, communication between them is more likely to be effective.

4.5.4 Age and Marital Status

For responding target clients, the analysis of the ages of the respondents established that majority (53.8% or n=135) were aged between 28 and 37 years, followed by those aged between 18 and 27 years, representing 28.7 per cent (n=72). Thirty eight to 47 years accounted for 12.6 per cent (n=32). The remaining age brackets accounted for below 10 per cent (n<25). The respondents' marital status indicated that 29.4 per cent (n=73) of them were single, while the bulk were married, accounting for 49.0 per cent (n=123). Those that were separated represented only 9.1 per cent (n=23), while those who were divorced or widowed were 4.9 per cent (n=12) and 2.1 percent (n=5) respectively.

The study further sought to establish the responding service providers' age distribution. The findings, as shown in Table 4.11, indicate that the respondents were distributed across all ages with the middle age bracket of 29 to 39 years taking the majority of them at 54.3 percent (n=19), while the bottom and top age brackets of 18 to 28 years and 40 to 50 years almost equally sharing the rest, at 25.7 percent (n=9) and 20 percent (n=7) respectively. However, the study did not seek to establish the marital status of the service providers as it was seen to be of little significance. The service providers' age distribution corresponds well to the finding on target audience, where those aged between 28 and 37 years account for 53.8 percent (n=135) of the respondents.

Again, this was found to be by design and in line with the programme implementing agencies' "age-appropriate" principle, in which they assign peer-educators and other mobilisers to target clients of more or less the same ages, to ensure, among other things, similar experiences and world view.

Key informant interviews revealed that the implementing partners were aware of the problems posed by age disparities and created appropriate mechanisms to deal with them. Among these mechanisms was targeting age appropriate communication strategies, with emphasis on age when it came to peer-based communication. One manager said:

> *At the inception, some partners were using champions… Others were just going to schools to do general talks… But now we're using what is called age appropriate approach (AAA), a client centred approach, where we have interpersonal communication agents who are given training, mainly communication, then released to focus on people of their age and work among them as peer-educators.* [KII–03]

The similarity in age between the VMMC advocates and target clients portends a positive interaction, since homophily, as Rogers (2003) posits, enhances the chances of acceptance of an intervention. According to this principle, most individuals enjoy the comfort of interacting with others who are similar, as talking with those who are totally different requires more effort and adjustment to make communication effective.

The foregoing theoretical standpoints are in consonance with several empirical findings. For instance, in their study on factors affecting effective communication about sexual and reproductive health issues between parents and adolescents in South Africa, Motsomi *et al*. (2006) found that parents or people of the age of parents find it difficult to speak openly to the youth on matters of sexuality as the respondents said their culture

did not allow them as parents to directly talk to their children about issues of sexual and reproductive health. Another study in eastern Ghana (Botchway, 2004) found that interpersonal communication between parents and male adolescents was strained when it came to sexuality due to age and generational gaps. Specifically, in their study of communication in the health environment, Park and Song (2005) found generation gap as a barrier to communication between older patients and nurses.

4.5.5 Education Level and Language Competence

Target Clients: The study also sought to establish the respondents' levels of education, with the analysed data showing that 50.3 per cent (n=126) of the respondents had primary as their highest level of education, 34.3 per cent (n=86) had gone up to secondary school level, 7.7 per cent (n=19) were of college level and only 3.5 per cent (n=8) had university education. At the same time, the respondents were found to be competent in Dholuo language with 83.8 per cent indicating that they were very competent.

The spread, in terms of proficiency in English and Kiswahili languages, was even, since the competence in the two languages was between a high of 36.0 per cent (n=90) and a low of 1.9 per cent (n=5) (Table 4.10). The education level and language competence was important for this study since it helped to inform the framing of the questionnaire in terms of the choice and depth of language. Based on the pilot study findings, the questionnaire was retained in English but the researcher and the trained research assistants remained on the ground to help the respondents throughout the process.

Service Providers: The findings in this section indicate that the highest concentration of education was at the college level with 51.5 percent (n=18) being college graduates. Secondary school graduates accounted for 36.1 percent (n=13), while primary and university levels of education accounted for low numbers of 6.1 percent (n=2) and 6.3 percent (n=2) respectively. This distribution, as shown in Table 4.11, is at variance with the level of the target clients for whom the findings reveal that the highest concentration was at primary level of education with 50.3 percent (n=18), followed by secondary, at 34.4 percent (n=12).

Similarities or disparity in education level and language competence between service providers and health service clients are considered key factors in interpersonal interactions. A number of clients, particularly those with low education levels, thought that some health workers looked down upon them because of their level of education. The providers, although not accepting the clients' claim that they looked down upon their clients, said the problem was caused by the clients' failure to understand some "basic" health information and issues.

> *Some of these people come to us with the attitude that we know nothing, and if that happens we also show them that we don't have time for those things of theirs. But if they approach us with respect, we listen to them. [FGD1-05 (client)]*

This finding is in agreement with another study conducted in Malawi, where Seljeskog *et al.* (2006) observed that education gap between the two sets of interactants was a key barrier in accessing maternal services.

4.6 Interpersonal Communication Strategies

The first objective of this study was to examine the different interpersonal communication strategies employed in the voluntary medical circumcision campaign. Specific strategies examined in this study included peer based interaction, expert counselling, and telephone helplines. To establish how the service providers were communicating VMMC as an intervention among the target clients, target clients who participated in the study were asked if the service providers conducting the campaign had engaged in them these strategies. The service providers were asked to state the level of priority they accorded each of these strategies.

4.6.1 Peer-based Interpersonal Communication Strategies

As indicated in Figure 4.1, 70.9 percent (n=178) of the respondents said they had been engaged in peer education while 29.10 percent (n=73) said they had not. A total of 78.10 percent (196) had participated in community events, another peer-based programme where, according to the informants, the mobilisers would introduce "champions" (people who had been circumcised) to try to persuade their peers to accept the cut.

Another peer-based communication strategy that the respondents had engaged in was home visits (66.7% or n=167). Only 39.8 percent (n=100) said they had been engaged in expert counselling, while 34.6percent (n= 87) had used telephone helpline. The rest of the respondents, 65.4 percent (n=164) said they had not used telephone helpline as a means of communication with VMMC service providers.

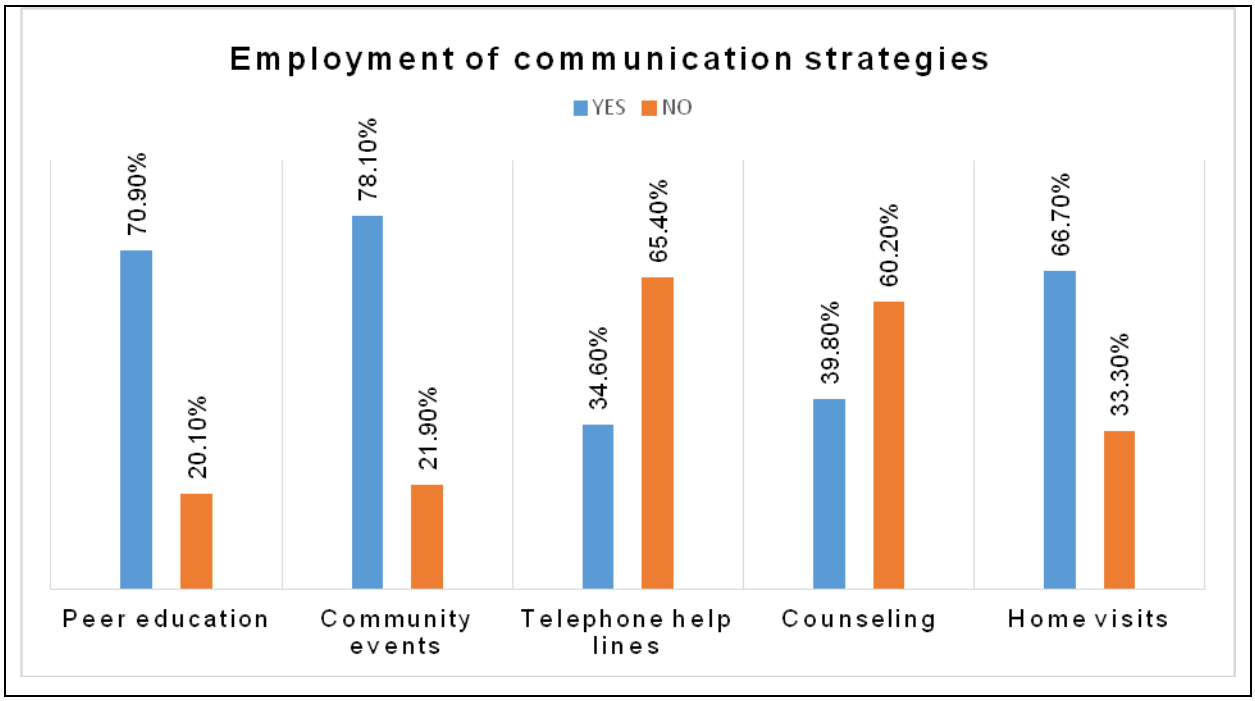

Figure 4.1: Level of Engagement in Interpersonal Communication Strategies According to Target Clients.

From the service providers, the study found that peer-education strategy was accorded the highest priority at 85.5 per cent (n=30) indicating "very high" priority, 8.6 per cent (n=3) "high" and 5.7 per cent (n=2) "low." Following closely was "home visits", which 45.5 per cent (n=19) and 30.8 per cent (n=11) of the respondents said they gave "high" priority and "very high" priority, respectively.

The third most popular method of mobilisation, according to the findings was "community events", which 66.5 per cent (n=23) of surveyed service providers said they accorded "high" and "very high" priority respectively. Counselling and telephone helpline were given low in priority rating at 39.6 (n=14) and 46.6 per cent (n=16) respectively. These finding compare positively with those on target clients as indicated in Figure 4.2.

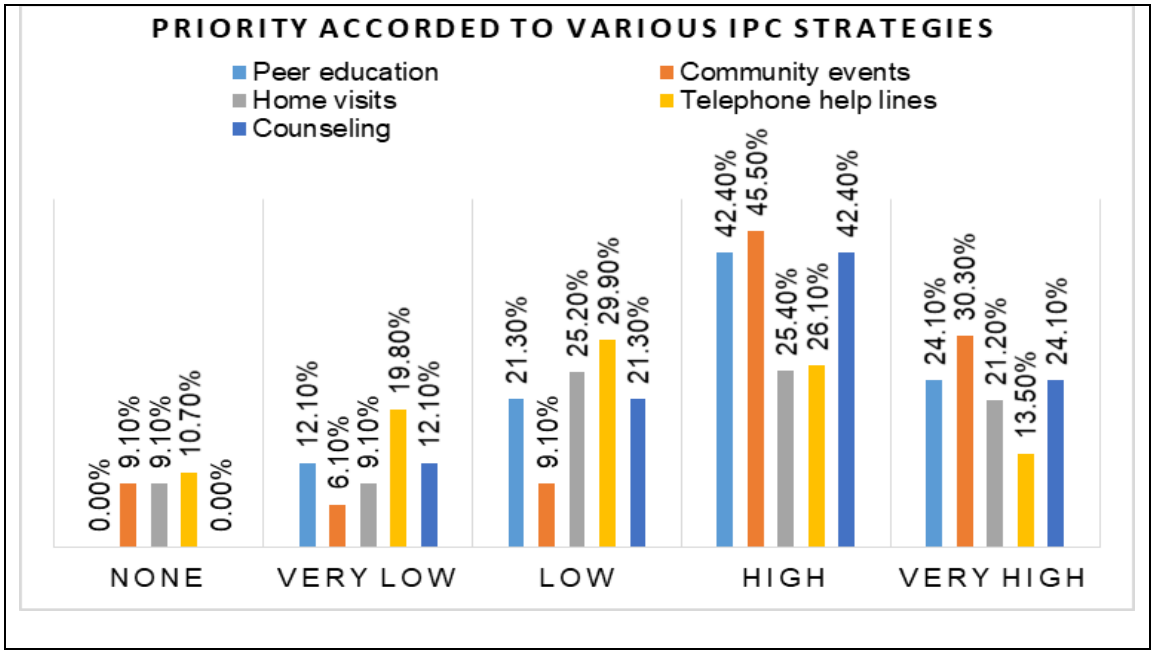

Figure 4.2: Priority Accorded to Different Communication Strategies according to the Service Providers.

The findings of the male participants of focus group discussions show that peer-based education was generally lacking in the fish landing beaches. They reported that despite there being active groups that were brought together by particular interests, such as work, games, like pool, *ajua* and so on, which could form a perfect entry points for VMMC campaigners, the programme implementers were seldom seen on the ground,

thus letting go of an important opportunity to net potential clients for VMMC. Some participants said:

> *Here at the beach, there is very high incidence of STIs and HIV/AIDS. But I have not seen those people create schedule where peer groups or youth like us meet to talk about their health… like circumcision, or HIV. These guys could talk to the groups…but here we don't see them.* [FGD1-01]

> *I have seen them approach us here and they said they are peer educators and were looking for men. They came from the nearby village. They came only once…I saw them only once… I think they did not come again.* [FGD1-05]

The female participants of the focus group discussions agreed with their male counterparts:

> *We don't see these people we have a number of social groups where we could discuss these issues…but those people do not come to us. I think we can work with them...if at all they want* [FGD2-01]

> *The only time I saw them was when they came to talk to us about circumcising our son. But as for talking to our group, I have not seen them anywhere.* [FGD2-02]

On counselling, the FGD findings indicate that it was done for those who had already agreed to be circumcised. Thus, those who had not been circumcised said they did not know about counselling, while participants who had undergone the practice admitted having gone through the process of counselling. Some of the participants had the following to say:

When I was ready to be circumcised, I went to the hospital and I was given a raft of advice before being circumcised. I was told what to do and what I should not do during and after. They told me that VMMC was not a license to engage in indiscriminate sex and that I must remain careful [FGD1-02].

One FGD participant who had not taken the cut said that he had not seen any counsellor at his place of work or at home.

I have not seen them. I only hear about counselling in VCT. I have not gone for VCT. I don't know if it is also there for circumcision. [FGD1-05]

Key informant interviewees provided further insight into the communication strategies used in the programme. One interviewee who had worked in the programme since its inception in 2008, thus having the advantage of working with different implementing agencies, revealed that the programme had been implemented by four non-governmental agencies, with the MoH being the constant partner. During each phase, different communication approaches were used:

At the inception, some partners were using champions… Here once you are circumcised, you are then told to go and talk to your peers or colleagues about the benefits. Others were just going to schools to do general talks… Now the current implementers are using what is called age appropriate approach (AAA), a client centred approach, where we have IPC agents who are given a one-day sensitization talk, just to go and work as peer educators. Then we have sub-county mobilisers, who work hand in hand with the peer educators. Now we are also trying to rope in community health volunteers (CHVs). [KII – 03]

The managers elucidated the ways in which they employed different strategies such as peer-based education, counselling, community events and telephone helpline. However, they explained that the programme operated in such a way that the implementers handling different communication strategies worked as a team, complementing each other.

> *At every facility there must be these people… One team should have a surgeon, assistant surgeon, one infection prevention officer, one counsellor, a mobiliser and then a set of peer educators. So that becomes a complete team.* [KII-03]

The findings reveal that the VMMC implementers used different strategies for different purposes and at different times within the campaign period. It, for instance, came out clearly that peer-based education was the most commonly employed method for creating client buy-in. One team leader explained thus:

> *We have peer-group strategy which we use in different ways. One, we engage and train peer educators who serve as staff… They engage one-on-one with their peers. Most of our clients are youth. So they engage youth to work with them… We also use satisfied clients as champions. These are people who have successfully gone through the circumcision process. They also engage their peers who have not been circumcised. These peer-type of people then share with us the challenges that they go through, which we try to address* [KII-03]

Another key informant interviewee said that the peer educators are the first line of "attack":

> *Usually we have the peer educators and community mobilisers talking to the people first. Once they have done this and the people have come to the facility, trained counsellors then engage with them* [KII – 01].

It was revealed that because the peer educators and mobilisers were not from the medical background like clinicians and nurses, they faced hard times dealing with questions touching on medical expertise. To solve this, those with medical expertise teamed up with peer educators, mainly when carrying out campaigns in high schools or colleges.

> *When they are going for health talks, for primary schools, they can do it by themselves. But for high schools and post-secondary institutions, they have to go with the medical team. The counsellors, maybe the surgeons because some of the peer are educated, some are not. And since VMMC is a package, we have to talk to them about HIV, screening and treatment, counselling and testing…* [KII – 02]

The KII findings further show that counselling was another important IPC strategy the implementers used to advocate VMMC. The interviewees revealed that they used counselling sessions to give clients clear guidance on how to manage themselves, particularly after the cut.

> *The counsellor has to give the clients clear in-depth information that will help them prevent adverse events or reduce them. A counsellor has to start by giving the right information to the client. Things like… after circumcision, you are not supposed to engage in sex for the next six weeks… you have to observe hygiene, and so on.* [KII – 01].

With regard to telephone helpline, the interviewees said that this was used; but mainly after circumcision when clients called mainly to report cases of emergency.

> *We have a toll-free number and we also have a hotline number, which we display on our advertising chats…That is on our brochures and also on our flyers and when clients come to the facility, these are the numbers that are written on the client's card…They must have these numbers… the toll free and the hotline and the surgeon's number.* [KII-01]

Overall, the study established that peer-based communication approach featured more prominently in the field than at the health facilities. This was because there were few cases where the target clients would go to the health facilities of their own volition to seek information on VMMC. Rather, the service providers had to mobilise them through persuasion.

