

**SOCIAL AND BEHAVIOR CHANGE
COMMUNICATION FACTORS AFFECTING THE
UPTAKE OF VOLUNTARY MEDICAL MALE
CIRCUMCISION (VMMC) AMONG THE
TRADITIONALLY NON-CIRCUMCISING
COMMUNITIES IN KENYA**

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Social and Behavior Change Communication Factors affecting the uptake of Voluntary Medical Male Circumcision (VMMC) among the traditionally non-circumcising Communities in Kenya

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DECLARATION

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

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This thesis has been submitted for examination with our approval as the University Supervisors

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DEDICATION

This study is dedicated to all people who struggle to read and get meaningful solution from education, especially those in communications field who endeavor to deliver solutions to societal problems through strategic communications.

ACKNOWLEDGEMENT

I would like to thank God almighty who has brought me this far and provided me with the strength and endurance, knowledge and vitality that has helped me to finally come up with this thesis and made it a reality. I would wish to thank my family particularly my wife for her moral financial support and encouragement and finally my entire family their understanding when I was not there for them during this demanding period that I was robustly involved with coming up with this thesis project. I wouldn't have made this far without them.

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ABBREVIATIONS AND ACRONYMS

| | |
|--------------|---|
| AIDS | Acquired Immunodeficiency Syndrome |
| ART | Antiretroviral Therapy |
| ARV | Antiretroviral |
| BCC | Behavior change communication |
| BRICS | Brazil, Russia, India, China and South Africa |
| CBO | Community Based Organizations |
| CFSC | Communication for Social Change Theory |
| CSW | commercial sex workers |
| DHS | Demographic and Health Survey |
| FBO | Faith Based Organizations |
| FGD | Focus Group Discussions |
| HIV | Human Immunodeficiency Therapy |
| ICT | Information Communication Technology |
| IDIs | In-depth interviews |
| KAIS | Kenya, Aids Indicator Survey |
| KEMRI | Kenya Medical Research Institute |
| KNBS | Kenya National Bureau of Statistics |
| MC | Male Circumcision |

| | |
|----------------|---|
| MICS | Multi-Cluster Indicator Survey |
| MMC | Medical Male Circumcision |
| MoPHS | Ministry of Public Health Services |
| MTCT | Mother to Child Transmission for HIV |
| NACC | National Aids Control Council |
| NACOSTI | National Council for Science and Technology |
| NASCOP | National Aids/STI Control Programmes |
| NGO | Non-Governmental Organization |
| NRHS | Nyanza Reproductive Health Society |
| PEPFAR | President Emergency Plan for Aids Relief |
| PSI | Population Services International |
| SBCC | Social and behavioral change communication |
| SCC | Social change communication |
| SEM | Social Ecological Model |
| SM | Social mobilization |
| SMC | Safe Medical Circumcision |
| STI | Sexually Transmitted Infection |
| SWOT | Strength Weaknesses Opportunities and Threats |
| TRA | Theory of Reasoned Action |

| | |
|---------------|--|
| TPB | Theory of Planned Behaviour |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| USA | United States of America |
| USAIDS | U.S Agency for International Development |
| VCT | Voluntary Counseling and Testing |
| VMMC | Voluntary Medical Male Circumcision |
| WHO | World Health Organizations |

OPERATIONAL DEFINITION OF TERMS

- Advocacy:** The policy/enabling environment level of the social and behavior change consists of policy, legislation, politics and other areas of leadership that influence health and development (Fishbein, 2008).
- Environmental factors:** These are organizational and institutional factors, such as family, schools, religion, workplaces, peer groups, HIV and AIDS support and interest groups.
- Personal factors:** This refers to sets of preferences, values, and beliefs about oneself in relation to the environment. (Campbell, Nair & Maimane, 2007).
- Social Change Communication:** Social change communication (SCC) is a purposeful and iterative process of public and private dialogue, including the way power is distributed within social and political institutions. (Oriaso, 2013).
- Social factors:** This refers to factors such as values, beliefs, lifestyles and behaviors, social norms, culture and traditions, relationships and social influencers or models government policies, technology and health systems and infrastructural factors. (Anita et al., 2014).
- Social Mobilization:** Social mobilization (SM) is a continuous process that engages and motivates various inter-sectoral partners at national and local levels to raise awareness of, and demand for, a particular development objective. (Fishbein & Ajzen, 2010).

ABSTRACT

The general goal of this investigation was to decide the social and behaviour change Communication factors that influence the take-up of the voluntary medical male circumcision (VMMC) among the customarily non-circumcising networks in Funyula Sub-County in Busia County. The study tried to accomplish the following objectives: to look at the individual factors that influence take-up of voluntary medical male circumcision (VMMC) among the Samia Community in Funyula Sub-County; to research the social factors that influence the take-up of VMMC among explicitly dynamic male populaces; to analyse the authoritative or institutional components influence take-up of VMMC in Funyula; to inspect the ecological variables that influence take-up of VMMC; to decide the Communication factors that influence take-up of VMMC; and to decide the connection between components of individual, social, hierarchical, condition and Communication factors that influence the take-up of VMMC among explicitly dynamic male populaces in Funyula Sub-County. This study utilized blended techniques configuration including both subjective and quantitative approaches. The study focused on male populace from 20 years and above. The population for this study was 276 respondents. The study connected fundamentally essential information using both quantitative and subjective information. Quantitative information was gathered by utilizing questionnaire while subjective information was gathered utilizing Focus Group Discussions and inside and out Interviews with Key Informants from the recorded associations managing HIV and AIDS and SBCC in Funyula Sub-County. Statistical Product for Social Sciences (SPSS) was utilized for information analysis. From the study discoveries, it turned out that a substantial number of the young around there have the best possible data on what MC involves. Amid the Focus Group Discussions the members could graphically clarify the procedure that they were taken through amid their visits to the VMMC destinations. Generally speaking, the respondents had an extremely abnormal state of consciousness of the defensive impacts of male circumcision, for example, decrease in the rate of HIV and STI diseases and event of penile malignancy. Non-circumcision was referenced by most respondents as a critical social trademark that recognized the men from different networks, and some communicated dread that presenting circumcision could cause loss of this social personality. In light of the experimental proof and discoveries in this investigation, various obvious end results can be made. There is a constructive and factually huge connection between close to home variables and take-up of Voluntary Medical Male Circumcision. VMMC request creation messages should be explicitly custom fitted for various ages and ought to underline non-HIV avoidance benefits, for example, enhanced cleanliness and sexual intrigue, and need to address men's dread of agony. The investigation suggests that The Social and Behaviour Change Communication (SBCC) battles need to utilize different channels of communication to achieve every key partner at all dimensions of the socio-environmental model, for example, pioneers at the province and the sub-region levels; every key partner in VMMC administrations; every single grown-up man and ladies in the regions with low VMMC take-up. These gatherings are relied upon to comprehend the VMMC procedure and the suggestion it has to succeed. The results in Table 4.56 depicts a statistically significant relationship among; personal factors, social factors, organization factors, environmental factors, Communication factors and uptake of VMMC in which the value of correlation coefficient for all the variables is 0.769. The adjusted $R^2=0.582$ which indicates that 58.2% of uptake of VMMC can be explained by the independent variables (personal factors, social factors, organization factors, environmental factors, Communication factors). The remaining 41.8% of the variation in uptake of VMMC is affected by other variables not included in the model.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

World Health Organization has distinguished social change communication as one of the ten key components basic to the achievement of a wide scale Voluntary Medical Male Circumcision take off (WHO & UNAIDS, 2010). Aside from making request, the job of VMMC wellbeing communication endeavors in making messages depicting the extent of VMMC defensive capacity is principal. Social and Behaviour Change Communication (SBCC), is one of primary systems utilized by the nations to advance the interest for MC. The point of SBCC is to give people the data they have to settle on educated options with respect to MC. SBCC likewise makes it conceivable to address social hindrances encompassing MC and to advance more secure sex after circumcision. For sure, SBCC can be connected to data mediations about VMMC. To accomplish this goal, governments (services of wellbeing and national HIV/AIDS [AIDS] committees) with the help of neighborhood and global authoritative implementers, distinguish the substance of key communication for MC, the intended interest groups and the channels of communication to achieve target gatherings of people.

VMMC reduces men's risk of acquiring HIV through heterosexual intercourse by approximately 60% (Bailey, 2007). As more men become circumcised, fewer will become infected with HIV. VMMC indirectly protects men's female sexual partners from HIV, because HIV-negative men cannot infect their female sexual partners. However, for HIV- positive men, VMMC does not reduce their risk of transmitting HIV to their sexual partners. Furthermore, if men who are already HIV-positive become circumcised, it will not reverse their HIV-positive status.

Inside the field of HIV anticipation, the strategy of medical male circumcision (MMC) is picking up energy as a promptly accessible and quantifiable type of biomedical HIV

avoidance. The World Health Organization (WHO) and UNAIDS gauge that around 30% of males matured 15 years or more seasoned are circumcised comprehensively (WHO/UNAIDS, 2012). Before, male circumcision has ended up being powerful in lessening the dangers of penile malignant growth (Daling et al., 2005) and cervical disease in female accomplices of circumcised men (Castellsague et al., 2002; Drain et al., 2006), urinary tract contaminations in babies and youngsters (Shaikh et al., 2008), ulcerative STIs (Gray et al., 2009), bacterial vaginosis and trichomonas among female accomplices of circumcised men (Gray et al., 2009).

Research has demonstrated that the danger of a medically circumcised man contracting HIV amid vaginal sex is decreased by up to 60%, contrasted with that of an uncircumcised man (Auvert et al. 2005; Gray et al. 2007; Bailey et al. 2007). The general objective of the National MC Communication Strategy is to bring issues to light of VMMC as a medically endorsed technique that decreases the danger of hetero obtaining of HIV contamination for men and to make and keep up demand for VMMC administrations. The methodology distinguishes boundaries to take-up of VMMC administrations, including apprehension of agony and social opposition among customarily non-circumcising communities. The technique additionally looks to counter the developing perception that circumcised men and their sexual accomplices are completely shielded from HIV and the hazard practices that may spill out of this mixed up conviction (MoPHS, 2008).

Moreover, MC has been shown to be exceptionally financially savvy and cost sparing. Numerical demonstrating established that for each 5 to 15 strategies, one new HIV disease is turned away. Also, turning away one HIV contamination prompts investment funds going from US\$150 to US\$900, utilizing a 10-year time skyline (Gray et al., 2007; Kahn, Marseille and Auvert, 2006; UNAIDS and WHO, 2009). An investigation evaluating the nation explicit epidemiologic effect and the expense and net reserve funds related with scaling up the VMMC administrations demonstrated that 3.36 million new HIV diseases can be turned away through 2025 just if the scale-up of grown-up VMMC

achieves 80 percent inclusion in the 13 need nations by 2015, in this manner requiring 20.34 million circumcisions somewhere in the range of 2011 and 2015 and an extra 8.42 million somewhere in the range of 2016 and 2025 to keep up 80 percent inclusion.

Approximately 30% of the world's males aged 15 years or older are circumcised. Of these, around two thirds are Muslims living mainly in Asia, the Middle East and North Africa, 0.8% are Jewish, and 13% are non-Muslim and non-Jewish men living in the United States of America. Studies have been behaviourised on the general acceptability of VMMC among traditionally non circumcizing communities in the world. Many generalizations have also been made. A study done in Pune, India among un-circumcized men 18 years and above on the acceptability of MC showed that the fear of pain (Krupp, 2011), upto 71.3% of respondents, was the main obstacle for acceptability, followed by cultural barriers (40.9%), fear of stigma (29.5%), fear of medical complications (27.2%).

Research has shown that, under the proper circumstances, MC can help men avoid HIV infection but it cannot, however, eliminate the risk entirely. In light of these findings, the United States Agency for International Development (USAID), in accordance with the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), promotes a particular type of MC - Voluntary Medical Male Circumcision (VMMC) - as part of a larger combination HIV-prevention portfolio. The Joint United Nations Program on HIV and AIDS (UNAIDS) and the World Health Organization (WHO) recommend safe, voluntary male circumcision as an additional, important strategy for the prevention of heterosexually acquired human immunodeficiency virus (HIV) infection in men in areas with high HIV prevalence and low levels of male circumcision (WHO/UNAIDS, 2007).

However, male circumcision can have deep symbolic meaning that could pose barriers to implementation. In some parts of the world, male circumcision is a traditional practice with religious or cultural significance; in others, it is a common hygiene intervention; and in yet others, it is unfamiliar or foreign. Consequently, the proportion of men who are circumcised varies by country from less than 5% to more than 80%, with an

estimated 30% to 40% of adult men circumcised worldwide (Rizvi et al., 1999). There is no comparable evidence demonstrating that male circumcision protects against male-to-female transmission or male-to-male HIV transmission (Marks et al., 2008). Male circumcision is a relatively simple, inexpensive one time surgical procedure that is cost effective, but raises a host of ethical, legal, and human rights challenges. There are also concerns on how to package the MC information to avoid misconceptions, false sense of security, safety, ethics and need for continual engagement at the community level. In such situations, the campaign is affected by lack of proper information leading to rumors, fears, misinterpretation of facts and sometimes political interference (UNAIDS, 2008).

The VMMC service delivery package supported through PEPFAR includes screening and treatment of sexually transmitted infections (STIs); HIV counseling and testing; risk reduction counseling focused on increasing the correct and consistent use of both male and female condoms, decreasing the number of multiple and concurrent sexual partnerships, and promoting other positive behavior changes relevant to HIV prevention; and ensuring active referrals of HIV-positive men to care and treatment programs (UNAIDS, 2007).