Although this study was cognizant of the challenge posed by the lack of a generally accepted definition of the term peer or peer-based intervention (Weber *et al.*, 2010), it drew a clear distinction to separate peer based IPC from interpersonal communication led by expert 'outsiders' by adopting the definition of peers as people who share a common culture, language, and knowledge about the problems that their community experiences (Szilagyi, 2002). In research context, they share a health problem, or a potential for change in their health status.

Despite not being clearly demarcated, the findings indicate mixed models of peer-based communication in the VMMC programme. The first model was the group-based peer education intervention, where peers were "showcased" during community mobilisation campaign meeting to bring out their experiences with a view to influencing their colleagues to adopt VMMC; while the second was the dyad model, which provided a one-on-one engagement opportunity.

However, the study could not establish whether this was a conscious arrangement by the implementers. Further, it was not clear from the findings, which model was prescribed, at management or institutional level, or was more successful. Besides, it was found that at times these models were mixed in the advocacy programmes.

Majority of the implementers preferred dyad, saying that because of its more interpersonal nature, its results were easy to evaluate with greater level of accuracy. This standpoint supports Szilagyi (2002), who argues, in his study on peer education on tobacco issues, among socially disadvantaged children in Hungarian communities that the model allows the peers to individualise the intervention to meet participants' needs and permit flexibility with participants' schedules and logistical concerns. It can also facilitate a more personal bond between a participant and a peer leader, increase the peer's legitimacy with the participant, and increase the participant's willingness to sustain the proposed behaviour.

However, despite the dyad model being seen as the best approach for interpersonal health communication due to its one-on-one nature, this study holds the view that its employment as the only model in the VMMC programme is not tenable in the programme's current implementation structure. The peer-educators were casual employees whose pay depended on coverage and were therefore required to reach as many people as possible. They, therefore, found it more realistic to deal with groups rather that the dyad model.

The study also noticed several instances where there were no clear lines in relation to which type of peer-based interpersonal communication was employed with a tendency towards a combination of both group-based and dyad approaches where workplace event were held and lay advisors, commonly known as community health volunteers (CHVs), would visit group members who were unable to attend group sessions. This combination, according to Allen *et al*. (2001), provides the answer to the dilemma posed by having to find the perfect fit between the two models, each of which has its logistical and structural complications.

While, in some instances, there were glaring differences between the mobilisers and target clients, the tag "peer educators" remained in use with respect to the mobilisers. For instance, mobilisers serving in the villages, fish landing beaches and market centres also served in schools, where their clients, the pupils, were of totally different demographic profiles.

Nonetheless, their title remained "peer-educators" even among the pupils. This was reported to pose the problem, particularly of age and levels of understanding, besides social circumstances, all of which are key factors in peer relations and interpersonal communications (Wamoyi *et al.*, 2010). The negative effect of this was reported to be more acute in schools, where the mobilisers encountered challenges of credibility arising from their apparent inadequate subject knowledge, as their understanding of the life sciences appeared to be lower than that of their clients, the students. Apparently, this is a common challenge in peer-based interventions, which, according to Weber *et al*. (2010), is brought about partly by the inability to put together people with absolute similarities in terms of education, age, training-related competence and general worldview. One informant reported that this challenge was also experienced in some of the homes or social places, where the peer-educators were confronted with questions beyond their cognitive grasp.

This finding supports the principle of homophily in Rogers' (2003) diffusion of innovation theory, which states that communication is easier between people of similar characteristics. Moreover, the peer-educators were often viewed by both teachers and students as strangers as they were not part of the school community. This situation is congruent with the findings of a study done by the UNAIDS (1999: 16-17) on the engagement of peer-educators in HIV prevention campaigns in Jamaica, where one challenge of "utilising peer education with factory workers is the ability to make the factory administrators accept the process and foresee the advantages of peer education activities in the long run, as restrictions make it difficult for outsiders to arrange activities for factory workers."

To address these challenges, the VMMC implementers reported that they had devised a method where both trained medical personnel such as nurses and clinical officers worked alongside the lay-educators to deal with more complicated health related issues. In other studies this issue has arisen, where the suitability of peer educator vis-à-vis expert health practitioners has been questioned. In their study on VMMC campaign in Malawi, Simioni *et al.* (2011) juxtaposed the role of peers with that of experts in a purely medical situation where medical experts would best convey the technical aspects of the surgery and research supporting widespread circumcision. However, the peer-educators find support in the counter argument that, although the benefits of the procedure are amply demonstrated, convincing adult men to get circumcised may be difficult and this is where peers find their relevance and usefulness. This argument is valid when considered against the various stages, particularly the persuasion stage of behaviour adoption in the Diffusion of Innovation theory (Roger, 2003).

This study holds the view that peer involvement remains relevant even in highly technical health matters like HIV and VMMC. This is even more so where we are dealing with socially complex interventions like VMMC which, if not handled properly through a well thought-out peer interaction, has the potential of turning counterproductive.

This viewpoint is supported by Simioni *et al*. (2011: 10), who argue that peers may be needed to support men, after healing, to ensure that there is no behavioural disinhibition (leading to increased risky behaviours that would counteract any positive effect of the circumcision)."

The quantitative results of the study imply minimal use of counselling, either through physical contact or via telephone helpline, giving an impression that counselling as an IPC strategy is not popular or suitable in this particular campaign. However the qualitative findings, particularly from the key informant interviews clarify and debunk this impression by showing that counselling was actually another important IPC strategy that the implementers used but mainly on the second and third tiers of the VMMC campaign. In most part, counselling came after the clients had been "won over" in the mobilisation campaign. Counselling sessions gave clients clear guidance on how to manage themselves, particularly post-operation.

As Goldstein *et al*. (1999) postulate, effective healthcare interventions seek to teach, through counselling, self-management and engage problem-solving and coping skills, thereby enabling the patient to undertake the next immediate steps in the targeted behaviour change. The counsellors, according to key informants, gave the clients critical in-depth information to help them prevent or minimise adverse events. This includes providing technical advice on what to expect during the surgery, what to do during the recovery period, and on matters of hygiene.

In behavioural counselling, where HIV prevention and VMMC adoption counselling is located (Whitlock *et al.*, 2002), the primary care clinicians or other health care staff offers additional advice to address barriers to changes, increase the client's motivation and self-help skills, and help the client secure the needed support for successful behaviour change or adoption.

The findings show that pre-operation counselling was done mainly at the health facilities where the surgery was also done, Post-operation counselling was done during follow-up home visits or through telephone helpline, when the counsellors engaged with those already circumcised, to give guidance on issues of hygiene and general ways of handling themselves, including during emergencies. However, although the implementers interviewed indicated that there were toll-free telephone lines for the purposes of communicating with clients, a majority of the clients reported lack of awareness of their existence, while those who knew about the helplines said that, more often than not, they didn't go through.

Moreover, the implementers accepted another shortcoming on the part of the telephone helpline handlers - lack of technical medical knowledge, something that forces clients to wait for long on the line as medical personnel were sought to respond to their issues. This finding runs counter to Sim and Golightly's (1998) argument that telephone helplines can provide rapid and immediate access to information, advice and support. The discrepancy here can be traced to differences in physical and social infrastructure, which aid telephone helpline in health campaigns.

Hughes and colleagues (2002) argue that the cost of providing a helpline within each health outlet manned by medical practitioners can be out of the reach of the implementing agencies, taking into account the cost of maintaining the lines, technical staff's time and additional consultations.

A further shortcoming with the telephone helpline in the VMMC campaign was found to be the fact that most of those handling this docket were not only lacking in technical medical training but also had no specialised training in telephone handling, including telephone consultation skills, interpersonal communication skills, listening and questioning and empathising, advice giving, clear communication, following protocols, checking that advice has been understood, negotiation skills and, in some cases, counselling skills as advised by Pate *et al*.(1997).

In Siaya County, where health facilities are few and far between (NBS, 2019), telephone helplines as a communication strategy, can be particularly useful as it can save those seeking medical advise the long distance walk in search of such services. Fortunately, this study confirmed a high level of clients' confidence in the service provider as people they can trust with their confidential health issues, a factor that, as Bennett (2000), and Hudson-Allez (2000) say, the programme's implementers can leverage on to make counselling work to enhance the uptake of VMMC.

4.7 Communication Training and IPC Competence

The second question this study sought to answer was the level of interpersonal communication training and competence among those charged with the implementation of VMMC particularly at the operational level. Specific factors that were considered included: formal training in communication, duration of training, portion of training dedicated to IPC, service providers' self-rating in communication competence and target clients' rating of providers' interpersonal communication competence.

4.7.1 Formal Training in Communication

When asked whether they had undergone any formal training in communication, 71.4 per cent (n=24) of the surveyed service providers indicated they had been trained in communication while 28.6 per cent (n=11) indicated they had not, as shown in Figure 4.3.

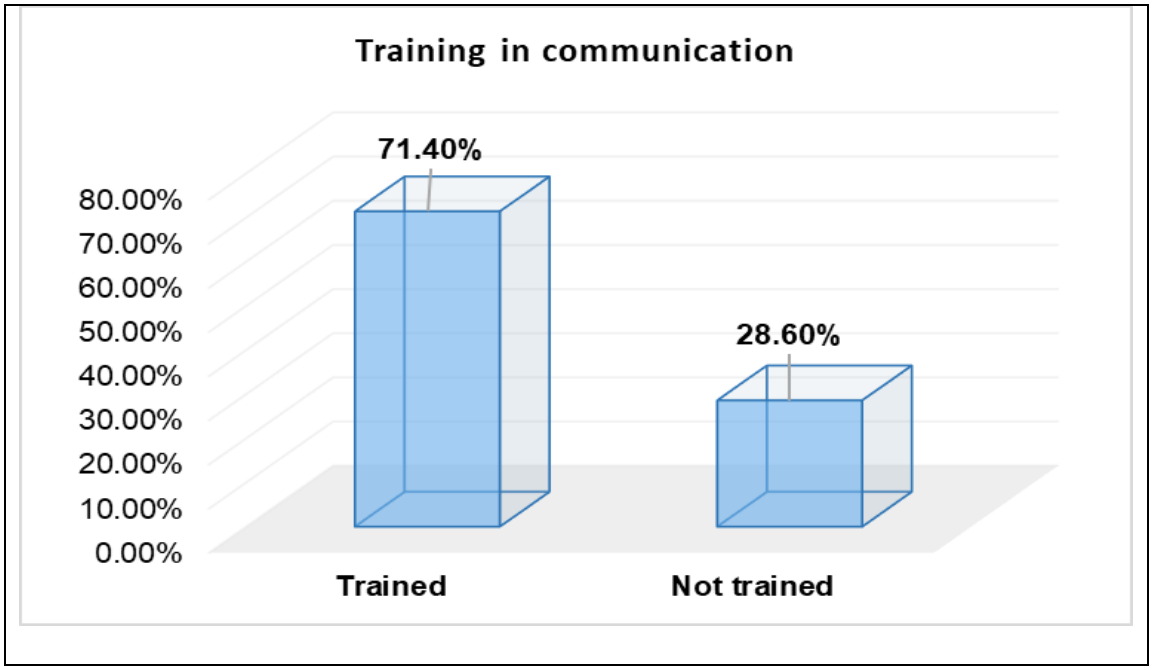

Figure 4.3: Formal Training in Communication

4.7.2 Duration of Communication Training

This section sought to establish how long those who had formal training in communication had taken in their training. The highest concentration was for those who attended training for less than one month at 34.3 per cent (n=12), followed by those whose training lasted between two and seven months at 25.3 percent (n=9), while 14.1 percent (n=5) the respondents had been trained for between eight and 13 months. Only 2.5 percent (n=1) of the surveyed programme implementers had undergone

communication training lasting more than 20 months. Up to 16.9 percent (n=6) of the respondent had no formal training in communication, as shown in Figure 4.4.

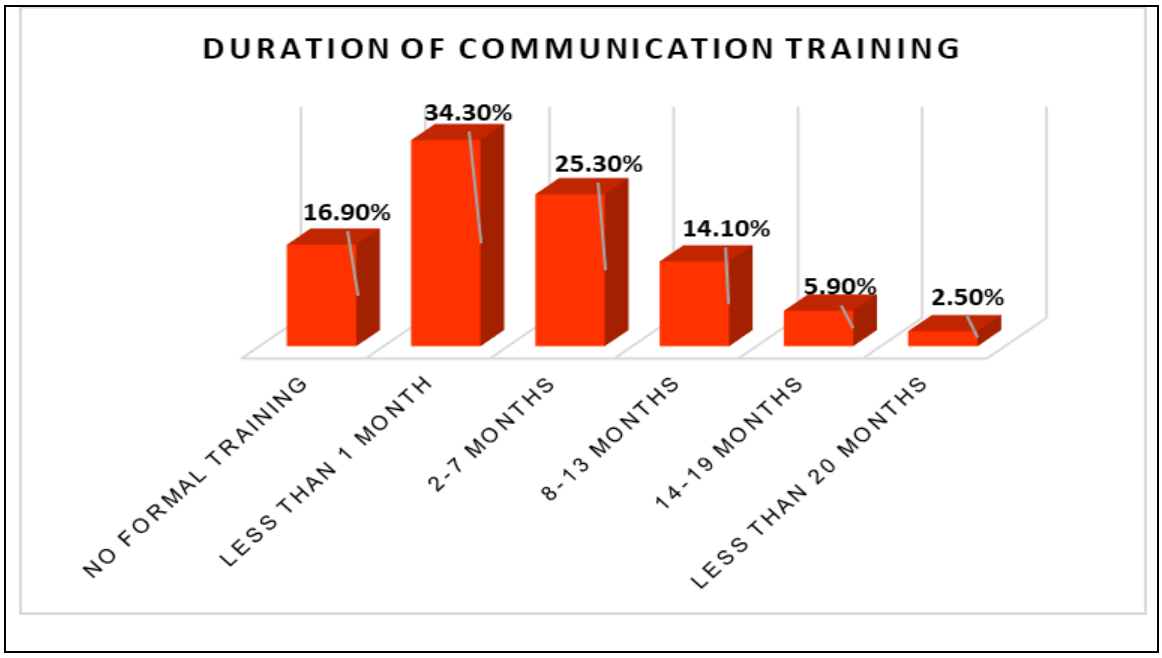

Figure 4.4: Duration of Communication Training as Reported by Service Providers

4.7.3 Portion of Training Session Dedicated to IPC

This sector of the study sought to establish from the respondents, the amount of time dedicated to interpersonal communication in the training that they underwent. On the portion of the training allocated for interpersonal communication skills, 48.7 percent (n=17) said they had been trained for up to a quarter of the training duration, an indication that a good number of the implementing staff had had a reasonable amount of training to handle IPC under the VMMC programme. However, the findings also show that up to 18 per cent (n=6) of the staff, who had not undergone any training in communication had no idea of what interpersonal communication was (Figure 4.5).

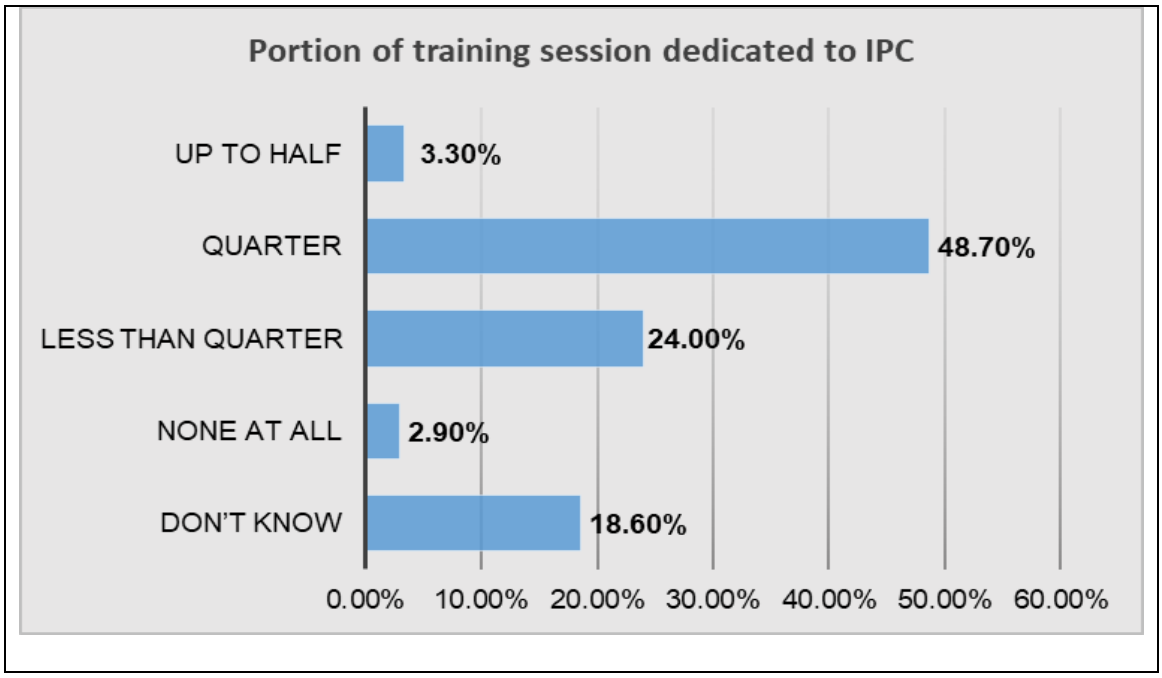

Figure 4.5: Portion of Communication Training Dedicated to Interpersonal Communication

4.7.4 Areas of Communication Covered by Programme Implementers

Out of the five areas of communication checked, communication skills had the highest percentage of coverage with 91.2 percent (n=32) indicating that they had been trained in communication skills, while interpersonal communication followed with 49.8 percent (n=17) of respondents saying "Yes". Only 19.2 percent (n=7) said they had been trained in information, education and communication (IEC), while media relations scored the least with only 6.9 percent (n=2) saying that the area was covered in their communication training as shown in Figure 4.6. It is observable from the sampled training programme that in most training on communication skills, interpersonal communication was covered as an integral component.

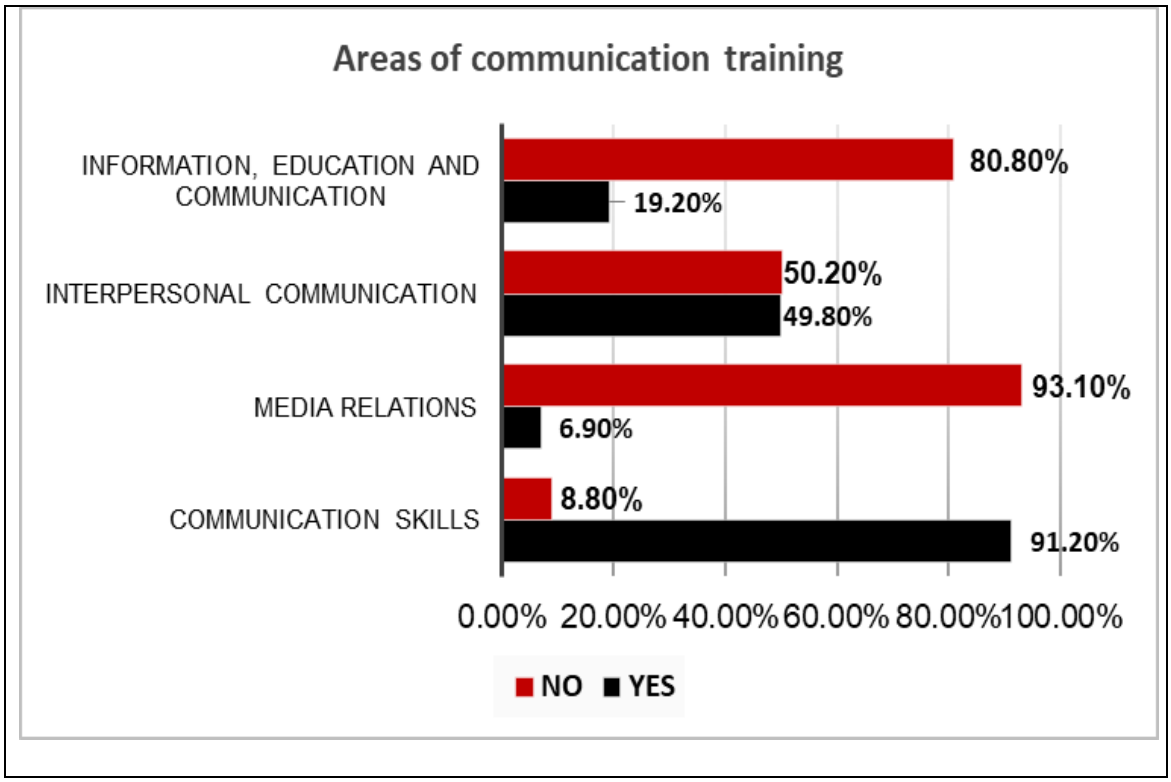

Figure 4.6: Areas Covered in Communication Training

4.7.5 Service Providers' Self-rating in IPC Competence

Here the study sought to understand the service providers' view of themselves regarding their IPC competence. The findings show that 45.1 percent (n=16) thought that they were competent, while 30. 6 percent (n=11) considered themselves very competent in interpersonal communication. Only 14.5 per cent (n=5) said they were fairly competent while 9.8 percent (n=3) thought they were not competent. None of the programme's implementers surveyed thought they were "Not competent at all" (*Figure 4.7*).

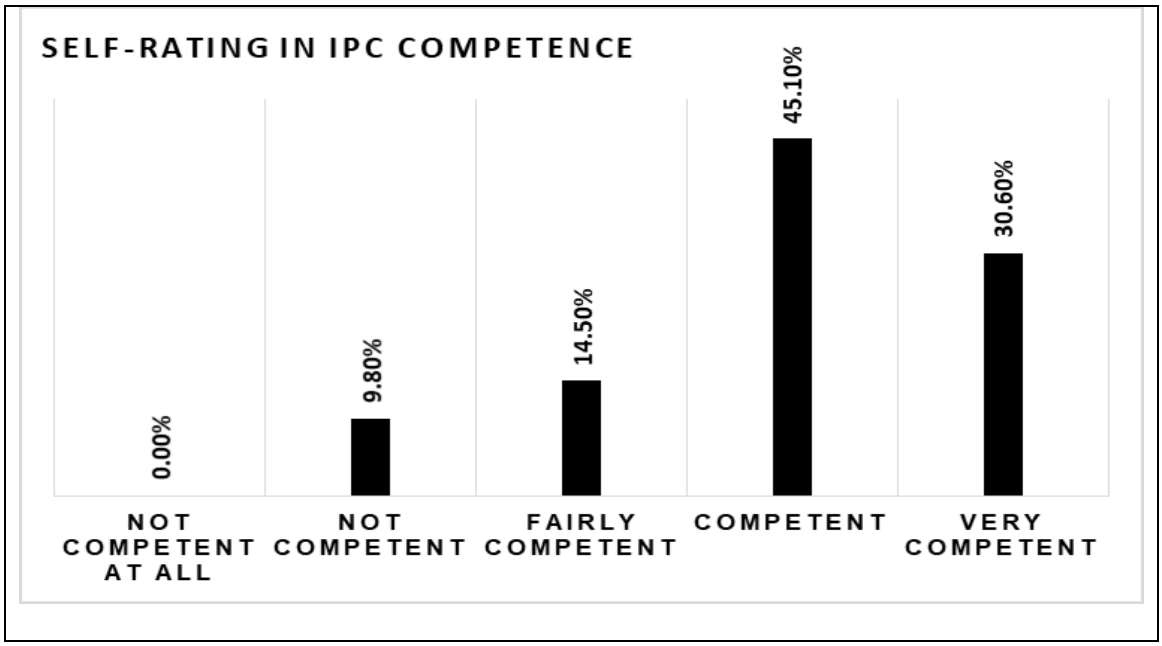

Figure 4.7: Self-Rated Competence in Interpersonal Communication

The key informant interview findings show that qualification in communication was not a prerequisite for employment. Furthermore there was no specific communication training manual for those involved in the implementation of the VMMC programme.

> *As we speak, NASCOP is writing the VMMC training curriculum, the only manual which is out is that for circumcision under local anaesthesia for adults, EIMC (early infant male circumcision), but for counsellors or mobilisers, I think there is no training manual of any kind. They are just being sensitised on the key messages about the programme. There is no training which focuses on communication per se. [KII-03]*

4.7.6 Target Clients' Rating of Service Providers' IPC Competence

Here, the study sought to establish the target client's view on the level of knowledge as exhibited by the service providers during their interactions.

The findings indicate that 8.4 percent (n=21) of the respondents rated the service providers as either “not competent” or “not competent at all,” while 44.5 percent (n=112) said they were “competent” and “very competent.” Up to 47.1 percent (n=118) of the respondents said they ‘Don’t know”, meaning they had not interacted with the service provider and, thus, could not proffer any judgment on their competence or otherwise. The findings, which are shown in Figure 4.8, relate well with the findings on whether the respondents had discussed their concerns on HIV and VMMC with the service provider, where 45 percent (n=113) said they had not interacted with the VMMC programme implementers.

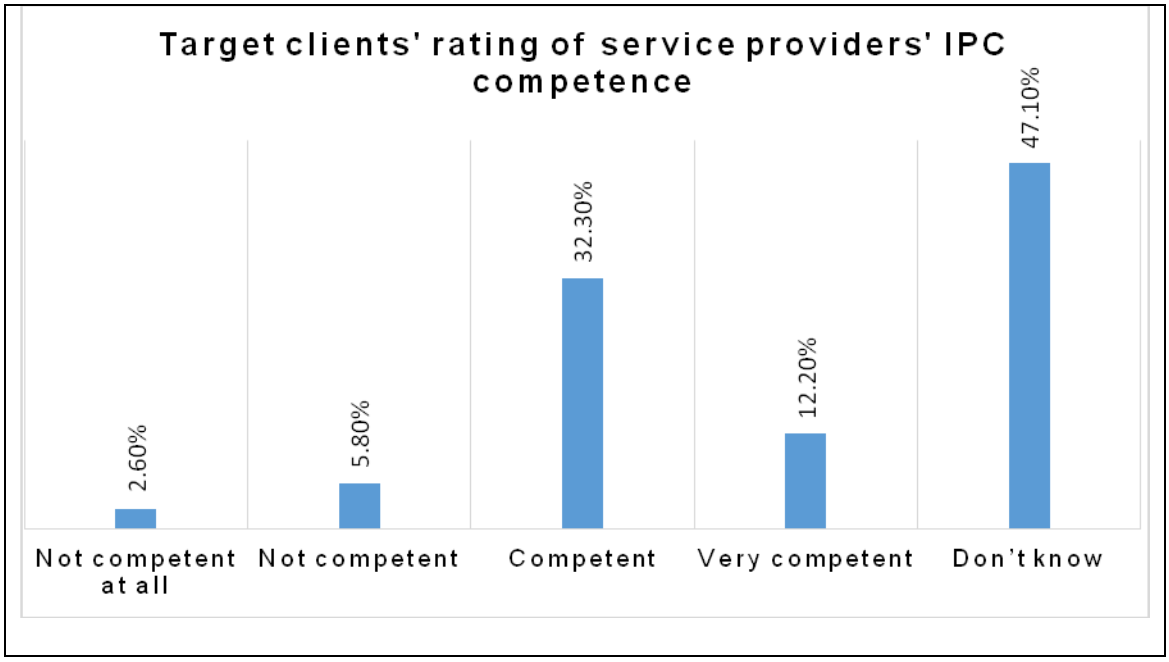

Figure 4.8: Target Clients' Rating of Service Providers' Interpersonal Communication Competence

In the key informant interviews with implementing staff at supervisory and managerial levels, the researcher sought to establish the level of training and competence of the mobilisation team in communication in general and interpersonal communication in particular. One way of ensuring competency in communication was to either have demonstrable communication competence as a prerequisite for employment of the operational or supervisory staff, or making communication training mandatory upon employment. The findings show that qualification in communication was not a core-requirement for employment. Asked specifically whether they had communication experts in their teams, one supervisor said:

> *When we started CHS in 2016, it was not there…They then brought in the, eh… information people; but they also have not been trained in communication. They ended up being deployed to take calls, and they would go to schools to check the number of clients who've been booked; they'd also go to pick consent forms from parents who have been communicated to... but it was not working. They were ill-equipped as communication experts...They were not experts, you know… [KII-01]*

The findings from all the informants further indicate that although the programme has a team of staff called IPC (interpersonal communication) agents, who were tasked to undertake client mobilisation, their interpersonal communication competence or expertise was wanting. In any case, it was revealed that this group was only given one day of general induction, where communication was included. Further, although it was revealed that there was training on communication in the formal medical training curricular, particularly for those undergoing medical training at almost all levels, it was

also clear that a sizeable number of those enlisted in the VMMC programme campaign, especially as community mobilisers, had not undergone medical training of any kind.

Thus, it could not be assumed that they had had basic training in communication, hence the acute need for training in communication. One manager acknowledged the complex nature of HIV and VMMC and, hence, the need for specialised interpersonal communication training:

> *…But for mobilisation, for example in VMMC programme, there're ways in which these guys are supposed to engage their clients so that a client can feel he is part of it. Because, eeh, remember, VMMC in Kenya is being implemented in three different set ups: One, there is a traditionally circumcising community, another one is the traditionally non-circumcising community. Then, there are those in urban centres, you don't know whether they circumcise or not, unless you go to the data. So there is need for a well thought out training manual with distinct messages and message delivery methods for each set. So far, this is lacking [KII-04]*

Furthermore, the interviews revealed that there was no specific communication training manual for those involved in the implementation of the VMMC programme.

> *As we speak, NASCOP is developing the VMMC training curriculum, the only manual which is out is the one for circumcision under local anaesthesia for adults, and early infant male circumcision, but for counsellors or mobilisers, I think there is no training manual of any kind. They are just being sensitised on the key messages about the programme. There is no training which focuses on communication per se. [KII-03]*

The above findings support the view that even if there is health communication training at the global level, as offered in medical training institutions, there is need for case specific communication training so that the entire implementing team is able to appreciate the general human communication, including cultural communication and communication across ages, gender, as well as message design and message pitching. Key informant interview findings specifically show that those who undertook their medical studies at diploma and degree levels only interacted with communication as a course when they took the general communication skills unit offered to students of all disciplines. There was no focus on communication for those hired in the field and trained on-job specifically for the VMMC programme as their induction focused mostly on how to clinically and hygienically carry out the operation. Some admitted that poor communication planning and lack of adequate sensitisation prior to planned operations had led to low client turn out and poor final response. One supervisor said:

> *At times, we assume that the people are interested in VMMC because we, the implementers, think it is important without engaging them to know how much they actually value the whole thing.* KII-02]

The above scenarios support the arguments of various scholars (Kim, 1999; Fallowfield 1998;Schiavo, 2007) that healthcare providers should, as a minimum, be specifically trained in interpersonal skills to help them shed off their socio-cultural biases and work with the client for better results, arguing that that it is not right to assume that effective communication always occurs naturally. Alotaibi (2018: 24) avers that one of the most common barriers facing health workers in communication is their limited training in using proper strategies in communication with patients and families. He asserts that lack

of preparation with skills, knowledge, and experiences in the communication aptitudes "is the most obvious difficulty confronting the nursing field in this era."

4.8 Barriers to Interpersonal Communication

In this section, the study sought to establish if there had been communication challenges between the service providers and their target clients, something that could adversely affect the outcome of the VMMC programme. The respondents were asked about specific issues, which could be communication barriers, as discussed below.

4.8.1 Time Constraints

The study sought to establish whether, from the perspective of the service providers, the time allocated was adequate. For peer education, 59.8 percent (n=21) of the respondents thought the time allocated was "not adequate" and "not adequate at all", while 40.2 percent (n=14) were of the view that the time was "adequate" or "very adequate." A total of 55.5 percent (n=19) of the respondents were of the view that the time allocated for community sensitisation was "not adequate" while 44.5 percent (n=16) thought it was "adequate." The findings further indicate that up to 63.4 percent (n=22) of the respondents said the time they had for follow-up visits was either not adequate at all or not adequate, while only 36.6 percent (n=13) thought it was enough.

However, on pre-circumcision counselling, up to 56.7 percent (n=20) agreed that the allocated time was adequate, while the rest (43.3% or n=15) thought otherwise. In the case of time allocated for post circumcision counselling, the respondents were divided more or less equally, with 51.1 percent (n=18) saying the time was adequate, while 49.9 percent (n=17) did not agree (Figure 4.9).

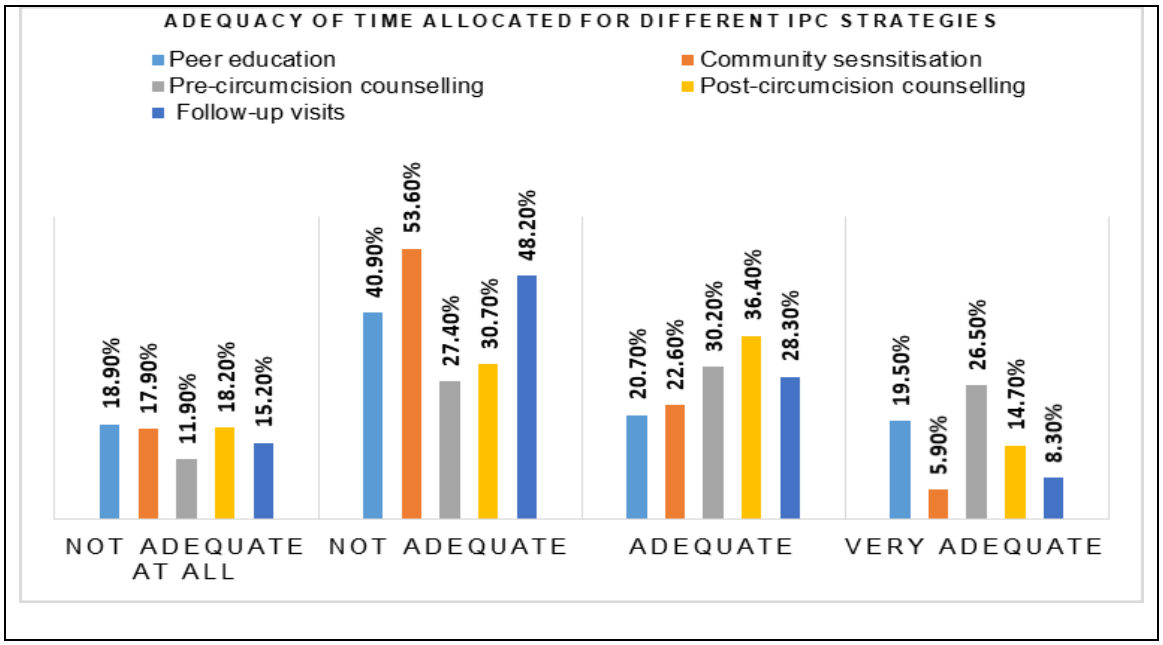

Figure 4.9: Service Providers' Views on Time Allocated for Various Interpersonal Communication Strategies

Further, the study sought to know how, from the perspective of the service providers, time constraints affected the general provider-client consultations. The findings show that time was a major constraint among the implementing staff, with 70.7 percent (n=25) of the respondents saying that lack of time was "to a large extent" and "to a very large extent" a barrier to effective communication. However, 20.2 percent (n=7) thought time constraint was a barrier only "to a limited extent." Only 6.3 per cent (n=2) of the

respondents thought it was a barrier “to a very limited extent”, while a paltry 3.0 percent (n=1) did not think it was a barrier “at all.”