The benefits of male circumcision show that the practice has health and social benefits to society. Male circumcision is the latest addition to the proven strategies that people can use to protect themselves from HIV infection (Auvert et al., 2005). This means that being circumcised can dramatically reduce a man's risk of HIV infection, but it also means that male circumcision does not provide complete protection against the virus. That is why it is critical to ensure that male circumcision is perceived as an addition to, and not a replacement for other effective HIV prevention measures. To ensure that they are protected against HIV infection, circumcised men and their partners must continue to practice the "ABCs" of safe sex; abstinence, being faithful to one uninfected partner, and correct and consistent use of condoms (WHO/UNAIDS/JPHIEGO, 2008).

A few procedures have been executed so as to control the spread of HIV including Voluntary Medical Male Circumcision (VMMC). VMMC is characterized as the careful expulsion of the prepuce by a prepared wellbeing laborer (Gray et al., 2010). It is a methodology to keep the spread of HIV that was prescribed by the World Health Organization (WHO) in 2007 (Montaño et al, 2014). It was explicitly prescribed in nations with high HIV predominance and low commonness of male circumcision, for example, Zimbabwe (Montaño et al, 2014). This pursued consequences of Randomized Control Trials (RCTs) done in South Africa, Uganda and Kenya which exhibited that VMMC decreases HIV transmission by up to 60% (Mwandi et al., 2011). It has likewise been shown that circumcising 80% of men could forestall 45% of new HIV contaminations between the years 2011 and 2015 (Hallett et al, 2008). Nonetheless, it is important that VMMC offers incomplete security to HIV (Kigozi, 2008). This calls for utilization of other HIV counteractive action techniques related to the procedure. Besides, concerns have been raised about probability of compensatory disinhibition after the technique (Kigozi, 2008).

Aside from the fractional anticipation of HIV transmission, VMMC has been found to have other medical advantages. These incorporate enhancement of individual cleanliness, decrease of explicitly transmitted diseases, for example, genital herpes, syphilis and Chlamydia, counteractive action of penile malignancy, aversion of ballanitis, anticipation of paraphymosis, decrease in danger of urinary tract contaminations and decrease of cervical disease hazard in accomplices of circumcised men (Hallett et al., 2008).

Voluntary Medical Male Circumcision (VMMC) was presented in Zimbabwe in 2009 with the point of circumcising 1.2 million men somewhere in the range of 15 and 29 years constantly 2015. The circumcision is done at static or effort destinations. Static locales are principally area and common emergency clinics while outreach administrations are given at facilities. A great deal of exertion and assets have been put into the VMMC program. These incorporate broad communications crusades, social

assemblies in schools and networks, school occasion battles and motivations to wellbeing laborers. The program has additionally made utilization of prominent artists and nearby pioneers. It is of worry that regardless of these endeavors, before the finish of 2012, three years after the beginning of the program, just 91 335 (7.6%) men had gotten VMMC medical procedure.

Along these same lines, Zimbabwe is probably not going to meet its objective and improbable to appreciate greatest advantages of VMMC which incorporate aversion of HIV, cervical malignancy and penile disease. In Mashonaland focal territory, four locales are putting forth VMMC benefits under Population Services International (PSI). As indicated by month to month return shapes for the period 1/04/2013 to 30/09/2013, the consolidated aggregate for the four areas did not achieve the month to month focus of 800 and 1350 amid school occasion battles (April and August). The investigation was completed to distinguish factors impacting the dimension of VMMC take-up in Mazowe area.

Supported by these outcomes, the World Health Organization (WHO) and the Joint United Nations Program on HIV/AIDS (UNAIDS) assembled in March 2007 and prescribed the usage of VMMC programs as one part of an extensive HIV counteractive action technique for the anticipation of heterosexually procured HIV disease in areas with low MC rates, high HIV predominance and huge populaces in danger for HIV contamination (WHO & UNAIDS, 2007). These nations are Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Uganda, the United Republic of Tanzania, Zambia, and Zimbabwe. WHO and UNAIDS have generally suggested the scaling up of male circumcision exercises in nations and locales with hetero scourges with high HIV and low male circumcision predominance (WHO/UNAIDS, 2012).

Kenya has a generally high predominance of male circumcision. In the Kenya AIDS Indicator Survey (KAIS) of 2007, 85 percent of men detailed that they were circumcised. Be that as it may, around half (52.9 percent) of the uncircumcised males

lives in Nyanza area with the greater part of the update living in Rift Valley, Nairobi and Western Kenya. Altogether, 73 percent of the evaluated 1.4 million HIV-tainted people in Kenya hail from the four locales. The most astounding HIV pervasiveness rates among uncircumcised males matured 15-64 years are in Nairobi (20.2 percent), Nyanza (17.3%), Rift Valley (7.0%) and Western locale (6.8%), (Mwandi et al., 2007). These territories were chosen as need districts for execution of VMMC to accomplish 80 percent inclusion (860,000 circumcisions) by July 2013 to diminish HIV transmission in Kenya (KNBS et al., 2008).

In Kenya, as in different parts of Africa, HIV rates will in general be high in zones where the commonness of male circumcision is low. Nyanza Province, for instance, has the most minimal rate of male circumcision and the most astounding commonness of HIV contamination: practically 15% of grown-ups are tainted with the infection, and less than a large portion of the men are circumcised. Across the country, the KAIS (2007) found that HIV predominance was 13.2% among uncircumcised men and 3.9% among circumcised men.

After discoveries from randomized control preliminaries in Kenya, Uganda, and South Africa showed that VMMC gives up to 60 percent security for men against heterosexually obtained HIV diseases (C-Change, 2012), the Government of Kenya led the pack in taking off VMMC administrations, in view of specialized direction from UNAIDS and the World Health Organization. The National MC Task Force was set up under the MoPHS in July 2007. The members of a national gathering assembled that year to build up a rollout system recognized Nyanza Province as the need district and the Luo as the need ethnic gathering for VMMC administrations. These choices recognized Nyanza's high HIV pervasiveness at the time at 15.1% among grown-ups. Ages 15-49 years and its low rate of male circumcision of 46.4%. Among the Luo, a customarily non-circumcising gathering and the lion's share ethnic gathering in Nyanza, the rate of male circumcision was assessed to be 17%, while among Kenyan men generally speaking, the detailed circumcision rate was 85% (C-Change, 2012).

In 2008, the Ministry of Public Health and Sanitation of Kenya discharged its Communication Strategy for Voluntary Medical Male Circumcision with the help of national and universal associations, including Population Services International (PSI), Communication for Change (C-Change), which is executed by FHI 360, the Nyanza Reproductive Health Society, the Impact Research and Development Organization, Family AIDS Care and Educational Services, APHIA II Nyanza Program (Engender Health), and the Catholic Medical Mission Board, that have actualized the methodology.

The SBCC technique was actualized in Nyanza among the Luo, some portion of Western Province, particularly among the Samia Community in Busia, with generally non-circumcising networks, parts of Rift Valley, particularly those circumscribing the non-circumcising networks, for example, Nandi and Uasin Gishu and Nairobi districts, with blended networks. Important is the way that the HIV commonness is still on the expansion in a large portion of these areas (KAIS 2013) and one is left pondering the degree of the take-up of VMMC and whether the SBCC approach used to impart was powerful or not, and what factors influenced the take-up of VMMC among the explicitly dynamic male populace in these locales. There is likewise the need to decide whether the messages scattered did not persuade the intended interest group concerning the take-up of VMMC for decreased hetero HIV commonness. Communication is focal in affecting social and behaviour change (UNAIDS, 1999).

Funyula Constituency is an electoral constituency in Kenya. It is one of seven constituencies in Busia County. The Samia Community is customarily non-circumcising, and was focused by the SBCC crusade looking to advance VMMC for diminished hetero HIV commonness in Kenya (Kwalia, 2009). Funyula Sub-County was picked for this study in light of the fact that the inhabitants are chiefly Samia who are customarily a non-circumcising network, and the rates of HIV contamination is moderately high (KAIS, 2012).

The sub county covers Nangosya, Odiado, Mudoma, Ganjala, Bukhulungu, Busembe and Busijo locations. The 2009 census reported a population of 235,000 people giving an assumed reduced growth rate of 3.5% and population density 318 persons per (sq. km). The main occupation of the residents is peasant farming of subsistence food crops such as maize, cassava, millet, sorghum and sweet potatoes. Others include beans, cow peas, groundnuts, simsim and several kinds of bananas. These crops are therefore, sometimes sold for petty cash, thus serve several purpose of food and cash but mostly at subsistence level. The non-food crops grown in the area include cotton, sugarcane, sunflowers and a few trees of Robusta coffee. There is also livestock farming on small-scale levels. There is also fishing in the lower parts of the division and in the Munana Valley. The people in the division are greatly influenced by existence, accessibility and distribution of social and economic infrastructure available.

The conceptualization of God was based on “Were” the only one God. He was thought to be living up in the skies, as opposed to the spirits of the dead ancestors, which were believed to be living in the under-world. “Were” was also perceived as “Khagaba” (the provider for each individual). However, Christians do not refer to God as “Were” but as “Nyasaye” a synonymous concept (District socio-cultural profile Busia District, 2016).

The traditional beliefs as mentioned are still predominant among the Samia of Busia County. However, new beliefs are slowly reversing the situation. First came Islam through Arab traders who used to pass through Samia to Uganda from Mumias. Later, Christian’s denominations such as Catholic and Anglican Churches were introduced. In more recent times syncretic regions such as Legion Maria have come in.

1.2 Problem Statement

Globally, research has shown that, under the proper circumstances, MC can help men avoid HIV infection but it cannot, however, eliminate the risk entirely (WHO, 2017). In light of these findings, the United States Agency for International Development (USAID, 2016), in accordance with the U.S. President’s Emergency Plan for AIDS

Relief (PEPFAR), promotes a particular type of MC - Voluntary Medical Male Circumcision (VMMC) - as part of a larger combination HIV-prevention portfolio. The Joint United Nations Program on HIV and AIDS (UNAIDS) and the World Health Organization (WHO, 2017) recommend safe, voluntary male circumcision as an additional, important strategy for the prevention of heterosexually acquired human immunodeficiency virus (HIV) infection in men in areas with high HIV prevalence and low levels of male circumcision (UNAIDS, 2007).

According to (WHO, 2015), male circumcision is one of the oldest and most common surgical procedures worldwide. It is practiced for cultural, religious and social reasons, however there are none circumcising communities. A study done in Pune, India among un-circumcized men 18 years and above on the acceptability of MC showed that the fear of pain (Krupp, 2011), upto 71.3% of respondents, was the main obstacle for acceptability, followed by cultural barriers (40.9%), fear of stigma (29.5%), fear of medical complications (27.2%). Approximately 30% of the world's males aged 15 years or older are circumcised. Of these, around two thirds are Muslims living mainly in Asia, the Middle East and North Africa, 0.8% are Jewish, and 13% are non-Muslim and non-Jewish men living in the United States of America.

In nations with high HIV predominance and low commonness of male circumcision, for example, Zimbabwe (Montaño et al, 2014), consequences of Randomized Control Trials (RCTs) done in South Africa and Uganda have exhibited that VMMC decreases HIV transmission by up to 60% (Mwandi et al., 2011). It has been shown that circumcising 80% of men forestalled 45% of new HIV contaminations between the years 2011 and 2015 (Hallett et al, 2008). Nonetheless, it is important that VMMC offers complete security to HIV infection (Kigozi, 2008).

Kenya has a generally high predominance of male circumcision. In the Kenya AIDS Indicator Survey (KAIS) of 2007, 85 percent of men detailed that they were circumcised. Fifty two (52 percent) of the uncircumcised males live in Nyanza region with another group living in Rift Valley, Nairobi and Western Kenya. Altogether, 73

percent of the evaluated 1.4 million HIV-tainted people in Kenya hail from the four locales. The most astounding HIV pervasiveness rates among uncircumcised males between 15-64 years are in Nairobi (20.2 percent), Nyanza (17.3%), Rift Valley (7.0%) and Western locale (6.8%), (Mwandi et al., 2007). These territories were chosen as need districts for execution of VMMC to accomplish 80 percent inclusion (860,000 circumcisions) by July 2013 to diminish HIV transmission in Kenya (KNBS et al, 2008).

The Samia ethnic community in Kenya, like Nilotes; Luo, Turkana, Teso and Pokot do not practice traditional Male Circumcision. These communities have registered high HIV prevalence rates compared to those that practice traditional MC despite various radio, television and Non-governmental interventions on the uptake VMMC. WHO/UNAIDS has recommended VMMC as an additional strategy in fighting HIV/AIDS in these regions. Funyula in Busia County is therefore a priority region in Kenya (Auvert et al, 2005). It is projected that by achieving an 80% VMMC coverage among males 15 to 49 years old by 2025, then a significant number of new HIV infections will be averted (Macintyre et al., 2014).

Auvert et al. (2001) noted a causal connection among circumcision and the decrease in HIV frequency through the use of SBCC model. Among the Samia Funyula males the SBCC model is yet to be adopted. Most government institutions and the NGOs working among stake holders working among the Samia Funyula to encourage VMMC uptake have continued to use communication methods that hardly can change non-circumcising culture. This study seeks to fill this gap by determining the SBCC factors that can be used to encourage on VMMC uptake.

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study was to determine the Social and Behavior Change Communication factors affecting the uptake of Voluntary Medical Male Circumcision (VMMC) among the traditionally non-circumcising in Kenya.