On the part of target clients, the findings show that the majority of the respondents were of the view that time constraints did not pose a challenge to interpersonal communication between them and VMMC implementers. Up to 30.2 per cent (n=76) thought time constraint was a communication barrier only “to a limited extent”, while 28 per cent (n=70) said it was a barrier only “to a very limited extent,” and 6.5 per cent (n=16) said it was not a barrier at all. However 25 per cent (n=63) were of the view that time constraint hindered communication on VMMC “to a large extent” and 10.3 percent (n=26) thought time constrained their communication “to a very large extent.”

The key informant interviewees indicated that time constraints constituted a major barrier especially among the operational staff, who had to distribute time to a large number of clients. The supervisory staff, who occasionally accompanied the mobilisers to the field, said the field staff have tight targets to meet, with each of them allocated a specific number of clients to serve within given time slots. This put a major constraint on them, leaving them with no ample time with each client. It was established that the bulk of the mobilisers, who included peer educators and community health volunteers, were not on full time employment of the VMMC implementing agencies, and had to share their time between the mobilisation work and their other economic and social engagements, a factor that exacerbated the time constraints.

There exists, however, a significant difference in perception about adequacy of time between clients and providers. Among the target clients, time is not seen as key barrier to effective interpersonal communication, with majority (over 66%) saying time was a barrier only "to a limited extent." These findings are in consonance with those of Norouziana *et al.*(2016) in their study of the barriers to effective nurse-patient communication, which showed that health workers' viewpoints were at variance with those of their clients, feeling more strongly that time constraints was a barrier to health communication than their clients.

From in-depth interviews with the implementers, this discrepancy can be attributed to the priority that each group attaches to the VMMC programme. Whereas the service providers attached utmost priority to the success of the intervention, the clients' focus was on earning their livelihood and anything that came between them and their economic activities was a distraction. Moreover as Schiavo (2007) argues, the onus to create good understanding in a heath communication dyad rests with the health worker. In general terms, many studies have identified time constraint as a major hindrance to positive health outcomes. During consultation, the clients do not get sufficient time to present their story and are often interrupted midway (Park & Song, 2005).

From the health service provider's perspective, the demands and long working hours are often too burdensome to create enough time for effective interaction (Maguire, 1985). Yet, allowing parties enough time to express their concerns and symptoms is likely to translate into a better provider-patient relationship as well as to fewer follow-up visits,

and shorter, more focused, interactions, an ideal that is hampered by the reality that primary health personnel are expected to deal with an increasing number of patients to satisfy healthcare policies in the face of cost-cutting interventions.

4.8.2 Language Difference and Levels of Education

Up to 65.3 per cent (n=164) indicated that language difference was a barrier in their communication with the programme's implementers, with 38.8 per cent (n=97) and 26.5 per cent (n=67) indicating "to a large extent" and "to a very large extent" respectively. Tied to language was the clients' level of education vis-à-viz that of the service providers. Up to 69.4 per cent (n=174) of the respondents said level of education was a hindrance to effective interpersonal communication in the VMMC campaign. From the perspective of service providers, a total of 47.4 percent (n=119) and 22.9 percent (n=57) said that language difference between the service providers and the target clients was a barrier "to a large extent" and "to a very large extent" respectively, bringing the total of those who fully agreed that language difference between them and target clients was a barrier to 70.3 percent (n=176). Only 10.3 per cent and 8.8 per cent said language difference was a barrier "to a limited extent" and "to a very limited extent" respectively, while 7.6 percent (n=19) of the respondents did not think it was a barrier at all. At the same time, over 63 percent (n=22) of the staff agreed that their target clients' modest level of education was a barrier to effective interaction between the two parties.

Another area where the providers and the clients were in agreement, as a possible barrier to their interaction was level of education. The clients thought that some providers looked down upon them because of their low level of education, while the providers, although not accepting the clients' claim, said the problem was caused by the clients' failure to understand "some basic" health information and issues.

This finding is in agreement with another study conducted in Mangochi, Malawi that says the education gap between the two interactants was a key barrier in accessing maternal services (Seljeskog *et al.*, 2006). To address this, (Madula *et al.*, 2018) propose that providers should offer patients clear and concise means to understand health information regardless of the latter's education level. Thus, communication by healthcare providers has to be designed for the average or illiterate person to understand. It must be put in simple language (Bohren *et al.*, 2014).

4.8.3 Cultural Issues on Gender and Age Differences, and Sexuality

The findings also reveal a raft of other issues that posed challenges to interaction between the target clients and the programme's implementers. When asked if they thought gender and age differences were a barrier to communication, most of the clients answered in the affirmative, with 69.7 per cent (n=175) of the respondents saying that, "to a large extent" and "to a very large extent," gender difference was an impediment to their communication with VMMC campaigners, and 64.5 percent (n=162) saying the same concerning age differences between them and the service providers. The service providers concurred with their target clients on age and gender differences between

clients and service providers, with 69.9 percent (n=175) of them being of the view that age difference was a major hindrance to their communication with VMMC clients, while 61.8 percent (n=155) thought the same about gender difference. However, 23.4 per cent (n=59) of the clients thought age difference was not a barrier at all while 20.6 per cent (n=52) thought the same way about gender difference between them and their target clients.

In the key informant interviewees also reported varying degrees of difficulty when it came to navigating the complex web of cultural sanctions, contradictions, inhibitions and other nuances. The interviews revealed cultural issues cropping up in matters such as provider-clients gender differences and provider-client age disparities.

> *These people are very particular about relationships. Some people will even refuse to be circumcised by ladies, others do not want to discuss with our lady staff in the field, especially when the ladies are much younger [KII-02].*

The above statement point to the twin issues of gender and age. To partly get around this hurdle, the interviewed managers said they had resorted to employing the age-appropriate approach in information dissemination, focusing on among others, using champions."

> *What we are advocating most now is use of champions. For example if we get an old man who has been circumcised under the programme, that is the man we'll use to approach and convince his peers through peer education. Once we map out the area of resistance, we will focus on group discussion. Then they say "we need one of us, who knows what we go through, to talk to us"* [KII-O3].

The study also identified culture as an issue of concern in a wider sense – beyond gender and age differences. The programme's implementing team had a staff of mixed ethnic origins while the target clients were generally homogeneous comprising mainly members of the Luo community. The informants reported varying degrees of difficulty when it came to navigating the complex web of cultural nuances, contradictions and inhibitions.

> *Cultural challenges are there… Like say in EIMC (early infant male circumcising), since we assumed that to circumcise an infant, all we needed was the parents' consent. But then we realised there's the grandmother. The grandmother, particularly the paternal one, has such a strong cultural attachment to the male grandchild… You know, traditionally, a male child is his grandmother's husband and you are courting trouble if you go ahead and circumcise a boy without the grandmother's consent. We've once had to involve the chief to restore peace between a woman and her mother-in-law over circumcising a boy.* [KII-02]

A number of both clients and service providers surveyed admitted that the culturally non-circumcising nature of the Luo community, coupled with their initial perceptions on AIDS disease, complicated conversations on HIV/AIDS and VMMC. Moreover, family relations had a significant bearing on the communication, where service providers reported complex beliefs pertaining to sexuality within the wider family circles. For instance, the key informants reported that the decision to circumcise a boy, particularly in the rural setting, did not lie with the parents alone; on the contrary, the boy's paternal grandmother had to give her consent since, traditionally speaking, the

boy is her "husband," and therefore she is an "significant other" in the boy's life, and thus her assent is needed for VMMC to take place.

This finding is in consonance with Dutta-Bergman's (2005) theoretical standpoint, which advises removal of health decisions from the individual, to "significant other" as advocated by Fishbein and Capella (2006) and, further, to the realms of the collectivistic (Dutta-Bergman, 2004). The finding is also in consonance with another study in the same Luo community (Juma *et al*., 2014), which found that the boy child was considered a special member of the society, an important source of future support, whose life must be protected by all.

Age was also found to be an issue and a potential impediment, as young mobilisers found it difficult to discuss sexual issues with people above their age bracket. This finding is in agreement with an earlier study on factors affecting effective communication about sexual and reproductive health issues between parents and adolescents in South Africa, where Motsomi *et al.* (2006) found that cultural beliefs act as an inhibiter in mediating and addressing issues of sex, and sexual and reproductive health. Parents or people of the age of parents find it difficult to speak openly to the youth on sex matters because, according to the respondents: "our culture does not allow us as parents to directly talk to our children about issues of sexual and reproductive health…" Matters to do with sex are traditionally a taboo in our culture; such are private subjects, not befitting public discourse."

The finding has consistence with other studies on these matters. In his study on parent and adolescent male's communication about sexuality in the context of HIV/AIDS in the eastern region of Ghana, Botchway (2004) found that issues of sexuality and reproductive health are culturally sensitive hence are often not openly discussed across ages. Guilamo-Ramos *et al.* (2008) says the same, particularly of communities where cultural beliefs are still intact. On their part, Park and Song (2005) found generation gap as a barrier to communication between health service providers and clients. Key informant interviews revealed that the implementers were aware of these problems, and were working to resolve them by targeting age appropriate communication strategies.

The same applies to gender difference where 61 percent and 69.3 percent of the providers and clients, respectively, were of the view that discussion on matters to do with sexuality was complicated across gender, and was a hindrance to the communication campaign for VMMC. The findings are consistent with those by Wamoyi *et al.* (2011) on parent-child communication about sexuality in Tanzania where such communication about sex and reproductive health was uncommon, and if it happened, was mainly delivered by mothers and rarely fathers. The situation in our study was complicated by the fact that in the case of the VMMC campaign the communication is supposed to be led by the young women who are leading the mobilisation and counselling programmes. This is because, as Lesch and Kruger (2005) found in their study on communication between mothers and daughters on sexuality in one low-income South African community, such discussions, if they happen, are

invariably parent-led. For the fathers, in the rare occasion that they engage their daughters, they communicate through threats and warnings (Wamoyi, 2011).

A considerable number of those surveyed from both the provider and client spectra of the study, representing over 68 percent on each side believed that cultural difference in general was a major hindrance to effective health communication, a view that supports Dodd's (1998) assertion that perceived cultural differences alone can be a hindrance to successful communication outcome. Bakić-Mirić*et al.* (2012) cite diversity of cultural backgrounds as one of the causes of unclear communication engagements, while Norouzinai *et al.* (2016) aver that patients are also less acceptant of health service providers with different languages and cultures.

Aware of this, the VMMC programme implementers interviewed reported that in order to deal with the general cultural differences as a result of differing ethnic origin, their recruitment, particularly for the mobilisers and other field officers, was skewed towards recruiting mobilisers mainly from the Luo community, which the bulk of the target clients hail from.

4.8.4 Service Providers' Attitude and Technical Jargons

Another barrier to communication reported was the service providers' attitude, where 69.1 per cent (n=173) of the target clients said that service providers' "patronising attitude" was an impediment to their communication. Asked about the service providers' language during consultation, 42.6 per cent (n=107) of the client respondents said that their technical medical jargon was a barrier to "a large extent" while 29 per

cent (n=72) said it was to “a very large extent. This means that total of 71.6 per cent (n=180) of the surveyed target clients agreed that technical jargon used by service providers’ in the VMMC campaign was a barrier to effective interpersonal communication.

Asked whether what their target clients described as the service providers’ “patronising” attitude, could be a major barrier to effective IPC, majority of the surveyed staff were of the opinion that this was not an issue, with 55.9 percent (n=20) and 35.3 percent (n=12) saying their attitude could be a barrier only “to a very limited extent” and “to a limited extent” respectively. However, they were divided in opinion, as to whether their professional jargon could be a barrier to effective communication with the target clients who have no training in health matters, with 50.1 percent (n=18) saying their technical medical language did not help facilitate interaction, while 49.9 percent (n=17) disagreed.

A good majority of the clients surveyed thought the service providers “patronising” attitude, coupled with their technical medical jargon were a hindrance to provider-client interaction. However, the majority of service providers reported that these twin issues were not a problem in their interaction with their clients, only agreeing that the provider-client language difference was an obvious problem. This divergence in opinions would be expected because, while the clients could be quick to point out what they saw as mistakes on the part of their interlocutors, it might be lost on the latter that their attitude is not pleasant.

Furthermore, concerning technical jargon, the providers might not know that they were using jargon since this is their daily mode of communication among themselves. These findings are consistent with those of other studies, such as that by Mrayyan (2007) on problems of nursing practice in private hospitals in Jordan, which identified language nature, type and jargons, providers' attitude and lack of cooperation from either, as major hindrances to positive transaction. Specifically, service provider's unfamiliarity with the client's native language has been mentioned in many studies as a communication barrier (Schiavo, 2006), with Norouzinia *et al.* (2016) observing that if there is a difference in spoken language, effective communication cannot be established.

4.8.5 Interpersonal Communication Environment

Another barrier reported by the target clients was the environment where the communication took place. Up to 73.9 per cent (n=185) said that the environment of consultation was important "to a large extent" or "to a very large extent" a matter of concern. Only 26.1percent (n=66) said a poor consultation environment was not a barrier "to a limited extent or "to a very limited extent" The staff respondents were generally in agreement with the clients. A total of 70.2 percent (n=25) of them said a poor environment was a barrier "to a large extent" or "to a very large extent."

Table 4.12: ***Barrier to Interpersonal Communication (According to Service Providers)***

	To a very limited extent	To a limited extent	To a large extent	To a very large extent
Lack of time	9.1%	20.2%	39.4%	31.3%
Language difference	12.8%	13.9%	40.4%	22.9%
Cultural beliefs/cultural differences	18.7%	12.7%	37.1%	31.4%
Health workers' Jargon	19.7%	29.4%	27.4%	23.5%
Service providers' patronising attitude	57.9%	36.2%	2.9%	2.9%
Level of cleanliness in health facility	3.0%	23.0%	44.5%	29.4%
Clients' level of education	25.9%	11.1%	36.5%	26.5%
Provider-client age difference	26.4%	10.3%	33.5%	29.4%
Provider-client gender difference	20.9%	16.8%	33.0%	29.4%

Table 4.13: ***Barriers to Interpersonal Communication (According to Target Clients)***

	To a very limited extent	To a limited extent	To a large extent	To a very large extent
Lack of time	20.0%	34.7%	25.0%	10.3%
Language difference	6.7%	18.0%	38.8%	26.5%
Health workers Jargon	13.5%	14.8%	42.6%	29.0%
Client-provider cultural differences	36.9%	28.8%	20.0%	13.3%
Service providers' patronising attitude	18.3%	12.6%	39.3%	29.8%
Level of cleanliness in health facility	20.4%	9.5%	46.3%	23.9%
Clients' level of education	17.9%	12.9%	39.4%	29.8%
Provider-client age difference	18.8%	15.7%	41.0%	24.5%
Provider-client gender difference	14.5%	15.8%	40.4%	29.3%

The responses of key informant interviewees were largely akin to those given by individuals in questionnaires. Many staff voiced their frustration over the lack of proper offices for consultation especially for peer education. Lack of counselling room in the field was another area of concern. When asked about the influence of the work environment on their relationship with target clients, one interviewee said:

> *You see, these are people we are trying to persuade to accept VMMC. When we get them to come around for counselling and they find that the place is messy and not conducive for consultation some go away. And you can never know what such a person will tell others out there about the programme [KII-02].*

Similar sentiments were expressed by target clients in the FGD who said that they would prefer to deal with the service providers in a place where confidentiality was assured. These findings support those of similar studies on healthcare environment as enhancers or barriers to health outcomes. In their study on the effects of a UK primary care environment on patients and staff shows that , Rice and others (2008) show that an enhanced environment is associated with improvements in patients' perception of patient–doctor communication, reduction in anxiety, and increases in patient and staff satisfaction. According to Ulrich and Zimring (2008) the design of healthcare facilities can increase patient sense of safety, remove patient stress, improve medical outcomes, reduce staff stress and fatigue, and improve overall healthcare quality.

4.9 Emerging Trends in Interpersonal Communication in Healthcare

The fourth and last objective sought to establish whether additional factors exist that could help boost the interpersonal communication campaigns for improved uptake of VMMC. Two factors were examined, namely stakeholder involvement in the planning and execution of the programme and implementation of livelihood enhancing projects, targeting the intended beneficiaries and other crucial players in the VMMC programme.

4.9.1 Stakeholder Involvement in Planning and Execution

When asked whether they thought the VMMC implementers had involved them in the planning and execution of the programme's campaigns, up to 85 percent (n=213) of the respondents said they were "not involved at all" or "not involved." Only 10.6 percent

(n=26) said they were involved and 4.4 percent (n=11) said they were fully involved, as shown in Figure 4.10.