1.3.2 Specific Objectives

1. To investigate the personal factors that affects the uptake of voluntary medical male circumcision among sexually active male populations in Busia County.
2. To determine the social factors that affects the uptake of voluntary medical male circumcision among sexually active male populations in Busia County.
3. To examine the institutional factors that affects the uptake of voluntary medical male circumcision among the sexually active male populations in Busia County.
4. To investigate the environmental factors that affects the uptake of voluntary medical male circumcision among sexually active male populations in Busia County.
5. To determine the Communication Methods that affect the social and behavior change regarding the uptake of voluntary medical male circumcision among the sexually active male populations in Busia County.

1.4 Research Questions

1. What are the personal factors that affect the uptake of voluntary medical male circumcision among sexually active male populations in Busia County?
2. What are the social factors that affect the uptake of voluntary medical male circumcision among sexually active male populations in Busia County?
3. What are the organizational and/or organizational factors that affect the uptake of voluntary medical male circumcision among sexually active male populations in Busia County?

4. What are the environmental factors that affect the uptake of voluntary medical male circumcision among sexually active male populations in Busia County?
5. What are the Communication Methods that affect the social and behavior change regarding the uptake of voluntary medical male circumcision sexually active male populations in Busia County?

1.5 Significance of the Study

1.5.1 Policy Makers

The discoveries of the investigation will add to the proof base on wellbeing communication assessment inquire about so as to help general wellbeing experts and specialists in the improvement of future assessment procedures. This investigation will give both subjective and quantitative information on variables that influence men's choices to experience MMC, just as investigate the Communication factors, for example, structure and process, that influence the procedure of social and behaviour change, particularly in the take-up of voluntary medical male circumcision. Along these lines, the study wants to give a look into the state of wellbeing communication for VMMC in the Kenyan setting.

The discoveries of this study will give more data on the job of behaviour change battles in the battle against HIV and AIDS. It will control on reasonableness of the ideal communication techniques to use in social arranged communication mediations.

1.5.2 Academicians

The discoveries of the study will help academicians in the fields of advancement communication to accompany progressively definitive research. It will likewise profit in wellbeing communication in an offer to shape HIV and AIDS communication procedures to guarantee positive practices.

1.5.3 Theory and Practice

This investigation will add to writing here and the significant partners in government and in the scholarly world. The partners can utilize their endeavors to investigate difficulties that HIV and AIDS have at various dimensions in the public arena. This investigation will advise on the discernments and dispositions towards male circumcision by the objective populace. It will make proposals on how observations and mentalities can be changed. This will encourage the NGOs, communication specialists and wellbeing specialists to enhance their arranging and to actualize proper behaviour change communication systems for HIV and AIDS and structure future anticipation crusades.

The present investigation along these lines will help in giving responses to the key components of the individual, social, authoritative, and natural and Communication factors that influence social and behaviour change concerning the take-up of the voluntary medical male circumcision (VMMC) among the explicitly dynamic male populaces from generally non-circumcising networks in Western area of Kenya. Different studies have indicated variables that expansion the hetero HIV predominance, however few investigations have been directed to demonstrate what ought to be viewed as most in creating intercessions that work. This study will be helpful to wellbeing communication specialists and even to the legislature to plan important wellbeing approaches.

1.6 Scope of the Study

The investigation was topographically limited to Funyula Sub-County. The Sub-region was purposively chosen to speak to the network that socially does not rehearse circumcision. Helps pestilence keeps on presenting critical difficulties to individuals living in low and center salary settlements (NACC, 2010).

The investigation concentrated on male circumcision by Nyanza Reproductive Health Society (NRHS) in the Western Kenya program. The voluntary male circumcision program (VMMC) in Nyanza, Western, Rift valley and Nairobi related to radio, print media and network outreach underscored the message that male circumcision is a HIV and AIDS counteractive action strategy. The Data gathering was done in Funyula Sub-County, in Busia County.

This investigation extensively investigated the connection between male circumcision and HIV and AIDS avoidance. The study purposively focused on males dwelling in Funyula Sub-County. It utilized the Social Ecological Model. All the four builds of the Social Ecological Model for social and behaviour change, to be specific, individual, social, authoritative and natural components are applicable to the study, since they give a comprehensive expectation of the considerable number of elements that influence behaviour change particularly, in regards to the take-up of voluntary medical male circumcisions among explicitly dynamic male populaces in Kenya. The model underlines the requirement for social and behaviour change mediations to be focused at the individual, social, institutional and ecological components. The Model clarifies social and behaviour change to be controlled by close to home, social, hierarchical and ecological variables (WHO 2016; Stokols 1996; Mc Laren 2005).

The investigation utilized blended strategies plan which uses the qualities of both subjective and quantitative methodologies (Creswell, 2009). As indicated by Campbell et al. (1999), blended strategies are an incredible method for upgrading the legitimacy of results. Consequently, center gathering talks, key source meetings and self-managed polls were utilized to get information from the respondents. The utilization of a self-directed survey is especially valuable in the gathering of information on touchy subjects, for example, sexual behaviour of VMMC take-up (Campbell et al., 1999).

1.7 Limitations of the Study

The key restrictions and delimitations to the investigation were:

1. The colleges under study were situated in various zones inside Funyula sub-province. So as to cut on cost, the scientist visited one school at any given moment and made earlier meetings with suitable sightseeing plan.
2. There was an underlying uneasiness by the respondents who whined about the length and profundity of the surveys. The scientist actually connected with and guided the respondents in filling the surveys.
3. The respondents felt the data asked for through the questionnaire was private and classified. The researcher assured the respondents that the data was going to be treated with most extreme consideration and was for the unadulterated reason for scholarly.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter introduces a hypothetical survey of the Social Ecological Model and its application in the social behaviour change process with respect to the take-up of VMMC for diminished hetero HIV pervasiveness among the generally non-circumcising populaces in Kenya. The chapter also audits experimental writing on social and behaviour change communication, just as presents the reasonable structure of the study. It also reviews the study variables and gives an evaluation of existing literature before giving the exploration holes that legitimize the investigation and ultimately displays an outline of the part. The chapter also looked into; conceptual, empirical and the research gaps found. A comprehensive critique of existing literature and summary were also done.

2.2 Theoretical Review

Analysts contend that human behaviour change can be clarified by various models and speculations. These models or speculations clarify human behaviour change dependent on individual, social and institutional elements. For example Health Belief Model clarifies behaviour change dependent on close to home elements of the individual; Social Cognitive Model clarifies it dependent on the prompt social condition of the individual and; Integrated Behavioral Model, Diffusion of Innovation and Social Network Models clarify it dependent on the bigger social and institutional variables. This study looks to utilize a structure of the Social Ecological Model (SEM), which visualizes social and behaviour change as controlled by a comprehensive factors in the social arrangement of people (Mc Laren, 2005). The SEM accordingly shapes the hypothetical structure for this investigation. The investigation will likewise be guided by

hypothesis of arranged behaviour, social change communication demonstrate, broadened parallel process model and communication for social change show.

2.2.1 The Social Ecological Model

The Social Ecological Model, otherwise called the Ecological Approach tries to clarify the dynamic communication of different components that influence individuals and their social and behaviour forms (Mc Lauren, 2005). The Social Ecological Model was presented by sociologists from the Chicago School after the First World War, as a response to the tight research led by advancement therapists those days (WHO, 2016). These models were intended to cross over any barrier between behaviour speculations that concentrated on little settings and anthropological hypotheses that dissected bigger settings while endeavoring to clarify human instinct including development and advancement. Social Ecological Model was presented as a reasonable model in 1970s, formalized as a hypothesis in 1980s and was from there on, consistently updated by Urie Bronfenbrenner until his passing in 2005 (WHO, 2016).

In the underlying condition of this model, Bronfenbrenner proposed that so as to comprehend human advancement, the whole environmental framework in which development happens should be considered. Bronfenbrenner later included the natural and hereditary angles in the development and advancement of the individual (Mc Laren, 2005). By this expansion, Bronfenbrenner stated that person's natural and hereditary make-ups are influenced or altered by prompt physical and social condition called Microsystems, just as cooperation among frameworks inside the earth called mesosystems. Other more extensive social, political and financial conditions known as exosystems impact the structure and accessibility of Microsystems and the way in which they influence the individual. He saw that social, political and monetary conditions are themselves impacted by the general convictions and frames of mind known as large scale frameworks which are shared by individuals from the general public (Bukatko and Daehler 1998; Stokols, 1996).

The prior contention places Social Ecological Model at the focal point of the frameworks viewpoint (Mc Laren et al., 2005). The frameworks thinking contends that the best way to completely comprehend the general public, human instinct and change, is to comprehend the parts in relations to the entire, for example, how things impact each other inside an entire, in which case a framework is a network in a place, made up of people, systems or connections, social establishments and additionally associations and components of a more extensive condition (Stokols, 1996).

As indicated by Bronfenbrenner, social nature focuses on the individual, social, authoritative and ecological settings of human condition relations (WHO, 2016). It likewise expect that social and behaviour change of individuals in a place is dictated by a complex of variables in the earth, including individual, social, authoritative and more extensive financial and arrangement factors (Stokols, 1996; Mc Larren, 2005).

In view of these builds, the Social Ecological Model has been assumed control by general wellbeing orders, for example, wellbeing advancement, wellbeing brain science, wellbeing the study of disease transmission and maternal and tyke wellbeing, and extended to cover fields of wellbeing, improvement and vital procedures (Mc Larren et al., 2005; WHO, 2016). Presently, the Social Ecological Model is a center segment of general wellbeing preparing and capabilities. As per the American Institute of Medicine, the Social Ecological Model is a hypothesis of wellbeing which stresses the linkages and connections among different elements or determinants that influence wellbeing and social-behaviour change (WHO, 2016). As per the Social Ecological Model, the components influencing social and behaviour change include: Personal or individual variables, for example, statistic attributes, frames of mind, propensities, feelings, inclinations, self-adequacy and behaviour financial matters.

All the four builds of the Social Ecological Model for social and behaviour change, to be specific, individual, social, authoritative and natural elements are important to the present study, since they give an all-encompassing expectation of the considerable number of components that influence behaviour change particularly, with respect to the

take-up of voluntary medical male circumcisions among explicitly dynamic male populaces in Kenya. The model underlines the requirement for social and behaviour change intercessions to be focused at the individual, social, institutional and ecological variables. The present study tries to set up which of these components influence the take-up of the behaviour and the degree to which every factor influences behaviour change for diminished hetero HIV chance among the customarily non-circumcising networks. This model likewise relates with the precepts of the social and behaviour communication (SBCC) approach that was utilized to direct the procedure of progress amid the VMMC battle executed between 2008-2013 among networks that were customarily non-circumcising, for example, the luo in Nyanza, the cosmopolitan Nairobi and different networks in Western and parts of Rift Valley territories, similar to the Samia in Funyula Sub-County. Figure 2.1 underneath demonstrates the Social Ecological Model.

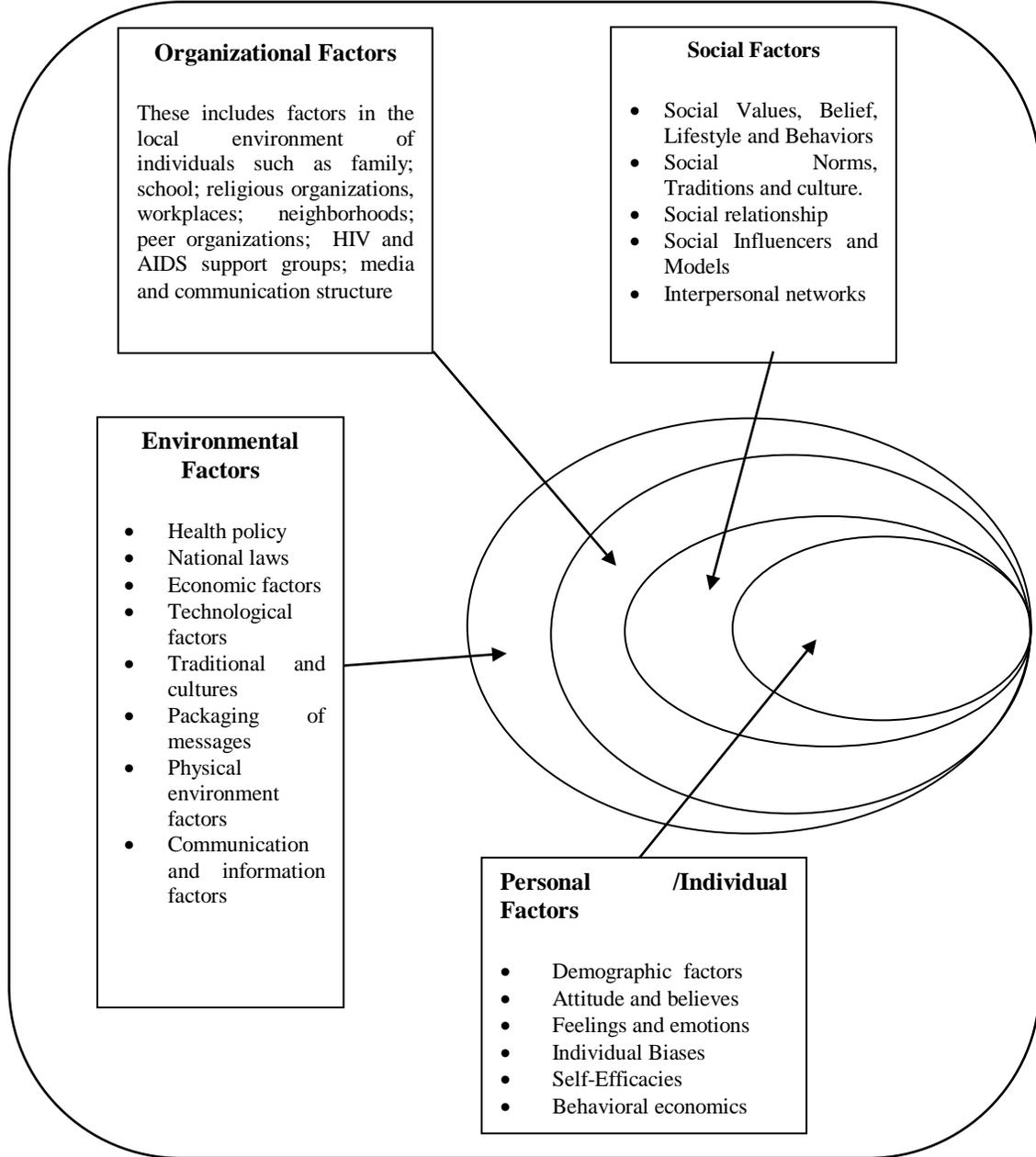


Figure 2.1: Social Ecological Model of social and Behavior Change

(Source: Adapted from WHO, 2016)