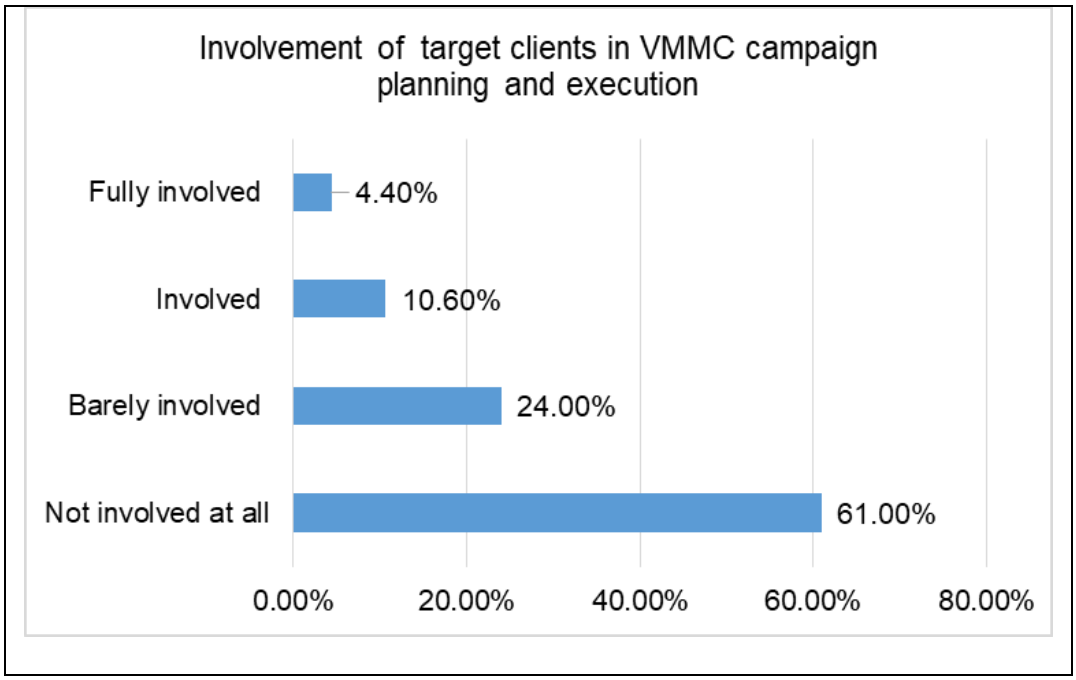

Figure 4.10: Target Clients' Involvement in VMMC Campaign Planning and Execution

The above responses contrasted with what the staff respondents said about overall involvement of target clients and other stakeholders. While the target clients were virtually unanimous that they were not involved at all, the service providers were divided more or less equally on whether they had involved target clients in the planning and execution of the programme. Up to45.6 percent (n=15) of the 35 surveyed service providers said they had fully involved the clients. A total of 38 percent (n=13) said they had not involved the target clients, while 16.4 per cent (n=6) said they were not

involved at all. On spouses of target clients and other women 46.8 percent (n=16) of the staff said that they had been involved.

Up to 65.3 percent (n=23) of the respondents said they had involved community leaders while 42.5 percent (n=15) said they had involved church leaders in the programme's planning and execution. Only 39.7 percent (n=14) said they had involved youth groups while a paltry 17.9 percent (n=6) said they had involved women groups. Up to 56.7 percent (n=18) said they had involved beach leaders as shown in Table 4.14 below.

Table 4.14: ***Involvement of "Important Others" in VMMC Planning Programmes (According to Service Providers)***

	Fully involved	Involved	Barely involved	Not involved at all
Target clients	20.0%	25.6	38.%	16.4%
Women/spouses	20.7%	26.1%	39.0%	14.2%
Community leaders	26.5%	38.8%	18.0%	16.7%
Church leaders	13.5%	29.0%	34.8%	25.7%
Youth groups	10.9%	28.8%	39.3%	210.0%
Women groups	5.3%	12.6%	42.3%	39.8%
Beach leaders	20.4%	36.3%	23.8%	19.5%

The findings from both men and women participants of the focus group discussion correspond to with those from the respondents of the client questionnaire, most of whom said that they were not involved in the planning or execution of the VMMC programme. One woman FGD participant said thus:

> *When those people come here, they only ask us if we have children that can be circumcised…One came and I told him the father of the boy was not there so he should come later when my husband was around, I did not see him again. That's all… If you mean asking for our opinions or wanting us to help them with ideas how to get people, that one they don't do*.[FGD2-03]

A male participant said that despite them having many youth groups that the implementers could work with, they were not involving them.

> *If these people were serious about this circumcision, they could have involved the young people and even ask them what they think. For example there are many groups for sports such as football volleyball and even pool. It would be easy to talk to the groups… even sponsor competitions then we can see the value. But these hardly come here. Once in a while we see them then they go to the beach leaders or the assistant chief… But we don't know what they discuss. [FGD1-01]*

However, the managers who participated in the key informant interviews said that they always strived to involve the stakeholders through meetings and other fora.

> *We try to get the clients involved, at least partly, where we use community leaders and the people themselves. For instance, at the beaches we generally leave it to the fisher-folk to guide us on the time we can talk to them. At times it does not work because the fishers are very strict on their work schedule…and when that time comes they will not pay attention to you.* [KII-02]

> *Yes, stakeholders are involved; otherwise we could have had a lot of problems in terms of implementation of VMMC, especially the opinion leaders. We engage them in stakeholder meeting and we ask them how best to implement the programme…All of them - chiefs, assistant chiefs,* boda-boda *riders… We've got focus groups whom we engage a lot… That is why we have even succeeded very well in schools.* [KII- 03]

Asked whether this could be mere tokenism while all decisions and implementation plans were made at the head offices, one key informant agreed that that was "somewhat" true, citing cases where if the wishes of the clients clashed with the implementing agencies', then the agencies position would carry the day. Another informant said that while they were trying to involve the stakeholders, their effort was hampered by the latter's expectations and lack of interest.

> *Planning and implementation of these things require dedication of time and other resources. When you want to engage, say community leaders, their foremost expectation is that you'll pay them. Yet we don't have that money allocated to us. Getting people to work with us as volunteers is not easy, as the people have families who rely on them.* [KII-03]

In the interviews and FGDs it was clear that some of the participants- both from the implementer and client sides, did not clearly understand the scope of stakeholder involvement, which is more that than merely informing the target clients and the public about the existence of a health intervention and its implementation schedule. On the contrary, stakeholder involvement goes beyond informing; it encompasses full engagement in the entire planning and implementation programme, including the

selection of important actors like peer educators and designing campaign programmes (UNAIDS, 1999). Duggan (2006) points to a shift to a provider-clients interaction that promotes a relationship-centred interpersonal communication.

This contrasts with the old paternalistic top-down communication model for healthcare management, where "the doctor makes the decisions and sets the layout of the interaction to be adhered to…" (Mira *et al.*, 2012:827). Svenson (1998), for instance, stresses the need of involving stakeholders, particularly, target clients in selecting peer educators, to ensure they are acceptable to the target groups and are suitable for the work at hand. A study done in Zimbabwe (Campbell *et al.*, 2014) found that an HIV/AIDS prevention intervention suffered rejection by the target community largely because of the involvement of commercial sex workers as peer-educators.

4.9.2 Economic Activities Initiated by VMMC Implementing Agencies

The study further sought to know whether there were socio-economic activities that the programme's implementers had involved the targeted beneficiaries in as a way of trying to uplift their livelihoods.

The target clients' response was overwhelmingly in the negative, with 81.2 percent (n=204) saying there were no such activities, while 18.8 percent (n=47) said they did not know, as shown in Figure 4.11.

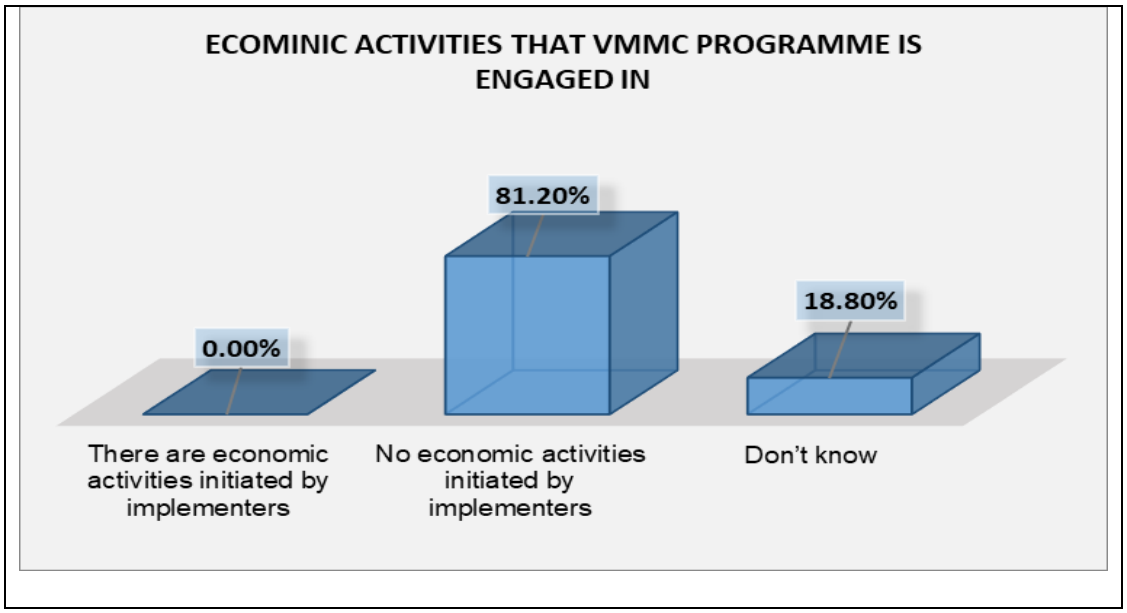

Figure 4.11: Economic Activities Initiated By the VMMC Programme

4.9.3 Service Providers' Interest in Clients' Socio-Economic Wellbeing

Asked whether they thought the VMMC programme implementers had shown interest in their (target clients') economic wellbeing, 40.1 per cent (n=101) of the surveyed target clients said they had done so "to an insignificant extent" while 52.3 per cent (n=131) reported that the implementer were interested "to a very insignificant extent." These findings are in agreement with responses of the service providers, who indicated that, at times, they did not have sufficient time to engage clients in a deeper sense to venture into such extraneous issues as the clients' economic wellbeing.

4.9.4 Choice between Livelihood Enhancing Projects and VMMC

The study further sought to know if given a choice between their economic wellbeing and VMMC or any other anti-HIV/AIDS interventions, what the target clients would choose in order of priority.

Up to 30.4 per cent (n=76) said they would give priority to VMMC and other anti-HIV/AIDS interventions, while 69.6 percent (n=175) were of the view that they would give priority to their socio-economic wellbeing (Figure 4.12).

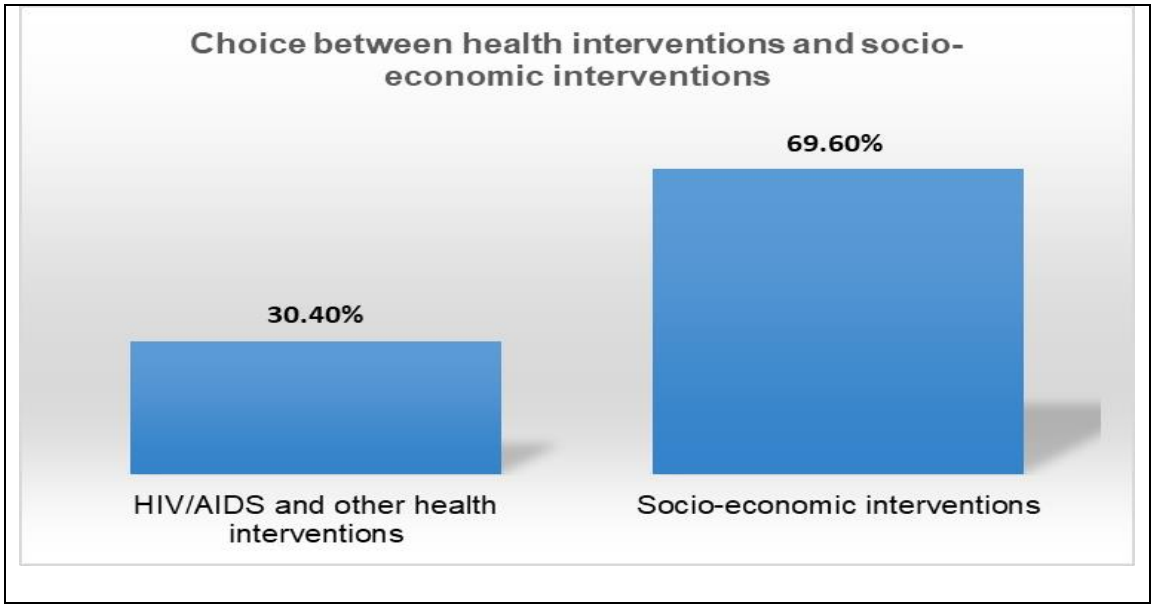

Figure 4.12: Clients' choice between socio-economic intervention and HIV prevention

4.9.5 Extent to Which Economic Assistance Could Boost VMMC Uptake

Although the programme's implementers were clear that they were not engaging the target clients in any economic activities, when asked whether they thought inclusion of livelihood boosting projects would bolster their communication campaign thereby enhancing VMMC uptake, 57.5 percent (n=20) of the respondents said economic project would boost the VMMC campaign "to large extent" and 32.4 per cent (n=11) said they would "to a very large extent." Only 6.9 percent (n=2) and 3.2 percent (n=1) said they would boost "to a small extent" and "to a very small extent" respectively.

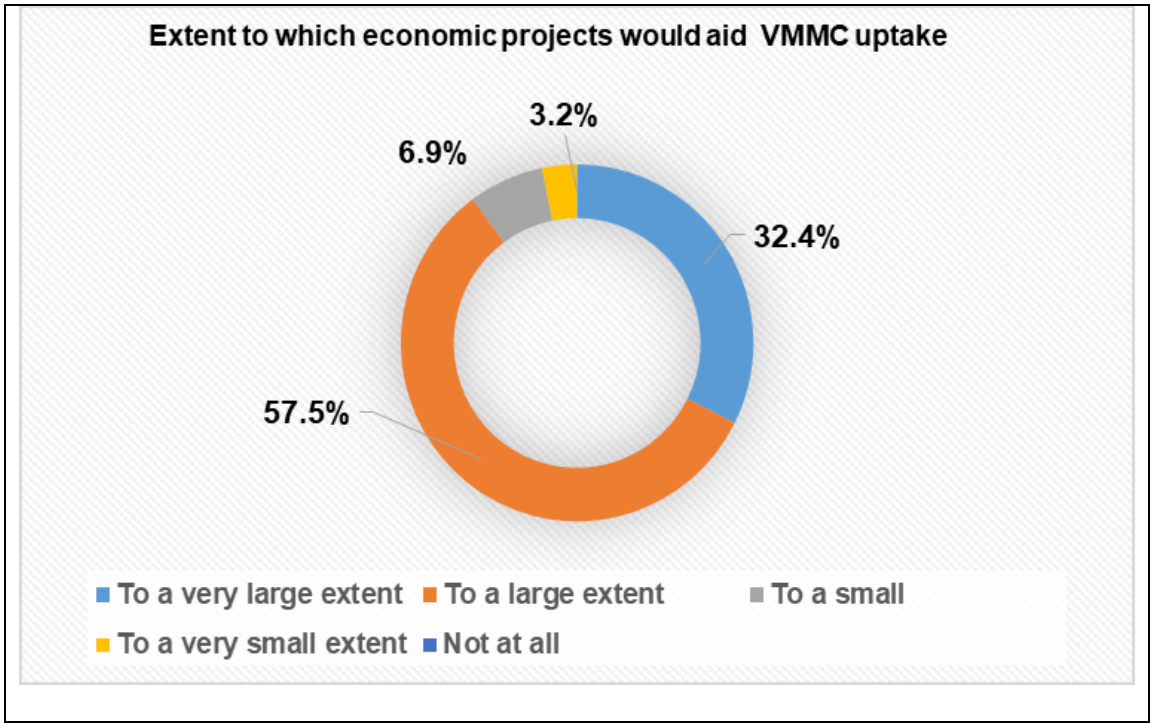

Figure 4.13: Extent to Which Economic Projects Would Aid VMMC Uptake

It has been demonstrated that relative and absolute poverty create vulnerability to diseases (Duta-Bergman, 2005; Narayan, 2000), as the poor are particularly susceptible to poor nutrition, inadequate health infrastructure hunger and psychology stressors "from powerlessness and despair" (Wallersein, 2006:7). From the demographic profile the population under this study were generally resource poor people with the bulk (67.6 percent) of them earning between KSh1,500 and KSh10,000 per month, putting the majority of them well within, the World Bank established poverty line of US$1.00 a day.

The loci of this study were the beaches where men, the principal family breadwinners, are the key participants in the predominant economic activity, fishing (County Government of Siaya, 2014). They, thus, have to be sure of the family's wellbeing, including during the post-circumcision healing period.