2.2.2 Theory of Planned Behaviour

Hypothesis of arranged behaviour (TPB) proposes three theoretically autonomous determinates of goal. The first is the frame of mind toward the behaviour and alludes to the degree which an individual has a positive or negative assessment or study of the behaviour being referred to. The second indicator is a social factor named abstract standard; it alludes to the apparent social strain to perform or not to play out the behaviour. The third predecessor of expectation is the level of seen behaviour control, it alludes to the apparent simplicity or trouble of playing out the behaviour and it is accepted to reflect past understanding just as foreseen obstructions and snags (Ajzen, 1991). TPB proposes a lot of relations among disposition, emotional standard, saw social control, and behaviour aim (Lam and Hsu, 2006). A lot of TPB look into has been moved in the wellbeing recorded (Kidwell and Jewell, 2003, for example, inquire about on recreational action (shoreline, running, hiking, sailing and biking) (e.g., Ajzen and Driver, 1992; Chatzisarantis, Hagger, Smith, and Sage, 2006). In total, the hypothesis of arranged behaviour gives a helpful system to see how mentalities, abstract standards, and social control should consolidate to impact both arranged and acknowledged behaviour (Bansal & Taylor, 1999).

This investigation was guided by the Theory of Planned Behavior (TPB). The defender of this hypothesis is Ajzen. It is an augmentation of the prior Theory of Reasoned Action (TRA), (Fishbein & Ajzen, 1975), TPB states that singular behaviour is driven by social expectations where social goals are an element of a person's frame of mind toward the behaviour, the abstract standards encompassing the execution of the Behavior, and the person's impression of the simplicity with which the Behavior can be performed (behaviour control). This apparent social control is attempted to influence genuine behaviour specifically, as well as influence it in a roundabout way through social expectation (Zimmerman et al., 2005). Frame of mind towards the Behavior is characterized as the person's sure or pessimistic sentiments about playing out the Behavior. It is resolved through an appraisal of one's convictions in regards to the

outcomes emerging from a behaviour and an assessment of the attractive quality of this result. The centrality of social aim addresses the established model of Belief, Attitude and Behavior (Conner & Sparks, 1995). Behaviour control is characterized as one's impression of the trouble of playing out a behaviour. TPB sees the control that individuals have over their behaviour as lying on a continuum from practices that are effectively performed to those requiring impressive exertion, assets, and so on.

In TPB, behaviour goal is dictated by a few variables. Regardless, frames of mind towards behaviour are dictated by the conviction that a particular behaviour will have a solid outcome and the assessment of this result. Besides, are the emotional standards or the confidence in whether other applicable people will affirm one's behaviour, in addition to the individual inspiration to fit in with the desires for other people. Another factor is the Perceived Behavioral Control, dictated by the conviction about access to the assets required so as to act effectively, in addition to the apparent accomplishment of these assets (data, capacities, aptitudes, reliance or freedom from others, boundaries, openings and so on.). Also, in conclusion, are the sociodemographic factors and identity attributes which condition frames of mind, emotional standards and saw behaviour control.

Hypothesis of Planned Behavior is critical to this investigation since it determines the idea of connections among convictions and frames of mind. Since the type of MC advanced under VMMC is anything but a social routine with regards to this network, the decision to experience it for an individual regularly includes a ton of exertion as one might be viewed as an outsider or be dismissed in the wake of experiencing the strategy. The individuals who experience this in a few territories in the locale might be viewed as resisting the social standards and thusly, must be set up to be mocked and called names. The model is in this way an exceptionally incredible and prescient model for clarifying human behaviour. As per this model, individuals. assessments of, or dispositions toward behaviour are dictated by their available convictions about the behaviour, where a conviction is characterized as the emotional likelihood that the behaviour will deliver a

specific result. Now and again, the adolescent might be hesitant to experience MC as a result of the result and its suggestion later on. These frames of mind men have, decide if they will acknowledge or dismiss MC as a HIV anticipation strategy as affected by the social condition, that is, the network or society in which one lives or sees as vital.

To comprehend why the young are not taking up the VMMC administrations requires information of their socio-social foundation, their socialization and how their mentalities have shaped. This makes TPB important as a result of its support of sentiments of restraint which would be valuable on account of the young settling on a choice to go for MC as the hypothesis advances sentiments of control and self-adequacy in consulting with accomplices.

Hypothesis of Planned Behavior is in this way, vital to understanding the whole procedure of basic leadership in either to embrace or not receive MC as a choice in the anticipation of HIV contamination. The arranged behaviour perspective of wellbeing has a heading during the time spent picking strategies and by expansion, the impression of the achievement and security of the said strategy for malady counteractive action.

As indicated by the hypothesis of arranged behaviour (Ajzen, 1991), a person.s behaviour is generally reliant on his or her aim to play out that behaviour which, thusly, is controlled by: (a) the individual's frames of mind toward the behaviour, (b) the emotional standards the individual in question accepts huge others have concerning the behaviour, and (c) his or her view of whether the behaviour can be performed (i.e., saw social control). The TPB.s proximal factors have been utilized to clarify individuals. support in chasing (Hrubes, Ajzen, & Daigle, 2001; Rossi & Armstrong, 1999), sailing, biking, climbing, running, and shoreline exercises (Ajzen and Driver, 1991, 1992), club betting (Oh & Hsu, 2001), drinking liquor (Trafimow, 1996), going to move classes (Pierro, Mannetti, and Livi, 2003), taking part in physical action (Courneya, 1995), and playing b-ball (Arnscheid & Schomers, 1996). Various relapse results by and large help the TPB. Hrubes et al., for instance, found that demeanors, abstract standards, and saw social control all anticipated expectations to chase, and goals (yet not saw behaviour

control) anticipated chasing behaviour. Similarly, Oh and Hsu discovered frames of mind, abstract standards, and three sorts of apparent behaviour control all anticipated clubhouse betting aims, and expectations (however not the apparent social control factors) anticipated gambling club betting behaviour. Courneya found that frames of mind, emotional standards, and saw behaviour control all anticipated physical action aims. It ought to be noted, in any case, that none of these three investigations or alternate studies referred to above, considered the potential impacts of race, ethnicity, or sexual orientation.

As of not long ago this exclusion was likewise normal in social mental research. In spite of the fact that uncommon, these contemporary studies do appear to help the hypothesis of arranged behaviours appropriateness crosswise over ethnic and social gatherings - while perceiving that essential contrasts do exist. For instance, Malhotra and McCort (2001) inspected how Chinese and American understudies chosen a couple of athletic shoes utilizing the TPB.s antecedent, the hypothesis of contemplated activity (Fishbein & Ajzen, 1975). Different relapse results bolstered the utilization of the hypothesis of contemplated activity diversely in spite of the fact that, as the creators expected, emotional concerns were progressively vital for the U.S. understudies while intellectual concerns were progressively imperative for the Hong Kong understudies. In another investigation, Blanchard et al. (2004) researched whether ethnicity directed the relationship between the TPB and physical action. They found that while abstract standard and self-viability made noteworthy and interesting commitments to aim for both African-Americans and Caucasian Americans, the frame of mind/aim relationship was altogether more grounded for African-Americans. Also, Godin et al. (1996) utilized the TPB to take a gander at condom utilization among Latin American, South Asian, and English-speaking Caribbean foreigners to Canada.

Taking everything into account, in spite of the fact that the hypothesis of arranged behaviour has regularly been utilized to clarify cooperation in MC exercises and has shown culturally diverse relevance, recreation specialists have not analyzed how the

TPB could possibly change because of ethnicity, either alone or related to sex. The choice to concentrate on these two ethnic gatherings depends on the way that individuals of Chinese foundation are the quickest developing minority bunch in Canada (Statistics Canada, 2003a).

2.2.3 Behaviour Change Communication Model

This paradigmatic move has seen the movement from the utilization of direct models of communication to behaviour change communication, BCC, to social change communication and two most as of late the participatory methodologies as techniques of HIV and AIDS positive behaviour change. Inside the field of HIV aversion, the methodology of medical male circumcision (MMC) is picking up force as a promptly accessible and quantifiable type of biomedical HIV avoidance. The World Health Organization (WHO) and UNAIDS gauge that around 30% of males matured 15 years or more established are circumcised all inclusive (WHO/UNAIDS, 2012) and are increasingly powerless against HIV disease. Previously, male circumcision has ended up being successful in diminishing the dangers of penile malignancy (Daling et al., 2005) and cervical disease in female accomplices of circumcised men (Castellsague et al., 2002; Drain et al., 2006), urinary tract contaminations in newborn children and youngsters (Shaikh et al., 2008), ulcerative STIs (Gray et al., 2009), bacterial vaginosis and trichomonas among female accomplices of circumcised men (Gray et al., 2009).

For sure, there has been a move from the utilization of straight models (broad communications mediations) to participatory, dialogical procedures of communication and the progress from the attention on individual behaviour to social change and the change of the view of HIV and AIDS as a medical issue to the appropriation of it as an advancement issue (Govender 2010).The first ways to deal with the HIV and AIDs communication intercession used the direct models, which include instructive and instructive techniques created from the understanding that communication is a crucial device being developed and HIV and AIDS aversion (Govender, 2010; Fishbein & Capella, 2006; Oriaso, 2013). The direct models of communication expect that

furnishing individuals with data and revealing to them how they ought to carry on is sufficient to achieve behaviour change required for decreased HIV and AIDS commonness (Oriaso, 2013). At first, particularly in the arranging of wellbeing communication battles, it was trusted that behaviour change involved having data and settling on an individual decision (Oriaso, 2013; Govender, 2010).

In Kenya, the straight models have been utilized to disperse messages and encounters on causes, impacts and control proportions of HIV and AIDS through radio and TV. Amid such refinements, youth-centered projects are broadcast and announcements put in many spots where the key messages have included restraint from sex, utilization of condom and being steadfast to sexual accomplices (KAIS, 2009; Oriaso 2013). Like different nations, Kenya has had a few HIV and AIDS behaviour change battles. The vast majority of these battles depend on the ABC way to deal with avoid sexual transmission of HIV and AIDS. As per UNAIDS (2004), ABC represents Abstinence, Be devoted to one accomplice and right and steady utilization of condoms. PEPFAR, an America's drive to battle the worldwide HIV and AIDS plague, pursues an ABC system that underlines on forbearance for youth including the postponement of sexual introduction and restraint until marriage, being tried for HIV and being reliable in marriage and monogamous connections and the right and steady utilization of condoms for the individuals who practice high-hazard practices (UNAIDS, 2005). These methodologies are instances of direct models of communication connected in Kenya. In any case, its adequacy is put to address as it has been reprimanded that it doesn't contemplate social setting.

Another kind of methodology that has been connected in conveying HIV and AIDS messages is the behaviour change communication (BCC). The principle defect with the direct model is that it delineates communication as a single direction process where speakers just talk and never tunes in. It likewise suggests that audience members tune in and never talks or send messages. Schramm (1955) thought of a progressively intuitive model that saw the recipient or audience giving input to the speaker or sender. This

model likewise demonstrates the speaker and audience convey better on the off chance that they have regular fields of involvement, or fields that cover. The behaviour change communication is a case of the utilization of this model.

As indicated by Family Health International (2002), behaviour change communication is an intelligent procedure with networks (as incorporated with a general program) to create customized messages and methodologies utilizing an assortment of communication channels to create positive practices; advance and support individual, network and societal behaviour change; and keep up proper practices. First world nations set accentuation on the behaviour of the people, raising the significance of behaviour change communication. The BCC is commenced on the conviction that the direness of the malady requires an attention on individual behaviour and urges individuals to settle on educated decisions (Govender, 2010).

As per NACC (2010), Kenya's HIV and AIDS answer to the United Nations General Assembly shown that the nation's technique supports the utilization of BCC to advance explicitly mindful behaviour. This report proposed that BCC has been fruitful in accomplishing positive behaviour change, especially among the adolescent to control the spread of HIV and AIDs.

It has been proposed that BCC has a noteworthy imperfection of overdependence on behaviour change, ignoring other deciding components as it expect that just behaviour alone should be changed, while, in all actuality, such change is probably not going to be economical except if it includes various types of social change (UNAIDS 1999). This thusly requires a thought of different variables like neighborhood African social qualities and practices. UNAIDS (1999) contends that communication activities get an opportunity of succeeding just when arranged inside the social settings of the intended interest group. A couple of pundits of the BCC display have noticed that behaviour change does not happen in separation but rather inside a structure of different factors, for example, the individual inspirations, nearby network support and accessibility of asset offices (Oriaso, 2013; Govender, 2010; Kunda & Tomaselli, 2009).

This BCC demonstrate is group of onlookers explicit. Utilizing the BCC way to deal with HIV and AIDs communication, the audience is cautiously divided, messages are pre-tried, and both broad communications and relational channels are utilized to accomplish characterized behaviour destinations (Oriaso, 2013; Govender, 2010). Stokols (1996), states that the behaviour change way to deal with ailment aversion and wellbeing advancement centers around the adjustment of an individual's wellbeing related practices, for instance, protected or risky sexual practices and substance misuse. The behaviour change communication includes the advancement of a specific behaviour or social standard through communication intercessions that depend on broad communications and social promoting strategies (Govender, 2010; Fishbein & Joseph, 2006; Oriaso, 2013).

A few potential constraints that are natural in behaviour change models of wellbeing advancement exist. As Stokols (1996) puts it, an individual's endeavors to change their wellbeing rehearses are frequently obstructed by monetary, social and social imperatives. Additionally, endeavors to induce an individual to embrace enhanced wellbeing practices may go unnoticed if that individual is unmotivated to establish the recommended practices and that notwithstanding when people do figure out how to receive as good as ever wellbeing rehearses, the adequacy of their behaviour changes can be undermined by their presentation to ecological environment.

Faultfinders of the BCC programs required a move to Social Change Communication display that recognises individuals and networks as operators of their change (Govender 2010). Communication reactions to HIV and AIDS must consider the setting in which the pandemic is implanted (Carey 2006; Govender, 2010). Lie (2008) declares that behaviour change can for the most part be a result of social change and requires tending to social issues, for example, standards and qualities, shame and segregation, authorities, belief systems, control relations and oppressive mastery inside a particular social, political and financial setting. A move past behaviour to concentrate on social or social change is significant (Govender, 2010). The social change perceives that individuals

require the essential aptitudes and capacity to bargain viably with social change (Govender, 2010; Bandura, 1989).

While social change is key in a network through exchange for aggregate activity, strengthening of the general population is critical for aggregate activity. Strengthening of the general population is pivotal to guarantee viable advancement. All projects should, along these lines, rethink the dimensions of strengthening given to the general population before mediations are actualized in networks, guaranteeing the equivalent sharing of learning and arrangement options among the.. Recipients and promoters. (Melkote, 2000). This move to an attention on participatory and strengthening activities has prompted the advancement of different communication and improvement models like the Communication for Social Change Theory (CFSC), which recommends that social change must be viably encouraged when the network and accomplices decide the dimensions of cooperation and proprietorship between the improvement bolster communication experts and the network (Govender, 2010). It is just when these communication experts hand over all dimensions of investment to the network where there is compelling proprietorship and dynamic discourse for aggregate activity where accord is made conceivable (Govender, 2010).

Cooperation is viewed as the opening of exchange, where the source and beneficiary connect consistently, considering the circumstance, recognizing formative needs and issues, choosing what is expected to enhance the circumstance, and following up on it (Nair & White, 1993). It is clear then that communication assumes a vital job during the time spent investment as individuals wind up included and included through persistent discourse about the difficulties that they look with respect to improvement. Support requires a move far from the best down, single direction stream of communication display, as the general population included can talk about, arrange and settle on aggregate choices.

2.2.4 Extended Parallel Process Model

The Extended Parallel Process Model (Witte, 1992) endeavors to clarify when and why these influential messages work or fall flat (Witte, 1992, 1994, 1998; Witte & Allen, 2000). The model offers a double/parallel way to deal with clarify how person's procedure and react to undermining messages Since the EPPM reestablishes the idea of dread as a focal variable in exploring dread intrigue, and it is additionally fitting for inspirational (instead of mindfulness or information) crusades, where the central gathering of people as of now has a high learning about wellbeing danger. Given the large amounts of learning announced in different investigations among the adolescent, EPPM was regarded suitable develop for directing this study.

As per the fundamental precepts of the EPPM, when an individual is presented to a dread intrigue, two subjective studies of the message will happen: first, the .evaluation of the danger. and second, the .study of the adequacy of the messages suggested reaction. (Witte, Meyer & Martell, 2001, p. 24), or as Perloff (2003) recommended, as an issue (risk) and arrangement (adequacy data). In the event that the risk assessed is seen to be high (for example, .Helps kills.), at that point fear is inspired (Easterling & Leventhal, 1989; Lang, 1984), and there is inspiration to start the second study, the assessment of the adequacy of the suggested reaction and self-viability. On the off chance that the risk is seen as superfluous/low, or irrelevant/inconsequential, (for example .Helps is a dark man's illness and being a white, I can't get the infection.) at that point there is no inspiration to process the message, viability isn.t assessed, and there is no reaction to the intrigue (Witte, 1992). Reaction viability relates to convictions about the adequacy of the reaction suggested in dissuading the risk (e.g., utilizing condoms makes it more uncertain that I will contract HIV.). Self-viability (Bandura, 1977) is an individual's impression of his or her capacity to play out the prescribed reaction to turn away the risk (e.g., .I can bear to purchase condoms?) (Rogers, 1975, 1983; Witte, 1998; Witte et al., 2001). These two studies will result in one of three results: (1) no reaction, (2) acknowledgment, or (3) dismissal of the message (Witte et

al., 2001). Rosenstock (1974) noticed that helplessness and seriousness are two basic components of seen danger. Vulnerability alludes to one's abstract impression of the danger of getting a wellbeing condition (e.g., .being youthful and in college, I am in danger of getting the HIV infection.), while seriousness shows one's sentiments concerning the reality of getting a disease (for example .HIV is a conceivably lethal ailment.) and its consequent social outcomes (for example unfriendly impacts on work- and family-life).

The EPPM predicts that if an apparent risk is high (inspiring some dimension of dread) and relying upon the dimension of adequacy evaluated, people will tail one of two separate pathways: threat control procedures or dread control forms (Witte et al., 2001). At the point when seen risk and adequacy are high, people will seek after peril control, which means they will concentrate subjectively on managing the danger and conceivable answers for turn away the risk (for example decline, be dedicated or use condoms). At the point when seen danger is high, however viability (self as well as reaction) is low, people will pursue the course of dread control. In dread control, they let their feelings assume control and utilize maladaptive ways of dealing with stress to relieve their apprehensions, for example, forswearing, reactance, or shirking for example .HIV isn't transmitted through sexual contact. (Witte, 1992, 1994, 1998; Witte et al., 2001). As per Witte, an effective dread intrigue should lead people down the way of peril control where they assess the risk and endeavor to control the threat and not be guided exclusively by their feelings. One vital idea of the EPPM is the basic point that happens when impression of the danger part of a message start to exceed view of the viability of the prescribed reaction (Witte, 1992).

Such recognitions will regularly make people move from risk control reactions (intellectually controlling the peril, e.g., accomplishing something constructive about the danger, for example, following the suggested reaction) to fear control reactions (giving feelings a chance to command the manner of thinking, e.g., denying their very own apparent weakness). At the end of the day, the basic point happens when people begin to

trust that they can't dodge a noteworthy risk from occurring. At that point and at exactly that point will they surrender controlling the risk and start to control their dread (Witte, 1992, 1994; Witte et al., 2001). Since risk control activities are self-defensive individuals embrace the suggested reaction and shield themselves from the danger – these are the kinds of activities we need to advance in any wellbeing intercessions. Review that solid view of risk and solid impression of viability advance peril control activities.

2.3 Conceptual Framework

An applied system speaks to the way inquire about factors are connected. With this relationship, the analyst can show and clarify the situation. As per scientists, a calculated structure imagines a conceivable answer for the issue being considered (Kumar, 1996; Kombo et al., 2004). The theoretical structure diagrams the relationship of the factors which are integral to the study. The present study has the needy and free factors. The social and behaviour change in regards to take-up the voluntary medical male circumcision for diminished hetero HIV predominance is the needy variable. The components that influence the take-up of VMMC among the explicitly dynamic male populaces, for example, individual, social, authoritative, natural and Communication factors are the free factors. This applied structure is basically created dependent on the elements related with the Social Ecological Model, and which are found in the writing.

The variables that influence behaviour and social change at all dimensions are accepted to incorporate individual and social procedures, likewise identified with communication. Despite the fact that Communication factors are secret with respect to the Social Ecological Model, they are really inferred in all procedures of human change. The reasonable structure has separated these components only for clearness, suggesting that understanding social and behaviour change is too perplexing to even think about being clarified utilizing unadulterated Communication factors alone, henceforth, the need to depend on the frameworks considering. Figure 2.2 demonstrate the calculated structure built to speak to the relationship of the study factors.

Independent Variables

Dependent Variable

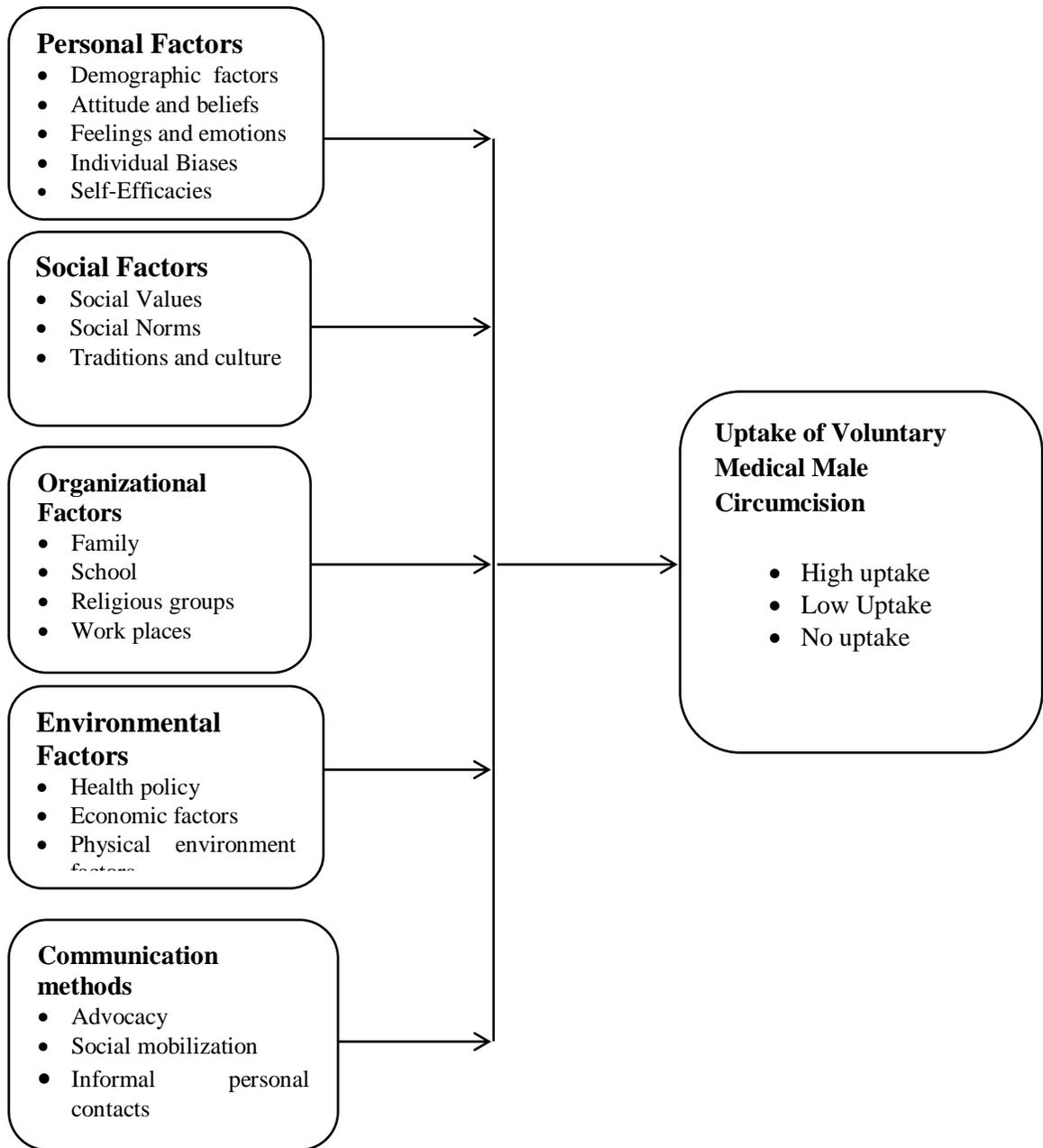


Figure 2.2: Conceptual framework

2.3.1 Personal Factors

Health knowledge level is associated with health literacy, which is the capacity to obtain process and understand basic health information and services needed to make appropriate health decisions (Nielsen-Bohlman, Panzer, & Kindig, eds, 2004). It plays an important role in disease prevention, for example, the spread of HIV and AIDs through the understanding of risks and identification of necessary behavioural changes (Kiai 2009; Nielsen-Bohlman, Panzer, & Kindig, eds, 2004). Different studies suggest an association between HIV and AIDS knowledge and youth behaviour (Mulwo, 2008; Govender, 2010).

Other studies indicate that knowledge does not necessarily lead to behaviour change (Fishbein and Ajzen 2010). In Kenya, there is need to establish the knowledge level of the most at-risk population of the most at risk populations for such conclusions to be made. Related to health knowledge are behavioural intentions and attitudes. A particular behaviour is most likely to occur if a person has a strong intention to perform it among other factors (Fishbein & Ajzein, 2010). If people believe that performing a particular behaviour is a good thing, then they are more strongly motivated actually to perform the behaviour than if they believe that performing the behaviour is a bad thing.