The state of affairs thus becomes a matter of genuine concern which makes it necessary to think of economic empowerment as part of any health intervention. However, the implementing agencies had no such project on the ground. Key informants said they were aware of the issue of economic assistance as a way of boosting the VMMC uptake; but, thus far, there was nothing on the ground.

> *Indeed, that is a big issue; but I always tell them: "When you are doing circumcision, the final beneficiary is not the NGO, or we, the staff; but it is you… And when you're doing circumcision, it's voluntary. So when you feel that your family feeds from your day-to-day work, we're not forcing you to go for it today. Once you accept, you can then plan. Maybe from now increase your daily production and save the rest that can take your family to eat for some time when you've undergone the surgery…" But it remains a big issue… because most of the people are not well economically.* [KII-02]

> *The lack of economic assistance is there...And that is the biggest challenge. You see any person who is 25 and above, their focus is the family and before they make any decision they must think about how that decision will affect them economically…It's something that we must think about very seriously if we are to achieve our target. [KII-03]*

Although not within the sphere of interpersonal communication in strict sense, various studies (Duggan, 2006; Dutta-Bergman, 2004; Schiavo, 2013) have shown that target beneficiaries' state of wellbeing has considerable prospect of complementing communication to soar up the uptake of health interventions.

Proper understanding of these factors can also help to shape the framing, packaging and targeting of the interpersonal communication messages, thereby minimising barriers to communication for positive health outcomes Jackson & Duffy, 1998)]. In this study it was found that there were no economic interventions instituted by the VMMC programme's implementers. The interviewees said that there were no specific programmes to address the economic needs of their target clients.

However, both clients and service providers agreed (>90%) that integrating economic activities within the VMMC programme implementation matrix could greatly boost the uptake of the intervention, especially if such projects could cushion them and their dependants from suffering during the post-circumcision healing period. The service providers were also convinced that the inclusion of livelihood boosting projects would bolster their communication campaign, thereby enhancing VMMC uptake. The case for implementing economic programmes for those targeted clients is further strengthened by the fact that the targeted clients fall in the category of resource poor populations, with an average monthly income of 10,000 Kenya shillings (Table 1).

These findings on the role of socio-economic support for target clients to enhance the uptake of health interventions are consistent with other studies (Hadi, 2001; Evens et al., 2016), which have advocated that theoretical approaches to health campaigns ought to locate mitigation of poverty and lack of basic resources at the centre of human behaviour and communicative choices.

According to Narayan *et al.* (2000), IPC-based approach that only focuses on benefits of a given health intervention without addressing the key structural elements as barriers to the success of the intervention particularly in resource-deprived populations, where individuals lack such basic necessities of life as food, clothing, and shelter, have little chances of success.

The population involved in this study was generally resource poor with the bulk (67.6%) of them earning between US$ 15 and 100 per month, putting the majority of them well within the World Bank established poverty bracket of US$1 a day. The study agrees with one done among fishers in Rachuonyo area, also along the shores of Lake Victoria (Evens, et al., 2014), which found that the concern about the financial burden of VMMC was especially common among men who earned a daily wage such as fishermen and those in the transport sector.

Moreover, this study's finding depicts gender disparity in favour of men, further agreeing with an earlier study (Kiriti & Tisdell, 2003), which found that in Kenya, women had lower income than men, and yet another by the UNDP (2000), which reported that of the over 1.3 billion people in absolute poverty globally, the majority were women, mainly found in rural areas and informal peri-urban settlements.

The loci of this study were the fish landing beaches, and their surroundings, with fisher folk being the key targets. As Dutta-Bergman (2009) argues, when people have immediate issues of basic needs to worry about, it becomes difficult for them to give their undivided attention to issues like VMMC, which to them are "high-end" health issues that they see as far in the horizon.

Mbirimtengerenji (2007) further argues that even if the people who are economically deprived understand what they are being urged to do, it is rarely the case that they have either the incentive or the resources to adopt the recommended behaviours. Although not targeted for the circumcision, women have a particularly important role to play in the implementation of VMMC, falling in the category that Fishbein & Ajzen (2010) refer to as "significant others." Firstly, as wives, women are relied on to provide economic and psycho-social support to their husbands in making the decision to go for the cut. Secondly, as mothers they hold a significant sway in nursing their sons who are also targeted for the VMMC.

Yet, as a wife a woman's power to negotiate on matters sexual has been found to be directly proportional to their economic wherewithal (Moret, 2014). Furthermore, as the women participants of the focus group discussions revealed, key in their list of worries is how they will be able to take care of their families, including the husbands, who will be economically incapacitated during the time of healing.

This study takes the stand that understanding the people's fears about possible loss of income, even if for a short time during the post-operation recovery, could help open discussions on how to deal with structural factors such as livelihood enhancing projects. As pointed out by Evens *et al*. (2014), suggestions, such as food or cash transfer to compensate men for time away from work and ensure their families are provided for during the healing period, could be made to ameliorate the situation.

The implementing agencies could work out a way of cushioning the target clients', and eschew the belligerent argument that the "VMMC is a voluntary not-for-pay programme which the people only go into if that want" as presented in the key informant interview. It would better serve the wider purpose of the programme if the service providers could shift their mind-set: from seeing themselves as helpers and service clients and VMMC target clients as people demanding too much, to a relationships that cultivates and upholds a sense of partnership. By redefining clients and health providers as partners willing to share knowledge, preferences and values throughout the decision-making process, the shared decision making strategy brings forth new opportunities to improve the uptake of VMMC in particular and the broader spectrum of healthcare services.

4.10 Chapter Summary

This chapter has presented discussed the results as obtained from the field and interpreted on the analysed data. It covered the research findings drawn from the analysed data. Both the quantitative and qualitative data were collected through triangulation of administered questionnaires - for survey, moderator-guided focus-group discussions, and key informant interviews. The section has, therefore, presented the results of the study conducted among implementers and target clients of the voluntary medical male circumcision programme in Siaya County of Kenya. The results are presented by objective as presented in chapter one and discussed in chapter two.

From the literature review and the findings as interpreted and discussed in various sections, the study found that communication in general and interpersonal communication specifically has a significant role to play in eliciting the acceptance of health interventions. Interpersonal communication has a special function in the implementation of the voluntary medical male circumcision among traditionally uncircumcising communities like the Luo of Siaya and elsewhere, in view of the complex cultural beliefs that give rise to discrimination and stigmatization. Unfortunately, from the findings of this study, it is clear that communication has not been given the weight that it deserves in the overall implementation of the programme both in terms of human and financial resources. Through extensive investigation, which involved long periods of observation, and interactions with both the project implementers and intended beneficiaries, the research was able to identify and understand several constraints hindering the effective incorporation of interpersonal communication as an integral component of the VMMC programme in Siaya County.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings of the study and draws conclusions on the study by trying to answer the research questions that necessitated the study. Further, it put forward specific recommendations on how communication, in general, and interpersonal communication, in particular, can be repositioned as a vital component in the wider health management spectrum. Finally, the study suggests further research that may aid and enlighten the continuing study in health communication.

5.2 Summary

This study set out to determine what IPC strategies have been employed to enhance the uptake of VMMC; establish the level of interpersonal communication training and competence among the VMMC programme implementers; determine the specific barriers to the effective interpersonal communication in the VMMC programme; and examine the emerging trends and practices in the application of IPC for up-scaling VMMC uptake in Siaya County. The key questions were whether interpersonal communication had a role in improving the uptake of VMMC and other health interventions and if such a role was dependent upon the proper identification and utilisation of appropriate interpersonal communication strategies, engagement of well trained and competent advocacy team of staff in different cadres, who are capable of employing the different strategies in the implementation of the programme;

identification of barriers to IPC in the provider-client engagement; and adherence to the best practices in the in the field of healthcare management in general and interpersonal health communication in particular.

This study adopted the mixed-method approach, employing both quantitative and qualitative methods of data collection, each complementing the other through use of different data collection instruments like questionnaires, focus group discussion and key informant interviews. Two questionnaires were administered: one on men aged between 18 and 50 years living in Siaya County, particularly in Rarieda and Bondo sub-counties; and the other with operational staff of the implementing agencies, who were involved in the mobilisation and pre- and post-operation counselling. Besides, two focus group discussions were held, with the first group comprising target VMMC clients – men aged between 18 and 50 years; and the second with women living and doing business or were spouses or partners of the local male residents. Finally, four key informant interviews were conducted with staff of the implementing agencies at supervisory and managerial levels.

5.3 Conclusion

The first objective sought to determine the various interpersonal communication strategies used in the VMMC campaign in Siaya County. There are clear and specific interpersonal communication strategies such as peer-led or expert-led education, counselling and telephone helpline, employed in the VMMC programme

implementation. However, their use is haphazard, with no clear demarcation on where to use specific peer counselling like dyadic or group model. Besides there is no existing communication manual that is guiding the interpersonal engagement between the mobilisers, counsellors and surgeons on one part, and the target clients on the other.

Secondly, the study sought to establish the level of training and competence among the staff implementing the VMMC programme in Siaya. It is clear from the finding of this study that a number of service providers do not have enough training and lack competence in interpersonal communication. Communication has been left to generalists, with little understanding of communication as a profession with its unique theoretical underpinnings to guide its application. There are no communication experts in the VMMC programme's implementing team. Only a small number of the programme's implementers in direct communication with the target clients have had formal training in communication. The majority of those who have training in communication have not had such training for more than two months. Nevertheless, for most of those who have undergone such training, interpersonal communication was part of the course contents.

Communication training or documented competence is neither a prerequisite for recruitment neither is there a structured communication training programme for the recruited peer educators, counsellor and other mobilisers. There is no focus on communication for those hired in the field and trained on-job specifically for the VMMC programme as their induction focused mostly on how to clinically and

hygienically carry out the operation. In view of the foregoing scenario, interpersonal communication cannot make a significant impact on the campaign for improved uptake of the voluntary medical circumcision effectively.

In its third objective, the study sought to examine specific barrier that could hinder effective interpersonal communication in the campaign to soar up VMMC uptake in Siaya. The study found time constraint as a major barrier, especially among the operational staff, who have to spend their limited time to cover a large number of clients. The majority of the staff have difficulty giving their full attention to clients, explain in detail issues raised and create an appropriate atmosphere of mutual understanding, as they have tight targets to meet in terms of the number of clients to serve. Culture, with its subtle nuances touching on relationships as determined by age, sex and views pertaining to diseases and human body parts, has a significant cross-cutting bearing on provider-client interactions.

The culturally non-circumcising nature of the Luo community complicates communication about HIV and VMMC. Family relations pertaining to children, sexuality, age and gender difference, also pose a potential barrier to effective communication, with clear a demand for cultural competence on the part of service providers. The language difference between the service providers and clients, and clients' low education levels also pause a challenge to communication. The medical staff's "patronising" attitude, coupled with their technical jargon, as perceived by the clients, has a potential negative effect on the VMMC programme's final outcome.

Finally, the study investigated how the implementing agencies were applying new trends and approaches in the VMMC campaign programmes. Specifically, the study sought to establish how the intended beneficiaries of the programme were being involved in the planning and execution in a way that could engender a sense of ownership among them.

Another area investigated was the role structural factors, such as economic assistance, played in complementing and bolstering the interpersonal communication campaigns. Although there a is deliberate attempt by the programme's implementers to involve the target clients directly or through their leaders, a large majority of the latter consider the involvement a mere tokenism, which only seeks to bring them aboard at the implementation stage and not from the initial stages, a fact that gives rise to a feeling of alienation in the programme's implementation process. Although livelihood enhancing programmes are heralded as important launch pads for disseminating health information among low income populations, there are no such economic activities being run alongside the VMMC campaigns in Siaya County, a fact that is frustrating the communication campaigns for the intervention. However both the VMMC programme implementers and their target clients are in agreement that the inclusion of socio-economic activities among the VMMC target clients holds the potential to booster to the programme.

From the evidence adduced through both the qualitative and quantitative data, the study concludes there is a clear nexus between interpersonal communication and improved uptake of the voluntary medical male circumcision, thus contributing to the prevention

of HIV in Siaya County, Kenya and the rest of African countries with similar demographic, socio-cultural and economic infrastructure. The study has shown immense potential for interpersonal communication as a tool for improving the uptake of VMMC and other health interventions in Kenya and Africa where this genre of communication is rooted in the traditional culture, and where mediated communication infrastructure is fairly underdeveloped. However, with no clear communication strategy on the ground; with little regard for communication competence and lack of communication training programme for staff; and with a number of factors militating against the effective interpersonal communication coupled with lack of involvement of all key stakeholders in the entire programme implementation spectrum, the full potential of interpersonal communication as a tool for the improving the uptake of voluntary medical male circumcision may not be achieved.

5.4 Recommendations

From the literature review and the findings as interpreted and discussed in various sections, it is clear that communication in general and interpersonal communication in particular, has a significant role to play in eliciting the acceptance of health interventions. IPC has a special function in the implementation of the voluntary medical male circumcision among traditionally uncircumcising communities like the Luo of Siaya and elsewhere, in view of the complex cultural beliefs that give rise to discrimination and stigmatisation. However, from the findings of this study, it is clear that communication has not been given the weight that it deserves in the overall implementation of the programme both in terms of human and financial resources.

Through extensive investigation, using various instruments as discussed in the foregoing sections of the study, coupled with close observations and interactions with both the project implementers and intended beneficiaries, this study has identified several constraints to effective incorporation of interpersonal communication as an integral component of the VMMC programme in Siaya County. The study therefore recommends as follows:

i. Communication experts with specific competencies should form the integral part of the programme implementation team with the task of drawing and executing communication plans for health interventions. Recruitment for such communication specific-assignments as peer-education, community mobilisers, and counselling should be based on qualification and competence in communication in general and interpersonal communication in particular.

ii. The field officers implementing the VMMC programme, as the findings show, have limited training and competence in interpersonal communication. This situation is exacerbated by the fact that they are operating without a communication strategy or manual to guide their operation. The current trend where the mobilisation and counselling teams have no communication plan to guide them is not tenable.

iii. Even the soon-to-be-released national communication manual for the implementation of VMMC programme will not suffice, as it is generally agreed that one-size-does-not-fit-all in health communication (O'Sullivan *et al*., 2003). There is, therefore, need for a communication strategy tailor-made for the Siaya County programme - messages clearly formulated to address the local community's cultural, linguistic, occupational, lifestyle and other socio-economic peculiarities. This study, therefore, recommends the development of a communication manual or guide unique to the situation in Siaya County, taking into account the specific communication needs of the general clientele base and the local people's peculiarities such as their cultural beliefs, individual and collective attitudes, and socio-economic situations.

iv. While it is healthy to involve people of different ethnic cultural background in the implementation of the VMMC programme, cultural mix and, worse still, cultural incompetence on the part of health programme implementers, has the potential of slowing down the programme's uptake if the implementers do not fully understand the clients' culture. The study recommends that staff at all levels make deliberate attempt to understand the culture of the beneficiary community as a way of enabling them to appreciate health-related cultural practices.

v. The VMMC implementers should consider women as important stakeholders for the success of the programme. They should, thus, target women in their interpersonal communication campaigns. In so doing, there should be clear

health and socio-economic benefit for the women. Because of their proven influence on men's decision making on acceptance or rejection of VMMC women can be incorporated as VMMC programme ambassadors.

vi. All health workers, including the non-medics, such as accountants, human resource and officers, logisticians, drivers, who form part of the health communication continuum, and, thus, need more than just fleeting knowledge of interpersonal communication. Their positive interaction with health service seekers, added to that of the frontline staff like the clinicians and peer-educators and VHCs, can go a long way in creating a conducive environment for clients. This study recommends communication training for all staff of the VMMC programme implementing agencies.

vii. While communication is offered as a unit in health training institutions at nearly all levels, this study recommends a curriculum review in order to put communication training on a higher pedestal both in depth and scope, thereby enabling the coverage of all aspects of communication.

viii. The study recommends the establishment of a communication unit of the ministry of health both at the national and county government levels, charged with developing national and region-specific communication programmes for different health interventions.

ix. While it is healthy to involve people of different ethnic cultural background in the implementation of the VMMC programme, cultural mix and, worse still, cultural incompetence on the part of health programme implementers, has the potential of slowing down the programme's uptake if the implementers do not fully understand the clients' culture. The study recommends that recruitment policy for staff specifically dealing with client mobilisation be skewed along ethnic and age lines, whereby those people of the same ethnic and age bracket as the targeted clients are given priority.

x. With 35.6 percent of its population living below the poverty line, Siaya County ranks just below the national average of 49.9 percent (KNBS, 2019). In resource-deprived populations, the residents tend to focus attention on their livelihood and may not give much thought to health interventions, especially when they do not address their immediate basic needs like food, clothing and shelter. The infusion of livelihood enhancing activities would go a long way in boosting the outcome of the VMMC programme. This study, therefore, proposes the integration of economic activities in the VMMC implementation programme matrix to run alongside the communication programme.

While this study support earlier research (e.g. Obure *et al*, 2011; Lissouba *et al*., 2011; Bailey *et al*., 2012), which have shown that women, in their capacities as wives, sexual partners, mothers and leaders, have considerable influence on the uptake of VMMC. However, one factor that kept coming up during the focus group discussion was women's latitude and limitations in negotiating sex.

This study recommends in-depth research into the power of women to negotiate matters of sexuality both at family and community levels, amidst perceived socio-cultural inhibitions.

Further, the study recommends similar studies for other diseases such as malaria, cholera and typhoid, which are rampant in most parts of the county, and whose control is largely dependent on human behaviour change and behaviour adoption.