Another important construct of personal factor is self-efficacy and perceived control. Perceived control, as described previously, is one's perceived amount of control over behavioural performance, determined by one's perception of the degree to which various environmental factors make it easy versus difficult to carry out the behaviour. In contrast, self-efficacy is one's degree of confidence in the ability to perform the behaviour in the face of challenges. Self-efficacy should not be confused with competence. Competence refers to actual skills, whereas self-efficacy refers to perceived capabilities. Self-efficacy is one's perceived capability to perform successfully behaviour (Marco, 2008) and can be measured by having respondents rate their behavioural confidence on bipolar "certain I could not, certain I could" scales.

Skills are something one knows and learn while competencies are the effective application of skills. Competence can also be looked at as a cluster of related abilities, commitments, knowledge and skills that enable a person to act effectively in a job or a situation (Sahlins, 1978). Competence indicates sufficiency of knowledge and skills that enable someone to act in a wide variety of situations (Sahlins, 1978; Hiller, 1998). About condom use, for instance, the majority of the youth identifies condoms with safe sex, but correct and consistent condom use is low. This would be similar to perceptions they have towards VMMC. The reasons given to this is related to the problems of negotiation, difficulties in access and the risks that condoms gave no protection from, such a sullied reputation (Hiller, 1998). Perhaps, because of this, some youth were looking to less secure methods of protection such as informal history-taking and monogamy (Hiller, 1998). Efforts should be put therefore into building an AIDS competent community through the establishment of community strengthening interventions to provide skills and competencies to the at risk populations. Campbell (2007), defines an AIDS competent community as one where community members work collaboratively to support each other in achieving sexual behaviour change, reducing stigma (a key obstacle to effective HIV and AIDS management), offer support for people living with HIV and AIDS cooperate with volunteers and organizations seeking to tackle HIV prevention and AIDS care and effective access to health care.

The community should also be empowered with what is referred to cultural competence. It is clear that culture does matter in behaviour change. Cultural factors are crucial in the prevention of HIV and AIDS, and more specifically VMMC. Cultural factors shape related beliefs, behaviours and values. Indeed, as Marcus (1986) puts it, systematic attention to culture improves adoption of new innovations. Culture is often made synonymous with ethnicity, nationality, and language (Marcus, 1986). For example, people of a certain ethnicity are assumed to have a core set of beliefs about illness owing to fixed traits. Cultural competencies therefore become a series of dos and don'ts. It is therefore important that cultural roots of a problem be identified for it to be adequately solved. In VMMC, therefore, cultural traits of a community can hamper its adoption.

Other cultures abhor the use of VMMC, as they say, this is an abomination and can bring bad luck, especially the traditionally non-circumcising cultures. Efforts should, therefore, be made that stigmatisation of VMMC is removed and the youth equipped to deal with cultural orientations that hinder it. This cultural competence results to increased VMMC use. There is, therefore, need to increase local competence to control HIV and AIDS through VMMC use by making the youth understand their biological and social knowledge about transmission of the disease to build competence among the youth.

Youth should become increasingly skilled in presenting the social context and microbiology of HIV and AIDS in public places, fellow youth in active public dialogue about presentation strategies, stigma reduction, on VMMC use, among others. Drama is an innovative and interactive way for the youth to acquire knowledge about HIV and AIDS and openly engage community members in public performances and discussions. The drama has been an effective participatory method for HIV and AIDS education. The community-based dramas actively engage the youth and the entire community in participating in and ask questions raised by the performance. In dramas, therefore, the youth can be empowered. Anita *et al.* (2014) argues that literature suggest that communication is a protective factor against the high-risk sexual behaviour. This therefore implies that it is important for the females to be empowered with communication skills so that they can negotiate for VMMC adoption in order to promote safe sex.

A person will need knowledge and skills to carry out certain behaviour even if there is a strong behavioural intention (with no or minimum environmental constraints). As noted above, when people do not perform a recommended behaviour as they intended to, the objectives of an intervention would not be to improve intention, as the problem here is not one of motivation but one of competence, that is, skills (and means, that is, environmental constraints or facilitators) (Marco, 2008). If, for example, a woman has a strong intention to get a mammogram, she requires sufficient knowledge of her health

care system to act on this intention (with no serious environmental constraints). Those affected by diabetes may be highly motivated and thus intending to start an insulin self-injection regimen, but in the reality of a first unassisted injection attempt they may find themselves unable to use the syringe correctly, that is, actual deficient skills. In brief therefore, without the necessary skills, intentions do not predict behaviour.

2.3.2 Environmental Factors

Environmental constraints are any limitations on strategy options due to political, external competition, social requirements and expectations, cultural or economic factors, technological or legal requirements (Anita et al., 2014). Behavioural changes are affected by a host of environmental factors. They include social constraints, political constraints, legal and ethical constraints, cultural constraints among others. Social constraints influence tastes and buying patterns. Economic factors such as household income determine what one has to spend and what to buy. Political constraints will also affect the use of health products like medicines and condoms. It is not lost that in the earlier days of the scourge, Kenya's political leadership was in denial and prevention measures like use of condoms were not promoted. It was not until the political leadership in 1999 when it declared HIV and AIDS as a national disaster that efforts to curb the scourge were put into place.

In South Africa, President Jacob Zuma once claimed he had sex with an HIV positive lady without a condom but did not contract the virus because he had a cold shower. These are some examples of the political constraints. Also, political constraints affect the taxing system. Taxing health products like medicines and family planning contraceptives, including condoms thereby making them expensive and therefore out of reach of the youth is a political, environmental constraint. There are also the legal laws and ethics that act as an environmental constraint. Laws that bar the distribution of family planning, contraceptives and STI, preventive products like condoms to underage that are under 18 years, are a constraint to increased condom use among the youth.

There are also technological constraints that act as environmental constraints. Condoms are not being manufactured in Kenya and sometimes are not adequate and become scarce, especially those freely distributed. Social requirements include the society's expectations of the individual, such as ethical issues. Rigid societal and gender norms that govern sexual behaviour for girls pose an environmental constraint, especially, where girls are just to submit to the men. Analysing and understanding environmental constraints and their dynamics are fundamental to positive behaviour change. All these environmental problems affect the uptake of VMMC as a social and behavioural problem.

2.3.3 Social-Economic Factors

Social constraints are the things one cannot do because society says it's bad. To date, it is viewed as improper for a woman to initiate sex and more especially keeping condoms. Keeping condoms or even purchasing condoms is seen as a sign of promiscuity. It is seen to be bad therefore for one to be seen openly buying and keeping condoms. Therefore, to date, buying condoms openly is difficult because of the social constraints, which may lead to people engaging sex without condoms. People may fear being seen buying condoms and so be forced to do unprotected sex, just like it appears when males are seeking VMMC services from service organizations located in traditionally non-circumcising communities. Generally, when one uses the phrase socially constrained, it means that people feel that they have to do or not to do certain things because of the manner in which others perceive such actions. For example, a man might really want to use VMMC but won't do so because of the way society views such activity and therefore, he is constrained to it.

The behavioural change will take place where apart from the existence of behavioural intention there are no serious environmental constraints preventing performance. These are what is referred to as environmental constraints in the Social Ecological Model. If, for example, someone's health insurance benefits include the use of a mail service pharmacy, the likelihood that syringes and insulin will be available will increase.

Unforeseen heavy traffic is an example of impediment, as it makes it difficult to be at home in time for a scheduled injection. In brief, therefore without the necessary skills and resources, intentions will not predict behaviour (Fishbein & Ajzein, 2010; Marco, 2008).

Sub-Saharan Africa is the part of the world that is most severely affected by the HIV and AIDS, yet, surveys of attitudes to AIDS across African countries show that most people do not attach great importance to the issue. It is argued that the salience of HIV and AIDS is low in Africa because many people are too poor to consider the disease important. HIV and AIDS is crowded with other issues such as poverty, hunger, and unemployment that have more immediate consequences for people's lives. Today, the youth fear most getting pregnant than HIV and AIDS. It is common therefore to see girls and young ladies willing to engage into unsafe sex by not using condoms as long as they will be paid handsomely because of poverty as they say HIV and AIDS will come at a much later date, so, the salience of HIV and AIDS is not seen. Poverty and material living conditions have significant effects on the likelihood that individuals consider AIDS as salient political issue.

This supports the notion that poverty is a constraint on the importance people attach to AIDS and condom use. The Health Belief Model developed by Godfrey Hochbaum and others assumes that individuals will take preventive actions (risk-reduction behaviours) when they are susceptible to a disease (self-perception of risk) and acknowledge the consequences as severe and believe that taking preventive actions will be beneficial in reducing the threat of contracting the disease (e.g, condoms are effective against HIV infection) and that its perceived benefits will be sufficient to overcome perceived barriers such as cost or inconvenience of undertaking the actions. Such therefore is the importance of salience in behaviour change. The saliency of the HIV infection and the challenges associated with it may cause a society-wide recognition of the problem, thereby promoting behaviours and social practices to eliminate the situation. This is

what may necessitate a traditionally non-circumcising community to recommend the adoption of VMMC against the socio-cultural norms against VMMC.

2.3.4 Organizational and Institutional Factors

Organization and institutions in the environment of individuals such as the family, clans, peer organizations, religious groups, cultural groups, and HIV and AIDS support groups have influence in the adoption of behavior and social practices such as the VMMC (Obure, 2009). Cultural barriers to male circumcision from the study done among non-circumcising communities, was mentioned by most participants as a significant cultural characteristic that distinguished the Luo and Samia are from other communities, and some expressed fear that introducing circumcision could cause loss of this cultural identity (Obure et al. 2009).

Because circumcision carries great cultural import in most societies, WHO/UNAIDS (2007) recommended that the socio-cultural context of traditional male circumcision should inform how VMMC programming is promoted. The meanings and associations people attach to circumcision should be considered when designing circumcision programs, as these will act as the filter through which MMC promotion will be received (Sithole et al., 2009). For instance, how will communities respond to VMMC promotion when circumcision, or the lack of it, is a mark of citizenship, religious or cultural affiliation or a sign of 'otherness' that signals exclusion, marginalization or oppression (Dowsett & Couch, 2007)? Additionally, it is important to understand the meanings attached to traditional forms of circumcision. Earlier studies found that some ethnic groups in which circumcision is not commonly practiced disapprove of circumcision, using derogatory terms for a circumcised man or a man with a congenitally shortened prepuce (Bailey et al., 2002).

In ethnically homogenous areas, circumcision could lead to rejection by local women and serve as a barrier to marriage (Bailey et al., 2002; Lukobo & Bailey 2007). In this paper, we will argue that understanding the local context and cultural aspects will shed more light on how to integrate the program in a culturally acceptable way that will ultimately increase the uptake of VMMC services.

There is an expressed perception among most people that promoting VMMC would lead to a misconception that MC was some “magic bullet” against HIV, which could have an adverse effect on other preventive methods (Alfredo, 2009). Some of the females claim that many of these men who come out of circumcision will feel that the sex speed governor has been removed. Now that they are cut, their chances of being infected have reduced...it is like the speed governor has been removed. Men will no longer want to use condoms (Alfredo, 2009). Another fear mentioned in several studies focusing on VMMC among traditionally non- circumcising communities is that MC promoted to reduce HIV, men who decide to remain uncircumcised would be discriminated against. The common argument is that the uncircumcised men would be labeled as risky or assumed as HIV infected. This issue brings up the perception that promoting MC in the community could discriminate against uncircumcised men (Sawires et al., 2007).

It is surprising that a lot of the people especially in the non-circumcising community support the theory that non-circumcision enhanced sexual pleasure. The perception is that MC leads to loss of penile sensitivity, which affects a man’s sexual pleasure. Inability to satisfy the woman is perceived as a significant failure in the masculinity test. Supporters of non-circumcision observe that the foreskin caused more friction, warmth, and sensation, increased penile size and filled the woman’s vagina. This is perceived to enhance pleasure for women and men. However, there are people who are reluctant to express the perception that circumcision leads to excessive sexual desire and tendency to womanize (Alfredo, 2009). A person’s response to HIV and AIDS is strongly influenced and shaped by their behavior, their social environment and the prevailing government and policy environment. However, whether or not an individual can embrace voluntary

male circumcision can be impacted by cultural, economic, social and political factors over which the individual may exercise little control.

Among traditional non circumcising communities such as teeth removal practice, myths related to circumcision in relation to sexuality performance and wife inheritance were looked into in relation to VMMC. Prevalence of circumcision within a country varies by ethnicity. In Kenya 84% of men are circumcised but the level is lower among the non-circumcising ethnic groups (40%). In some regions, there is discrimination, punishment, bullying and beatings in case a man is discovered not circumcised (Bailey et al., 2002). In these regions, circumcision is usually behaviourised in Augusts and therefore the desire to conform is always an important motivation in places where majority of male are circumcised and the uptake of circumcision is very high. Changing social norms or creating new social norms requires shifting (1) people's paradigms about what they perceive to be right or true, and (2) people's expectations regarding normative behaviors.

Social norms that are deeply rooted in one's beliefs are the most difficult to change. The various C4D approaches can be used to shift social norms toward positive norms through interpersonal and community dialogue, social mobilization, and advocacy. For example, gender norms and social expectations of the roles that men play in reproductive health affects their attitudes and behaviors about HIV and pregnancy prevention, gender-based violence, and their participation in pregnancy, childbirth, newborn care and child care. Programs that address the social construction of gender roles through group or peer education, community outreach, mobilization, and mass media campaigns, and promote policy-level changes that support positive social norms, have been shown to have effects on changing norms.