5.5 Contributions of the Study

Communication has gained considerable traction in healthcare management and is now being mainstreamed in an increasing number of health programmes in Kenya (Ndege, 2014; Emojong', 2019). This study goes on to confirm the centrality of interpersonal communication as a tool for promoting transaction between providers and seekers of health services. The study further shows that the success of health interventions depend in large measure on the quality of interpersonal communication particularly in largely oral rural resource-deprived population, which lack adequate access to mass media facilities. This particularly so in largely oral rural resource-deprived population, which lack adequate access to mass media facilities. For this to happen, communication competence among those driving a given health programme is mandatory. Jabusch and Littlejohn (1995: 4) say that to be a competent communicator "is not a simple matter." This argument is brought out clearly in this study, with the finding that interpersonal

communication competence, especially in culturally sensitive health issues like circumcision, , stigma prone diseases and sxuality.

Interpersonal communication competence requires clear understanding of the cultural complexes that surround the health problem, the health intervention and the beneficiary community. The study has brought to the fore important factors that affirm and boost theory and practice in health communication. The study puts cultural competence at the centre of interpersonal communication for health management. For instance, it shows that interpersonal engagements in male circumcision widens the scope of "significant others" and proposed by Fishbein and Capella (2006). Health practitioners in the VMMC project understood the important others as spouses for adult male target and mothers for boy targets.

However, the study has revealed paternal grandmothers as very significant in the case of boys and that the boys' mothers come third - after fathers and grandmothers - when it comes to deciding on boys' circumcision. For men targeted for circumcision, the significant others extend to their peers, who the study has revealed are other key influencer. This finding supports Dutta-Bergman's (2005) critique of the Integrative Model of Behaviour Prediction, which he argues tends to give greater value to individualistic rather than collectivistic approach. This approach, as the study has shown, presents the risk of creating communication failure when key players are left out of the interpersonal communication bracket.

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APPENDICES

Appendix 1: Questionnaire for VMMC target group (men)

My name is Osir Otteng, a doctoral degree student at Masinde Muliro University of Science and Technology. I am undertaking a study entitled: 'Incorporating Interpersonal Communication as a Tool for Improving the Uptake of Voluntary Medical Male Circumcision in Siaya County.' This questionnaire is intended to capture information that is useful to the research. The study is for academic and knowledge generation purposes; but is not intended for any financial or material gains. The information gathered, which will form part of the study's report, will be treated with utmost confidentiality and will not be used for any purpose that may cause harm to you in any way now or in future. Your participation, by way of answering the questions in this questionnaire or any other way, is voluntary. Thank you.

Note: Please put a mark [√, or *X*, or ⁄, or –] inside or across the brackets which, in your view, represents the most appropriate answer.

A. PERSONAL INFORMATION

1. Please indicate your sub-county of origin
Bondo [ ]; Rarieda [ ]; Alego Usonga [ ]; Ugunja [ ]; Ugenya [ ]; Gem [ ]; Outside Siaya County (Specify) _____[ ]

2. How old are you (in years)? 18–27 [ ]; 28–37 [ ]; 38–47 [ ]; 48–57 [ ]; 58 and above [ ]

3. What is your marital status? Single [ ]; Married [ ]; Separated [ ]; Divorced [ ]; Widowed [ ]

4. What is the highest level of education that you have attained?

University [ ]; College [ ]; Secondary [ ]; Primary [ ]; None [ ]

5. State the highest professional qualification that you have attained
Certificate [ ]; Diploma [ ]; Undergraduate [ ]; Graduate [ ]; None [ ]

6. What is your current occupation/source of income?
Student [ ]; Fisherman [ ]; Businessman [ ]; Employee [ ]; Private business employee []; Other (Specify) _____[ ]

7. What is your average income per month (in Kenya Shillings)?< 1,500 [5]; 1,500 – 5000 [4]; 5,001 – 10,000 [3]; 10,001 – 15,000 [2]; >15,000 [1]

8. If you are married, please state your wife's average per-month income. (Indicate "Don't know" if not married)< 1,500 [5]; 1,500–5000 [4]; 5,001–10,000 [3]; 10,001–15,000 [2]; >15,000 [1]; Don't know [0];

9. How would you rate your competence in the following languages?

Dholuo: Very competent [5]; Competent [4]; Barely competent [3]; Poor [2]; Very poor [1]

English: Very competent [5]; Competent [4]; Barely competent [3]; Poor [2]; Very poor [1]

Kiswahili: Very competent [5]; Competent [4]; Barely competent [3]; Poor [2]; Very poor [1]

B. INTERPERSONAL COMMUNICATION STRATEGIES

13. Have you had a chance to discuss the above issues with the implementers of the VMMC programme?: Yes [ ] No [ ]

14. Have you been involved in the following interpersonal communication strategies with VMMC programme as the main subject?

a. Peer education [Yes]; [No]
b. Community events [Yes]; [No]
c. Home visits [Yes]; [No]
d. Telephone help lines [Yes]; [No]
e. Counseling [Yes]; [No]
f. Political rallies [Yes]; [No]
g. Other (specify)…….....[Yes]; [No]

15. How would you rate the effectiveness of the following IPC strategies for the VMMC programme campaigns? (Select 'Don't know' against the strategy that you have not participated in/do not understand).

a. Peer education: Very appropriate [5]; Appropriate [4]; Fairly appropriate [3]; [Not appropriate [2]; Not appropriate all [1]; Don't know [0]
b. Community events: Very appropriate [5]; Appropriate [4]; Fairly appropriate [3]; [Not appropriate [2]; Not appropriate at all [1]; Don't know [0]
c. Home visits: Very appropriate [5]; Appropriate [4]; Fairly appropriate [3]; [Not appropriate [2]; Not appropriate at all [1]; Don't know [0]
d. Telephone help lines: Very appropriate [5]; Appropriate [4]; Fairly appropriate [3]; [Not appropriate [2]; Not appropriate at all [1]; Don't know [0]
e. Counseling: Very appropriate [5]; Appropriate [4]; Fairly appropriate [3]; [Not appropriate [2]; Not appropriate at all [1]; Don't know [0]
f. Political forum: Very appropriate [5]; Appropriate [4]; Fairly appropriate [3]; [Not appropriate [2]; Not appropriate at all [1]; Don't know [0]
g. Other (specify)……Very appropriate [5]; Appropriate [4]; Fairly appropriate [3]; [Not appropriate [2]; Not appropriate at all [1]; Don't know [0]

16. How accessible to you are the following sources/channels for information on VMMC?
    a. Peer educators: Highly accessible [5]; Accessible [4]; Fairly accessible [3] Rarely accessible [2]; Not accessible at all [1]

    b. Health service providers: Highly accessible [5]; Accessible [4]; Fairly accessible [3] Rarely accessible [2]; Not accessible at all [1]
    Newspapers: Highly accessible [5]; Accessible [4]; Fairly accessible [3] Rarely accessible [2]; Not accessible at all [1]

    c. Radio: Highly accessible [5]; Accessible [4]; Fairly accessible [3] Rarely accessible [2]; Not accessible at all [1]

    d. Religious leaders: Highly accessible [5]; Accessible [4]; Fairly accessible [3] Rarely accessible [2]; Not accessible at all [1]

    e. Political leaders: Highly accessible [5]; Accessible [4]; Fairly accessible [3] Rarely accessible [2]; Not accessible at all [1]

17. To what extent do you consider the following as trusted sources/channels of information on VMMC?

    a. Peer educators: Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

    b. Health service provider: Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

    c. Religions leaders: Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

d. Political leaders: Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

e. Radio:Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

f. Television: Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

g. Newspapers: Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

h. Family/Relatives: Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

i. Friends: Very trusted [5]; Trusted [4]; Fairly trusted [3] Not trusted [2]; Not trusted at all [1]

18. On a scale of 5-0, where 5 represents "highest" and 0 represents "lowest" indicate who among the following has had or could have the greatest influence on your decision to undergo or not to undergo the VMMC (CHOSE ONLY ONE GROUP FOR EACH NUMBER)

My partner (wife/girlfriend) [ ]; My parents [ ]; My clan [ ]; My social group [ ]; My religious group [ ]; Other (Specify)_____ [ ].

C. INTERPERSONAL COMMUNICATION COMPETENCE

19. How would you rate the interpersonal (communication) competence of the staff whom you have dealt with in the VMMC programme? Very competent [5]; Competent [4]; Fairly competent [3]; Not competent [2]; Not competent at all [1]

20. In you view, of what value is the VMMC implementing staff's competence in interpersonal communication? Very valuable [5]; Value [4]; Fairly valuable [3]; Not valuable [2]; Not valuable at all [1]

21. Please answer the following questions based on your past interactions with the health workers involved in the implementation of the VMMC in your area:

    a. Was the time provide by the health workers adequate to discuss state VMMC and related issues?
    Very adequate [5] Adequate [4]; Barely adequate [3] Inadequate [2]; Very inadequate [1]

    b. How seriously did the health workers appear to take your views? Very seriously [5] Seriously [4]; Barely seriously [3] Not seriously [2]; Not seriously at all [1]

    c. Did you feel that the health workers respected you/your point of view? Highly respected [5] Respected [4]; Barely respected [3] Not respected [2]; Not respected at all [1]

    d. Did you see in the health workers people you could trust with confidential matters pertaining to your health and life in general? Yes []; No []

    e. Did the health workers make efforts to make messages easily understandable to you? Tried very much [5]; Tried [4]; Barely tried [3]; Didn't try [2]; Didn't try at all [1]

    f. Did you feel that the views you gave during the consultation were reflected in the final decision/actions taken by the health workers? Largely reflected [5] Reflected [4]; Barely reflected [3] Not reflected [2]; Not reflected at all [1]

    g. How frequently were conversations/consultations interrupted to allow the health workers to attend other matters? Very frequently [5] Frequently [4]; Barely frequently [3] Not frequently [2]; Never [1]

D. BARRIERS TO INTERPERSONAL COMMUNICATION IN VMMC CAMPAIGN

22. How frequently have you experienced communication breakdowns between your and the VMMC campaigners on account of cultural differences or misunderstandings? Very frequent [ ]; Frequent [ ]; Rare; Never [ ]

23. If you have participated in the VMMC programme events below, what is your verdict on the amount of time allocated for each of them? (Indicate "Don't know" for those you have not been involved in)

    a. Peer education: Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

    b. Community events: Sufficient Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

    c. Telephone help lines: Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

    d. Counseling: Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

    e. Home visits: Sufficient Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

    f. Political (leaders')forums: Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

    g. Community sensitization: Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

h. Consultation with individual clients: Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

i. Follow-up visits: Very Sufficient [5]; Barely sufficient [4]; Not sufficient [3]; Not sufficient at all [1]; Don't know [0]

24. In your interactions with the implementers of the VMMC programme, to what extent do you consider the following factors a hindrance to effective interpersonal communication in the VMMC programme?

a. Lack of time: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

Cultural beliefs: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]
Language difference: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

b. Health workers' jargon: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

c. Clients' fear of service providers: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1] Not at all [1]

d. Cultural differences between you and service provider: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

e. Service providers' patronising attitude: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

f. Socio-economic differences between client and service provider: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

Client's lack of confidence: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

g. The level of cleanliness in the health facility: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

h. Client's level of education: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

i. Provider-client age difference: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

j. Provider-client gender difference: To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

k. Other (Specify) _____To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

E. TRENDS IN INTERPERSONAL COMMUNICATION FOR VMMC

25. To what extend do you agree that the decision whether men should adopt VMMC should be left to the Luo community leaders and not by an individual? To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

26. To what extent do you agree that a man should get his partner's consent before undergoing circumcision? To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

27. To what extent did/would your peers influence your decision to adopt or not adopt VMMC?To a very large extent [5]; To a large extent [4]; To a limited extent [3]; To a very limited extent [2] Not at all [1]

28. Are there any economic activities that the VMMC programme implementers have initiated in your area? Yes [ ]; No [ ];

29. If the answer to 25 above is "Yes", please name the activities

    i. ……
    ii…….
    iii……

30. During your interaction, how much does the health worker appear to be interested in your socio-economic issues? Very much [5]; Much [4]; A little [3]; Very little [2] Not at all [1]

31. If you were to choose between HIV prevention and your socio-economic assistance (money, clothes, fees, business startup, etc), what would you ask someone to first help you deal with at present? (Use numbers 1 and 2 for the first and second priority respectively)

    a. Socio-economic wellbeing [ ];

    b. HIV prevention [ ]

32. Are you a member of any development of social group in your community? Yes [ ]; No [ ]

33. If your answer to No. 29 above is “Yes”, state if the implementers of the VMMC programme have involved your group in their community outreach campaigns Yes [ ]; No [ ]

34. What is your view on the proposal that health worker should involve health service seekers in the planning and execution of all health programmes: Involve them fully [5]; Involve them as much as possible [4]; Involve clients partly [3]; Give clients information only [2]; Don’t involve clients at all [1]
35. What measures would you recommend for improving interpersonal communication between the implementers of the VMMC programme and the target clients in Siaya?

    _____

    _____

    _____

Appendix 2: Questionnaire for VMMC service providers

My name is Osir Otteng, a doctoral degree student at Masinde Muliro University of Science and Technology. I am undertaking a study entitled: 'Incorporating Interpersonal Communication as a Tool for Improving the Uptake of Voluntary Medical Male Circumcision in Siaya County.' This questionnaire is intended to capture information that is useful to the research. The study is for academic and knowledge generation purposes; but is not intended for any financial or material gains. The information gathered, which will form part of the study's report, will be treated with utmost confidentiality and will not be used for any purpose that may cause harm to you in any way now or in future. Your participation, by way of answering the questions in this questionnaire or any other way, is voluntary. Thank you.

A. PERSONAL INFORMATION

1. Please indicate your gender: Male [ ]; Female [ ]
2. In which age bracket do you fall? 18–28 [ ]; 29–39 [ ]; 40–50 [ ]; 51 and above [ ]

3. What is your marital Status?Single [ ]; Married [ ]; Separated [ ]; Divorced [ ]; Widowed [ ]

4. What is your highest level of education? Primary [ ]; Secondary [ ]; College [ ]; University [ ]
5. What is your highest professional qualification? Certificate [ ]; Diploma [ ]; Higher Diploma [ ]; Undergraduate [ ]; Graduate [ ];
6. Your ethic origin: Luo [ ]; Other (Specify) _____ [ ]

7. How would you rate your competence in the following languages?
   a. Dholuo: Very competent [5]; Competent [4]; Barely competent [3]; Poor [2]; Very poor [1]

b. English: Very competent [5]; Competent [4]; Barely competent [3]; Poor [2]; Very poor [1]

c. Kiswahili: Very competent [5]; Competent [4]; Barely competent [3]; Poor [2]; Very poor [1]

B. INTERPERSONAL COMMUNICATION STRATEGIES

8. In the VMMC campaign, what priority have you given to the following interpersonal communication strategies?

i. Peer education: Very high [5]; High [4]; Low [3]; Very low [2]; None [1]

ii. Community events:Very high [5]; High [4]; Low [3]; Very low [2]; None [1]

iii. Home visits: Very high [5]; High [4]; Low [3]; Very low [2]; None [1]

iv. Telephone help lines:Very high [5]; High [4]; Low [3]; Very low [2]; None [1]

v. Counseling:Very high [5]; High [4]; Low [3]; Very low [2]; None [1]

vi. Political (leaders') forum: Very high [5]; High [4]; Low [3]; Very low [2]; None [1]

vii. Other (specify)…Very high [5]; High [4]; Low [3]; Very low [2]; None [1]

9. If you have employed some, or all, of the interpersonal communication methods below, please rate them in the order of appropriateness in the VMMC campaign (with '1' representing the most appropriate and '' the least appropriate)

i. Peer education: [ ]

ii. Community events: [ ]

iii. Home visits: [ ]

iv. Telephone help lines: [ ]

v. Counseling: [ ]

vi. Political (leaders') forum [ ]

C. COMMUNICATION TRAINING AND COMPETENCE

9. Have you had formal training in communication? Yes [ ]; No [ ];

10. How long did your longest communication training last? (Mark against "Not applicable" if you have never been trained in communication). < 1 month [1]; 2–7 months [2]; 8–13 months [3]; 14–19 months [4]; > 20 months [5]; not applicable [0]

11. During your main medical training, was communication offered as a full course/unit in the curriculum? (Mark against 'Not applicable' if you have never undergone medical training lasting one year and above): Yes [ ]; No [ ]; Not applicable [ ]

12. What portion of the course was dedicated to interpersonal communication? (Mark against "Not applicable" if you have never been trained in communication): More than half [5]; Up to half [4]; Quarter [3]; Less than quarter [2]; None at all [1]; Not applicable [0]

13. Please indicate if you have had formal training in the following forms of communication

a. Communication skills: Yes [ ]; No [ ]

b. Media relations: Yes [ ]; No [ ]

c. Interpersonal communication: Yes [ ]; No [ ]

d. Information, education and communication: Yes [ ]; No [ ]

e. Other (Specify)…… ……..Yes [ ]; No [ ]

14. In view of your performance during interactions with your target clients in the VMMC campaign, how would you gauge your own interpersonal communication skills and competence? Very competent [5]; Competent [4]; Fairly competent [3]; Not Competent [2]; Not competent at all [1];

D. CULTURAL COMPETENCE IN VMMC CAMPAIGN

15. Are you a member of the Luo community? Yes [ ]; No [ ];

16. How well do you understand the community's cultural beliefs with regard to HIV/AIDS?
    Very well [5]; Well [4]; Little [3]; Very little [2]; Not at all [1]