In Yemen, the Safe Age of Marriage intervention used a community-based approach to change social norms and community attitudes regarding early marriage, girls' education, and the rights of girl children, including educating communities about the social and health consequences of child marriages, gaining support for keeping girls in school as an

alternative to child marriage, and securing the support of religious leaders and stakeholders to support of increased age of marriage. Social norms are usually understood by measuring individual attitudes (positive or negative feelings regarding an idea or behavior) and beliefs. Figure 3 is a schematic that highlights the concepts to consider when measuring social norms. To date, the most commonly used surveys (e.g., Demographic and Health Survey (DHS) and Multi-Cluster Indicator Survey (MICS) do not capture social norm data. Efforts are underway to develop ways to measure social norms.

These also influence preference for Voluntary Medical Male Circumcision. Studies in USA have shown a strong association between preference for VMMC and high socioeconomic status, whereas low uptake of the services is associated with low socioeconomic status. In contrast, the Demographic and Health Surveys in sub-Saharan African countries show no consistent association with socioeconomic status. For example, in Tanzania, higher rates of circumcision were observed among men with higher levels of education, of higher socioeconomic status living in urban areas, whereas in Lesotho, circumcision was most common among men with no education, in the lowest wealth quartile and living in rural areas. Social – lifestyles of the respondents, health seeking behavior and support groups. Social organizations and institutions also have a role to play in social and behavior change. These include the family, schools, religious organizations, workplaces, peer and friend networks, as well as HIV and AIDS support groups and other interested organizations.

2.3.5 Communication Methods

Interpersonal communication is hailed as very central in the success of communication intervention. Preferred to the linear approaches, interpersonal communication can be traced to the development of the two step flow theory in the 1940s by Paul Lazarsfeld, Berelson and Gaudet. The theory was later elaborated by two communication scholars Paul Lazarsfeld and Elihu Katz. The theory suggests that information moves through two stages: from the media to relatively well informed individual (opinion leaders) who

frequently attend to mass communications and from opinion leaders through interpersonal channels to individuals who have less direct exposure. The opinion leaders play important role in interpreting of issues. Opinion leaders are looked at in high regard and respectability by the masses and unlimited access to the media.

The proponents of the theory discovered that informal personal contacts were mentioned far more frequently than exposure to radio or newspaper as sources of influence on voting behavior (Lowery & DeFleur, 1995). This theory asserts that information from the media moves in two distinct stages. First, individuals [opinion leaders] who pay close attention to the mass media and its messages receive the information. Opinion leaders pass on their own interpretations in addition to the actual media content. In so doing, opinion leaders are quite influential in getting people to change their attitudes and behaviors and their personal influence seems more important in decision making than media (Flynn, Goldsmith & Eastman, 2001).

Brosius and Weimann (1996) explain one of the benefits of the two step flow theory as re-emphasizing the role of the group and interpersonal contacts. The most efficient media is word-of-mouth, and it is by reaching the influential's with other forms of media that this word-of-mouth is generated (Griswold, 2007). Some of the key approaches emanating from the interpersonal communication, which are central in promoting the success of SBCC strategies, are discussed below:

The policy/enabling environment level of the social and behavior change consists of policy, legislation, politics and other areas of leadership that influence health and development. A strategy used to address this level of the social system is advocacy. Advocacy is an organized effort to inform and motivate leadership to create an enabling environment for achieving program objectives and development goals. The purpose for advocacy is (1) to promote the development of new policies, change existing governmental or organizational laws, policies or rules, and/or ensure the adequate implementation of existing policies (2) to redefine public perceptions, social norms and procedures, (3) to support protocols that benefit specific populations affected by existing

legislation, norms and procedures, and/or (4) to influence funding decisions for specific initiatives. There are three common types of advocacy: Policy advocacy, to influence policymakers and decision makers to change legislative, social, or infrastructural elements of the environment, including the development of equity-focused programs and corresponding budget allocations; Community advocacy, to empower communities to demand policy, social, or infrastructural change in their environment, and Media advocacy to enlist the mass media to push policymakers and decision makers toward changing the environment.

Advocacy includes motivating different levels of decision makers (e.g. politicians, policymakers) to publically discuss important issues, defend new ideas or policies, and commit resources to action. The advocacy process requires continuous efforts to translate relevant information into cogent arguments or justifications and to communicate the arguments in an appropriate manner to decision makers.

The most common barriers to influencing leadership toward creating an enabling environment for SBCC programming can include: (1) political or institutional instability (e.g., high turnover of leadership and re-structuring) or lack of political will; (2) a lack of local evidence on overall program cost and cost effectiveness; (3) a lack of reliable data about the efficacy, effectiveness, or value of a program; (4) dissension among the leadership between health and other divisions of a government; (5) tensions or low capacity with regard to the use of various levels of health workers; (6) resistance from professional and/or regulatory bodies; (7) systems requirements (e.g., human resources, commodities); (8) contradictory policies; (9) culturally ingrained practices, social norms, and resistance to change; and (10) a lack of social accountability by policymakers.

A good way to approach developing an advocacy strategy is to identify key elements for different decision-makers, and examples of the concerns, activities and tools that suit these particular intended populations.

2.3.5.1 Social Mobilization

Social mobilization (SM) is a continuous process that engages and motivates various inter-sectoral partners at national and local levels to raise awareness of, and demand for, a particular development objective. These partners may include government policy makers and decision-makers, community opinion leaders, bureaucrats and technocrats, professional groups, religious associations, non-governmental organizations, private sector entities, communities, and individuals. This communication approach focuses on people and communities as agents of their own change, emphasizes community empowerment, and creates an enabling environment for change and helps build the capacity of the groups in the process, so that they are able to mobilize resources and plan, implement and monitor activities with the community.

Engagement is usually through interpersonal communication (i.e., face-to-face dialogue) among partners toward changing social norms and accountability structures, providing sustainable, multifaceted solutions to broad social problems, and creating demand and utilization of quality services. Other channels and activities for SM may include mass media awareness-raising campaigns, advocacy with community leaders to increase their commitment to the issue, and activities that promote broad social dialogue about the issues, such as talk shows on national television and radio, community meetings, traditional participatory theater performances, home visits, and leaflets. The outcomes are usually oriented toward developing a supportive environment for decision-making and resource allocation to empower communities to act at the grassroots level.

Social mobilization recognizes that sustainable social and behavior change requires collaboration at multiple levels, from individual to community to policy and legislative action, and that partnerships and coordination yield stronger impacts than isolated efforts. Key strategies of social mobilization include using advocacy to mobilize resources and change inhibiting policies, media and special events to raise public awareness and create public spheres for debate, building and strengthening partnership and networks, and motivating community participation.

2.3.5.2 Social Change Communication

Social change communication (SCC) is a purposeful and iterative process of public and private dialogue, debate, and negotiation that allows groups of individuals or communities to define their needs, identify their rights, and collaborate to transform the way their social system is organized, including the way power is distributed within social and political institutions. This process is usually participatory and is meant to change behaviors on a large scale, eliminate harmful social and cultural practices, and change social norms and structural inequalities.

While social mobilization (above) focuses on creating and sustaining action-oriented partnerships to create an enabling environment for positive health, SCC focuses on creating ownership of the process of change among individuals and communities. The emphasis of SCC is on creating empowered communities that know and claim their rights and become their own agents for changing social norms, policies, culture and environment (e.g., healthcare delivery infrastructure).

Multi-faceted communication interventions (e.g., using mass-, social-, and traditional media, information communication technology (ICTs), and/or *mHealth*) aimed at changing individual behavior play an important role as a foundation for SCC, with an emphasis on using local communication content that is socially and culturally appropriate to the community. Community members control the tools of communication directly, allowing for suitably tailored messages. Such interventions, however, must be reinforced by activities that encourage dialogue within the community to motivate people to shift toward desirable social/community beliefs, norms, and practices, and are often combined with advocacy.

Community dialogue for social change generally follows a pattern. The dialogue usually begins with a catalyst for change. The catalyst may be an individual within the community, a change agent working for a health organization who introduces a new innovation such as VMMC or a mass media message heard by individuals in the

community. For example, a man might talk to another man about whether to take VMMC. The men might talk to, and ask questions of, others in their family and social networks about the problem, which may prompt someone to identify an opinion leader or potential champion (e.g., a community health worker) that can help to address the problem. Usually the person who takes up the cause calls a meeting to discuss the issues related to the problem and to achieve consensus about how to address the problem.

Communities that engage in this collective process of social change communication are likely to gain a sense of collective efficacy, feel a greater sense of ownership for their actions and outcomes, and believe in their capacity to engage in similar projects in the future.

Behavior change communication (BCC) is the strategic use of communication to promote positive health outcomes. BCC is a theory-based, research-based, interactive process to develop tailored messages and approaches, using a variety of population-appropriate communication channels, to motivate sustained individual- and community-level changes in knowledge, attitudes, and behaviors. Formative research is used to understand current levels of knowledge, attitudes, and behaviors among individuals in a specified population in order to develop communication programs that move those individuals along a continuum of change (or through stages of change) toward the desired positive behavior(s).

Using the BCC approach can help to stimulate community dialogue and raise awareness about the problem; increase knowledge, for example, about the importance of taking the VMMC, promote attitude change, for example, about the risks associated with not undergoing the VMMC, create demand for information and services, advocate with policymakers and opinion leaders toward effective approaches to increasing the adoption of the innovation such as VMMC, improve skills and the sense of self-efficacy.

BCC is an essential part of comprehensive prevention and control programs that include both services (e.g., health, medical) and commodities (e.g., vaccines). Before individuals and communities can reduce their level of risk or change their behaviors, they must first understand basic facts about HIV health risks, adopt key attitudes, learn a set of skills and be given access to appropriate products and services. They must also perceive their environment as supporting behavior change and the maintenance of safe behaviors, as well as supportive of seeking appropriate prevention, treatment and support.

The above four approaches (advocacy, social mobilization, social change communication, and behavior change communication) are interrelated and interactive. When strategically combined, they produce a synergistic effect, that is, an increased intensity or effect with more efficient use of resources. BCC programs stimulate the most immediate preventive actions among individuals, families and communities for decreasing childhood pneumonia and diarrhea. Advocacy strategies can be used to create new laws or change existing policies to facilitate change. Multi-level approaches that help to change social, cultural, or institutional norms are most likely to result in sustained behavior change over time. Since individuals exist in a social ecological system, changing individual-level behaviors and creating new social norms requires creating an enabling environment, that is, facilitating change and removing bottlenecks that inhibit change at the household, community, organizational, and policy levels.

Program managers and program planners should use the Social Ecological Model (1) to understand the complexity of, and possible avenues for addressing, the health problem, and (2) to prioritize resources and interventions that address the multiple facets of the problem, remove bottlenecks, and create an enabling environment for sustained behavior and social change. As described above, a preliminary tool that some program managers and program planners use to help them assess the social ecological landscape prior to developing a strategic program plan is the SWOT analysis. A SWOT analysis is one element of a strategic plan. The SWOT analyses is an inventory of resources and

usually focuses on four key program management areas of (1) partnerships, (2) capacity development, (3) research, monitoring and evaluation, and (4) resource mobilization.

The SWOT analyses will highlight internal organizational strengths, internal weaknesses, external opportunities, and external threats or barriers to achieving your program's goal and objectives. Understanding the SWOT analysis will help to determine how to focus on high-priority vulnerable, marginalized, and hard-to-reach populations, where change is possible, and provide opportunities to change course or revise priorities as appropriate in order to reach your program goals. For example, an assessment of resources for a strategic SBCC program with a goal of increasing VMMC may allow (1) for advocacy activities toward a policy that assures that every male is circumcised, (2) for organizational capacity-building to develop a cadre of trained healthcare providers and promoters at the local level, (3) for community engagement activities to create demand for quality healthcare services where VMMC can be obtained at a reasonable cost, and (4) for a campaign to promote the importance, availability, skilled providers, and points-of-access for VMMC in an underserved community.

Strong partnerships and collaborations are at the core of effective SBCC programs. When partners take ownership of a program, it is more likely to succeed. A strong communication program should engage multiple partners at the national and local levels in a participatory manner; no single entity can achieve the results produced through multi-partner collaborations. Partners can provide program support through expertise, capacity building, and resource mobilization, can broaden the reach and profile of the program through network affiliations, and can help to avoid duplication of efforts.

A key strategy for developing and administering SBCC programs is to create an infrastructure or centralized mechanism for engaging partners in a participatory process to manage the program (e.g., SBCC Coordinating Committee). Such centralized mechanisms are more successful when partners create the mechanism together. The process for developing such a mechanism, and the ground rules by which it will operate, helps to create the culture of the partnership and develop working relationships.

The key to high-performance partnerships is continuous and open information sharing. There should be a mechanism for sharing information and communicating about the activities of the group and the program. For newly formed groups, it is useful to begin by clarifying a shared vision to help partners focus on the path to achieving success and brainstorming about the limitations and challenges to realizing the vision and how the team of partners can overcome the limitations or challenges. The partners should also develop a common goal and objectives for the partnership and discuss the potential contributions of each individual, group, or organizational partner. Meetings should be held on a regular basis to share information, assess progress, re-visit program objectives and activities, and discuss next steps in the program steering process.