17. How well do you understand the community's cultural beliefs with regard to male circumcision? Very well [5]; Well [4]; Little [3]; Very little [2]; Not at all [1]

18. How often, during the campaign, have you found it difficult to engage in discussion with your target VMMC clients with regard to cultural issues surrounding HIV/AIDS or male circumcision? Very often [5] Often [4]; Rarely [3]; Very rarely [2]; Not at all [1]

    (Please explain the cause(s) of difficulty
    _____
    _____ _____

19. To what extent do you agree or disagree with the view that your target clients' cultural beliefs are a hindrance to the implementation of VMMC programme? Very strongly agree [ ]; Strongly agree [4]; Agree [3]; Disagree [2]; Strongly disagree [1]

20. How do you rate the importance of proper understanding of the clients' culture prior to embarking on the exercise you are undertaking? Very important [5]; Important [4]; Fairly important [3]; Not important [2]; Not important at all [1]

E. BARRIERS TO INTERPERSONAL COMMUNICATION IN VMMC CAMPAIGN

21. How would you rate the amount of time set aside for the following activities in your VMMC campaign programme?

    a. Peer education:Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

    b. Counseling: Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

    c. Home visits: Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

    d. Other (specify)……Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

22. Within your normal operations, how would you rate the amount of time set aside for the following activities?

    a. Community sensitization: Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

    b. Consultation with individual clients: Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

    c. Pre-circumcision counselling: Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

d. Post-circumcision counselling: Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

e. Follow-up visits: Very adequate [5] Adequate [4]; Barely adequate [3] Not adequate [2]; Not adequate at all [1]

23. How often have you had to cut short your consultation/conversation with clients in order to attend to other urgent matters? Very often [5] Often [4]; Rarely [2]; Very rarely [2]; Never [1]

24. From your experience in the field, to what extent are the following factors a hindrance to effective interpersonal communication in the VMMC programme

a. Lack of time: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2] Not at all [1]

b. Cultural beliefs: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

c. Language barrier: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

d. Health workers' jargon: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2] Not at all [1]

e. Clients' fear of service providers: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

f. Provider-client cultural differences: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

g. Service providers' patronising attitude: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

h. Provider-client socio-economic disparity:To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

i. Clients' low self-esteem and confidence To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

j. Level of cleanliness in the health facility: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

k. Your level of education: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

l. Provider-client age difference: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

m. Provider-client gender difference: To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

n. Other (Specify) _____To a very large extent [5]; To a large extent [4]; To a small extent [3]; To a very small extent [2]; Not at all [1]

F: TRENDS ININTERPERSONAL COMMUNICATION FOR VMMC

25. In your estimation, how influential are the Luo community on the individual VMMC clients' decision to either adopt or not adopt VMMC? Very influential

[5]; Influential [4]; Fairly influential [3]; Not influential [2] Not influential at all [1]

26. How frequently have you encountered clients who insist that their partners must give consent for them to adopt VMMC? Very frequently [5]; Frequently [4]; Fairly frequently [3]; Infrequently [2] Very infrequently [1]

27. How often has it occurred to you that your clients' peers have sway on their decision on whether to adopt or not adopt VMMC? Very often [5]; Often [4]; Fairly often [3]; Rarely [2] Very rarely [1]

28. How often do issues of economic empowerment or clients personal needs (food clothing school fees, etc.) come up during your interactions? Very often [5];Often [4]; Rarely [3]; Very rarely [2] Never [1]

29. Besides information dissemination, are there economic/livelihood enhancing projects that the VMMC programme is engaging the people in? Yes []; No [ ];

30. If the answer to 26 above is "Yes", please name the activities
    i. ……
    ii…….
    iii……

31. How do you rate the inclusion of economic/livelihood enhancing projects as an integral part of the interpersonal interaction for enhancing the VMMC uptake in your area of operation?
    Very important [5]; Important [4]; barely important [3]; Not important [2]; Not important at all [1];

32. Within your area of operation, are there structured groups of the following members of the community within which you can work to deliver VMMC messages? Youth groups: Yes [ ]; No [ ]
Men's groups: Yes [ ]; No [ ]
Women's groups: Yes [ ]; No [ ]
Others (Specify)_____ Yes [ ]; No [ ]

33. To what extent have you tried to involve your target clients in the planning and execution of the VMMC programmes? To a very large extent [5] To a large extent [4]; To reasonable extent [3]; To a small extent [2]; to a very small extent [1]

(Please explain:_____
_____
_____

34. How much are the target clients willing to be part of decision making in overall planning and execution of the programmes: Very willing [5] willing [4] Barely willing [3]; Not willing [2] Not unwilling at all [1]

35. How resourceful are the target clients when you engage them in shared-decision making for planning the implementation of the VMMC programmes? Very resourceful [5]; Resourceful [4]; Barely resourceful [3]; Not resourceful [2]; Not resourceful at all [1]

36. What measures would you recommend as a way of improving interpersonal communication between you, the health professionals implementing the VMMC programme in Siaya and the programme's target clients?

_____
_____

Thank you for agreeing to participate in this study.

Appendix 3: Key Informant Interview Guide

My name is Osir Otteng. I am a PhD student at Masinde Muliro University of Science and Technology, undertaking a study entitled "Incorporating Interpersonal Communication as a Tool for Improving the Uptake of Voluntary Medical Male Circumcision in Siaya."You are a key partner in the implementation of this programme. I, therefore, request you to grant me your time to discuss a couple of issues pertaining to communication strategies employed in the programme. The study is for academic purposes only. The information you give, which will form part of the study's report, will be treated with utmost confidentiality and will not be used for any purpose other than academic. The following questions are intended to serve as a guide to the requested interview, which you and I will have at a mutually agreed time and venue.

1. Please outline the communication strategies you have employed in the VMMC programme.

    a. Please mention specific IPC methods that you have used in the campaign. Briefly comment on: i) Peer education; ii) Community events; iii) Home visits; v) Telephone help lines; vi) Counseling, vii) political (leaders') forums

2. Do you have communication experts within your team?

    - Comment on their level of IPC competence in terms of training and experience.

3. Was training and competence in communication a key factor in selecting implementing staff for the programme?

    - What about interpersonal communication in particular?

4. Is (post selection) training in communication mandatory for your operational staff?

    - How is it conducted?

5. Please comment on your communication budget vis-à-vis those of other operations.

    - What portion of it is assigned to the above indicated interpersonal communication strategies?

6. Comment on how you have involved the target clients in the planning and implementation of the various IPC strategies?

7. What have you done to gain the buy-in and support of the community's opinion leaders for the VMMC programme?

8. Comment some of the barriers you have so far experienced to IPC in the VMMC programme campaign.

9. Please explain how you have dealt with cultural issues specific to HIV/AIDS and circumcision.

- What challenges do you encounter relating to cultural difference between the implementers and target clients with regard to communicating the programmes?

10. Are there any socio-economic interventions specific to this VMMC programme being run by the Government or partner agencies?

11. Please outline some social and economic issues that, in you view, are key to the success of failure of the programme.

Appendix 4: Focus Group Discussion Guide

1. What is your understanding of voluntary medical male circumcision?
2. What could be your main reasons for accepting/rejecting the circumcision?
3. What are you community's traditions beliefs on relation to male circumcision/HIV/AIDS
4. Do you think men should undergo circumcision? explain your answer
5. Explain (if you know) the benefits of VMMC?
6. Have you interacted with VMMC campaign teams? In what circumstances?
7. What do you think most of their communication strategies?
8. Do you have peer educators/counsellors among
9. What strategies would you advise the VMMC campaign agents to adopt in to get the people's buy in?
10. What would you say are the main reasons why VMMC campaigns may fail in this area
11. Does the community have an influenceon men's decision to accept or reject VMMC?
12. What about wives/partners?
13. Are there any forms of stigma associated with being circumcised or not being circumcised in your community?
14. Which socio-cultural factors influence the uptake of VMMC?
15. In what way can VMMC can interfere with men's economic activities?
16. What are other challenges facing the adoption of VMMC in Siaya County?

Appendix 5: Focus Group Discussion Guide

1. Have you heard about voluntary medical male circumcision?
2. Is your spouse/partners circumcised?
    a Traditionally/in church/through VMMC?
3. Have you discussed/would you discuss VMMC with your spouse?
4. What are the traditions and beliefs of your community in relation to male circumcision and HIV/AIDS
5. What are the benefits of VMMC?
    a Where did you hear that from?
6. Can you discuss these benefits with your spouse/partner?
7. Have interacted with VMMC campaign teams? In what circumstances?
8. What do you think most of their communication/campaign strategies?
9. Do you think woman have a role to play in the VMMC campaign?
10. What'd you say are the main reasons why VMMC campaigns may fail in Siaya County?
11. Which socio-cultural factors influence the uptake of VMMC?
12. In what way can VMMC can interfere with men's economic activities?
13. What are other challenges facing the adoption of VMMC in SiayaCounty?

Appendix 6: Letter of Proposal Approval

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

Tel: 056-30870
Fax: 056-30153
E-mail: directordps@mmust.ac.ke
Website: www.mmust.ac.ke

P.O Box 190
Kakamega – 50100
Kenya

Directorate of Postgraduate Studies

Ref: MMU/COR: 509099 **Date:** 13th September, 2018

Osir Otteng
BJM/LH/01-55571/2016
P.O. Box 190-50100
KAKAMEGA

Dear Mr. Otteng,

RE: APPROVAL OF PROPOSAL

I am pleased to inform you that the Directorate of Postgraduate Studies Board considered and approved your Ph.D. proposal entitled: ***'Role of Interpersonal Communication as a tool for improving the Uptake of voluntary Medical Male Circumcision in Siaya County, Kenya.'***and appointed the following as supervisors:

1. Dr. Peres Wenje - Department of Journalism and Mass Communication, MMUST
2. Prof. Michael Kiptoo - KMTC, Nairobi

You are required to submit through your supervisor(s) progress reports every three months to the Director of Postgraduate Studies. Such reports should be copied to the following: Chairman, School of Arts and Social Sciences Graduate Studies Committee and Chairman, Department of Journalism and Mass Communication and Graduate Studies Committee. Kindly adhere to research ethics consideration in conducting research.

It is the policy and regulations of the University that you observe a deadline of three years from the date of registration to complete your PhD thesis. Do not hesitate to consult this office in case of any problem encountered in the course of your work.

We wish you the best in your research and hope the study will make original contribution to knowledge.

Yours Sincerely,

Prof. John Obiri
DIRECTOR, DIRECTORATE OF POSTGRADUATE STUDIES

Appendix 7: NACOSTI) Data Collection Authorisation Letter

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/18/31037/27226** Date: **12th December, 2018**

Osir M. Otteng
Masinde Muliro University of Science and Technology
P. O Box 190-50100
KAKAMEGA

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Role of interpersonal communication as a tool for improving the uptake of voluntary medical male circumcision in Siaya County, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Siaya County** for the period ending **12th December, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Siaya County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Siaya County.

The County Director of Education
Siaya County.

Appendix 8: Research Permit from NACOSTI

THIS IS TO CERTIFY THAT:
MR. OSIR M. OTTENG
of MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY , 0-90200 Kitui,has been permitted to conduct research in *Siaya County*

on the topic: *ROLE OF INTERPERSONAL COMMUNICATION AS A TOOL FOR IMPROVING THE UPTAKE OF VOLUNTARY MEDICAL MALE CIRCUMCISION IN SIAYA COUNTY, KENYA*

for the period ending:
12th December,2019

Permit No : NACOSTI/P/18/31037/27226
Date Of Issue : 12th December,2018
Fee Recieved :Ksh 2000

Applicant's Signature

Director General
National Commission for Science, Technology & Innovation

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke

REPUBLIC OF KENYA

NACOSTI

National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 22362

CONDITIONS: see back page

Appendix 9: Authorisation Letter from County Commissioner, Siaya

REPUBLIC OF KENYA

THE PRESIDENCY

MINISTRY OF INTERIOR & CO-ORDINATION OF NATIONAL GOVERNMENT

COUNTY COMMISSIONER
SIAYA COUNTY
P O Box 83-40600
SIAYA

E-Mail cc.siaya@yahoo.com
When replying please quote

CC/SC/A.31 VOL.II/175

14th February, 2019

ALL Deputy County Commissioners,
SIAYA COUNTY.

RE: RESEARCH AUTHORIZATION – OSIR M. OTTENG

The person referred to above from Masinde Muliro University of Science and Technology, Kakamega has been authorized by the Director-General/CEO, National Commission for Science, Technology and Innovation vide letter **Ref. No. NACOSTI /P/18/31037//27226** dated **12th December, 2018** to carry out research on ***"Role of interpersonal communication as a tool for improving the uptake of voluntary medical male circumcision in Siaya County, Kenya"*** for the period ending **12th December, 2019.**

The purpose of this letter, therefore, is to ask that you accord him the necessary support as he carries out research in your Sub County.

W.G. WACHIRA,
For: COUNTY COMMISSIONER,
SIAYA COUNTY.

Copy to: Osir M. Otteng,
Masinde Muliro University of Science & Technology,
P.O. Box 190 – 50100,
KAKAMEGA.

Appendix 10: Authorisation Letter from County Director of Education, Siaya

REPUBLIC OF KENYA

MINISTRY OF EDUCATION

State Department for Early Learning and of Basic Education

COUNTY DIRECTOR OF EDUCATION
SIAYA COUNTY
P.O. BOX 564
SIAYA

E-mail: cdesiaya2016@gmail.com

When replying please quote
CDE/SYA/URA/10/VOL.1(97)

Thursday, February 14, 2019

TO WHOM IT MAY CONCERN

RESEARCH AUTHORIZATION

The above named person has been mandated to carry out research in Siaya County vide an authorization letter from National Commission for Science and Technology and Innovation Ref. No. NACOSTI/P/18/31037/27226 dated 12TH December, 2018. This research study ends on 12 December 2019.

The research title is "***Role of interpersonal communication as a tool for improving the uptake of voluntary medical male circumcision in Siaya County, Kenya.***"

Please accord him the necessary assistance in this County as he may require.

SAMUEL ONDIEKI
FOR: COUNTY DIRECTOR OF EDUCATION
SIAYA COUNTY

c.c.

County Commissioner
Siaya County

Appendix 11: Authorisation Letter from Deputy County Commissioner, Maranda

REPUBLIC OF KENYA

THE PRESIDENCY
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Email;bondodc@yahoo.com
When replying please quote

Ref. BON/ST/15/3 VOL.III/44

Deputy County Commissioner's Office
Bondo Sub County
P. O. Box 236 -40601
BONDO.

14th February , 2019

Assistant County Commissioner
Nyangoma Division
Maranda Division
Usigu Division

RE; RESEARCH AUTHORIZATION – OSIR M. OTTENG

The above named is from Muliro University of Science and Technology.

He has been authorized to carry out a research on **"Role of interpersonal communication as a tool for improving the uptake of voluntary medical male circumcision in Siaya County".**

The research will run for the period ending 12th December, 2019.

Please accord him the necessary assistance appropriately.

T.G.MACHENERI
Deputy County Commissioner
BONDO

Copy- County Commissioner
SIAYA Your letter ref. no. CC/SC/A.31 VOL.II/175 -14th February, 2019

Appendix 12: Authorisation Letter from Centre for Health Solution

Centre for Health Solutions - Kenya

CVS Plaza, 4th Floor, North Wing,
Kasuku Road, off Lenana Road,
P.O. Box 23248 - 00100, Nairobi, Kenya.
Tel: +254 020 271 0077,
Cell: +254 724 710 077 | +254 732 710 079
Email: info@chskenya.org
www.chskenya.org

25/04/2019

Oteng Osir
PhD Student,
Masinde Muliro University

RE: PERMISSION TO INVOLVE CHS STAFF IN STUDY

Kindly accord Osir Otteng the necessary assistance in administering the surveys or interviews. He shall ensure that his activities do not any way disrupt normal VMMC service provision. He shall also cover all his study costs.

He is a doctoral degree (PhD) student at Masinde Muliro University of Science and Technology undertaking a study entitled: 'Incorporating Interpersonal Communication as a Tool for Improving the Uptake of Voluntary Medical Male Circumcision in Siaya County'. He has submitted proof of his scholarship and also relevant IRB approval (ending 12th Dec, 2019) from NACOSTI (REF/P/18/31037//27226), and Ministry of Education and County Commissioner Siaya County. The study will be a mixed method approach in data collection, combining surveys, focus group discussions and key informant interviews. The specific areas of study are Bondo and Rarieda sub-counties.

The engagement shall involve:

1. Filling of a Self-administered "VMMC service provider" questionnaire by 25 – 35 of CHS staff who are specifically involved in VMMC :

   a. Mobilisation,
   b. Peer education,
   c. Counselling, and
   d. Surgery

2. Engaging, in a key informant interview, your officer in charge of field operations under whom the above-listed categories of officers' fall.

The information obtained from this survey will form part of the study's report and shall be treated with utmost confidentiality and will not be used for any other purposes or in any way whatsoever that may cause harm to CHS as an organization, Centers for Disease Control and Prevention- Kenya or individual CHS staff.

A final report shall be shared with CHS Evaluations Advisor, SHINDA project Director, VMMC Advisor (or designate) and Communications & Grants Manager.

Yours faithfully,

Kevin Owuor,
Evaluations Advisor

Copy to:
Oteng Osir
CHS SHINDA project Director
CHS SHINDA VMMC Advisor
CHS Communications & Grants Manager