Capacity strengthening at the institutional and community levels is an important component for strong and effective SBCC programs. There are many strategies for developing capacities for the management and delivery of SBCC programs, including formal and informal skills training, mentoring, supportive supervision, and team building exercises. The type of strategy selected depends on the existing level of capacity, the type of strengthening required and the level at which the capacity needs to be strengthened (e.g., individual, group, community, organization/institution, or national level). Individuals might benefit from topic- or skills- based trainings, demonstrations, study-tours, observations, and supportive supervision. Groups and communities might engage in participatory training workshops, group education meetings, and team-building exercises.

Organizations and institutions might gain insight into their capacities through special studies, for example a SWOT analysis, that engages members of the organization in an exercise to determine the strengths, weaknesses, opportunities, and threats facing the institution in such areas as partnerships, research, monitoring, and evaluation, and resource mobilization, and enable them to make recommendations for leveraging internal strengths, improving internal weaknesses, exploiting external opportunities, and minimizing external threats.

2.4 Empirical Literature Review

A study by (Gasasira et al., 2012) in Rwanda to determine the factors that motivate or demotivate men to circumcise or allow their sons do so made the following findings as prohibitory; men reported that they were too old to for circumcision, whereas willingness was associated with young age, marital status and knowledge that MC protects them against HIV. The study concluded that many younger people were willing to get circumcised (Gasasira et al., 2012). The researchers admit that there is knowledge gap regarding the perception and willingness to undergo MC by older nontraditionally circumcising Rwandan men.

Price et al. (2014) conducted a study in Zimbabwe to examine adoption of VMMC; several interventions were identified that are likely to move men more quickly through this process of change. For instance, while at the pre-intention stage, the aim of behavior change interventions should be to increase men's exposure to VMMC messages through targeted messaging. Social pressure and encouragement to ascribe positive values to VMMC help move men further toward the decision to act, and addressing men's fears about the procedure may remove the final barrier. The study also demonstrated that even with critical danger of contracting HIV and AIDS, the act of preventive practices was still low. For instance, 80.9% of the respondents revealed that they didn't utilize a condom in their last sex. This was disregarding the learning of preventive estimation of condoms being at 89.1%. In the young people's culture, different qualities are unquestionably more essential than requesting precautionary measures from sexual accomplices. For instance, to demand the utilization of condoms would disregard the essential estimation of relational trust MacPhail (1998). The study also proposes that youngsters are mindful of the estimation of condoms as a boundary to contraception than avert HIV transmission.

The above study is predictable with information from the KDHS reports of 2003 and 2008-09 which demonstrated that there had been a checked enhancement in learning of HIV anticipation strategies among young people aged 15-19 years. For example, 75% of

teenagers realized that somebody could diminish the danger of getting the HIV infection by utilizing a condom each time one had sex. This learning of condom utilization expanded from 67% in 2003 to 75% in 2009 (KDHS, 2003; 2008-09).

Talk on HIV in numerous nations has rotated around the way that most communication models have demonstrated inadequate in addressing HIV and AIDS, and that long haul social change is a fundamental requirement (Kiai, 2009). This study has shown that there is a requirement for HIV and AIDS communication mediations that are predictable with the exceptional characteristics and ways of life of youngsters. This investigation has discovered that certain types of relational collaboration are the best methods for making preventive awareness.

In their study on HIV and VMMC, (Tsisis & Nirupama, 2008) found out that most of the respondents (60.9%) did not see themselves not to be in danger of HIV disease because of VMMC, in light of the fact that they engaged in sexual relations with their companions whom they trusted and accepted to be solid. As demonstrated in the study, HIV and AIDS is socially impacted on an individual (Tsisis & Nirupama, 2008). This investigation discovered that social factors, for example, connections; majorly affect behaviour that counteract HIV and AIDS transmission.

This study bolsters the view that in the African setting there is have to think about nearby African social qualities and practices. Communication activities get an opportunity of succeeding just when arranged inside the social and social setting of the intended interest group (UNAIDS, 2010). Early HIV and AIDS activities flopped in the African setting since they were made for a Western setting, where independence rather than network introduction was favored (Airhihenbuwa & Obregon, 2000). Thus, Kunda and Tomaselli (2009) repeat that viable wellbeing communication intercessions rely upon understanding the learning, dispositions and practices of individuals from given social vistas.

In their study Mulwo and Tomaselli (2009) saw that HIV and AIDS programs concentrated on the person as an operator of progress and neglected the social, social and monetary conditions that may hinder the capacity to complete certain choices at individual dimension. They further say that human sexuality ought to be comprehended as a social development that should be investigated inside a more extensive setting in which it is rehearsed. Different researchers, for example, Nzioka (1994) concur with them. A report by The Office of Disease Prevention and Health Promotion (2006), a United States based office on utilization of communication methodologies to advise people on VMMC found that the space of communication is a vital component in uptake of VMMC. These unique communication factors, person's introduction to VMMC, scan for, and utilization of personal data has been depicted as a success in uptake of VMMC.

In his study Khan (2006) points to a deficiency of learning among writers in an undeniably convoluted world. To connect this information gap, Khan found there is a need of an expansion in exchange and communication among columnists and the common society. To him, medical issues are at the foundation of the financial, social, and political issues of Africa. He further expresses that as writers and communicators utilize their methods and disposition to illuminate the general population, their significant assignments are to be pertinent and important to the worries of Africans like the VMMC issue.

The significance of media inclusion on VMMC is underlined by the United Nations organizations: WHO, UNESCO, UNFPA and the World Bank. In the event that more prominent consideration is given to medical problems and issues including consideration by the broad communications, the survival chances for Africans would increase. The urgent job of writers in a joint effort with key partners is to advise, teach, persuade and conceivably, assemble individuals for better wellbeing. This information ought to fundamentally incorporate data about the nature, shapes, costs, wellbeing, quality, viability, and access to conventional medication.

IAS (2013) conferences in Zambia found out that 40 percent of men going for circumcision or not were associated with traditional HIV risk factors such as men with two or more sexual partners than monogamous men and community norms about being circumcised are changing markedly. It was also reported that the so-regarded as secondary benefits of social conformity, sexual attractiveness and feelings of being in control as a man were considerably more critical in making the decision to undergo the surgery than the expected perceived direct health benefits (International AIDS Society, 2013). Conversely, VMMC campaign message emphasize that male circumcision is an additional prevention method for men, but that it does not replace measures such as delay in the onset of sexual relations, avoidance of penetrative sex, reduction in the number of sexual partners, and correct and consistent use of male or female condoms (Doyle et al., 2010). This is enough evidence that communicating partial protection remains challenge a big (Dickson et al., 2011).

Clearly, these aptitudes are valuable in all aspects of human services whether the methodology is modern or conventional. On utilizing the media to share wellbeing messages, Higgins (2004), takes note of that the media should initially function as educators to pass on wellbeing data. In reality, the media should assume liability for government funded training. Also, the media should keep watch over potential risks to general wellbeing by inspecting its status as often as possible and distributing alerts about dangers to general wellbeing. Thirdly, the media ought to give right bearings on open observation towards medical problems. They ought to endeavor to tell general society reality without causing pointless caution or frenzy. Fourthly, the media ought to alleviate open worry and help individuals to recapture their typical lives after wellbeing emergencies. Fifthly, the media should make preparations for personal stakes that hinder the release of media open obligations.

Bittner (1989) points out that there should be specific procedures to address VMMC messages by mainstream media. Dim, Cantril, and Noyces (1998) work give uncovering bits of knowledge into how the media depict wellbeing data. This depiction, we have to

underline must originate from the discernments writers have about medical problems. The certainties that rise up out of Gray, Cantrill and Noyces (1998) study are two dimensional investigations of the print media and their electronic per the following: write ups, papers and magazines. With regards to this finding, the study cautions columnists against accepting that the group of onlookers will naturally go to an ordinary person for additional information.

At last, the above studies express that there should be broad communications factors including counseling by experts for guidance. Broad communications should regularly regard the reactions of medications, different treatments, and methods that are traditional. What this finding recommends is that the media are not adequately educated about the idea of human behaviour, particularly the delicacy of human life. It is essential for the media to urge per users to counsel medical and wellbeing experts and not depend on self-improvement. In like manner, it is vital that VMMC messages should have adequate raw numbers about results, expenses, and reactions.

2.5 Critique of the Literature Review

The investigation by Govender (2010) found that the comprehension of HIV and AIDS to a great extent from information of the HIV and AIDS pestilence and its results. The extraordinary lion's share (98.8%) of the respondents in this investigation had generally total learning about HIV and AIDS and its methods for transmission. The study additionally demonstrated that notwithstanding critical danger of contracting HIV and AIDS among explicitly dynamic understudies, the act of preventive practices was still low. This investigation did not have any factor on VMC to interface the connection among VMC and HIV and AIDs.

The study by Mulwo and Tomaselli (2009) who saw that HIV and AIDS programs concentrated on the person as a specialist of progress and in this way neglected to fundamentally address the social, social and monetary conditions that may restrain the capacity to complete certain choices at individual dimension. They further say that

human sexuality ought to be comprehended as a social development that should be broke down inside a more extensive setting in which it is rehearsed. Different researchers, for example, Nzioka (1994) concur with them. These researchers two neglected to connect the HIV and AIDS programs with the VMC and how it influenced people who were not circumcised.

Khan (2006) to, .a deficiency of learning among writers in an undeniably confounded world. To connect this information whole, Khan requires an expansion in discourse and communication among columnists and the common society. Maybe this need to close the separation caused Ngweno (1993) to compose a lot prior, on the method of reasoning for wellbeing detailing for African writers. To him, .medical issues are at the base of the financial, social, and political issues of Africa. He further expresses that as columnists and communicators utilize their methods and demeanor to educate people in general, their real assignments are to be significant and important to the worries of Africans. What the creator neglects to expand is the connection between deficiency of learning and VMC in Non-circumcising networks in Africa.

Composing on the elements of communication in the wellbeing setting, (Infante et al., 2010) referred to Costello (1977) as distinguishing four capacities which all happen at the relational communication level to be specific: conclusion, co-activity, direction, and training. Past the useful parts of wellbeing communication, another key idea regular in wellbeing communication talk is communication ability. At the point when members in the human services settings – suppliers and customers – have capable relational abilities, viability and fulfillment, shape the result. Wellbeing communication abilities include the accompanying six relational abilities: mindfulness, empathy, enlightenment, responsiveness, addictiveness and morals. The researchers in this investigation did not obviously expound whether interchanges abilities and skill had any task to carry out in VMMC.

The Social and Behavior Change Communication (SBCC) campaigns need to use multiple channels of communication to reach all key stakeholders at all levels of the socio-ecological model such as leaders at the county and the sub-county levels; all key stakeholders in VMMC services; all adult men and women in the areas with low VMMC uptake. All these groups are expected to understand the VMMC process and the implication it has so as to succeed.

2.6 Research Gaps

In view of the epidemiological and test proof to date, MC could significantly affect the HIV plague in these most exceedingly influenced nations. Be that as it may, the adequacy of the intercession will rely upon numerous elements, not the least of which is the degree to which MC is acknowledged and taken up by males in these populaces. On the off chance that adequate quantities of males are circumcised, there could be an impact like group resistance since keeping men from getting to be contaminated will likewise secure their sex accomplices. At progressively moderate dimensions of take-up, the impact is less clear. Notwithstanding the extent of males who will progress toward becoming circumcised, the age at circumcision will likewise be a determinant of how quickly the mediation results in decrease of HIV predominance in the populace. On the off chance that newborn child circumcision is favored over, state, pubertal circumcision, the time slack from presentation of a vast scale intercession until noticeable decreases in HIV commonness could be decades.

The past studies on HIV behaviour change battles have to a great extent concentrated on tending to the learning of people on methods for transmission of HIV, the adequacy of the ABC approach in battling additionally spread of HIV and in the appraisal of the communication system in it in affecting the crusades proposed results. Nonetheless, there remains a hole in setting up whether the progressions that happen are owing to other mediating factors that lead to the ideal change. This study tried to address this hole by assessing the social and behaviour change Communication factors that have advanced or denied the take-up of voluntary male circumcision. Besides, past behaviour change

crusade focused on ladies and the young. This demonstrates the need to do an academic appraisal of this ongoing intercession focusing on men. This thus gave a premise in planning and actualizing future behaviour change crusades focusing on men.

2.7 Summary

Lie (2008) depicts the HIV and AIDS as a socially mind boggling issue clarifying that it is in excess of a medical problem and influences all areas of life. It requires a multi-division partner process and includes a trans-disciplinary approach of uniting alternate points of view and learning. This multifaceted nature requires an unpredictable communication approach, convenience of multi-partners, multi-sectoral approach and affectability to standards and qualities,

This investigation accumulated information on Voluntary Medical Male Circumcision (VMMC) which is a worldwide wellbeing effort that is equipped towards averting and diminishing the spread of HIV and AIDS. An unpredictable communication approach converts into one which is aware of the difficulties of interest and asks for a setting explicit way to deal with the utilization of cooperation for HIV and AIDS avoidance. This exploration focused on the populace that does not customarily circumcise males in Western Kenya dependent on the logical proof that male circumcision has ended up being compelling in lessening the dangers of penile (Daling et al., 2005), cervical malignancy in female accomplices of circumcised men (Castellsague et al., 2002; Drain et al., 2006), Urinary tract contaminations in newborn children and kids (Shaikh et al., 2008) ulcerative STIs (Gray et al., 2009), bacterial vaginosis and trichomonas among female accomplices of circumcised men (Gray et al., 2009). Anyway late research has demonstrated that the danger of a medically circumcised man contracting HIV amid vaginal sex is diminished by up to 60%, contrasted with that of an uncircumcised man (Auvert et al., 2005; Gray et al., 2007). In particular, this study tries to decide the social and behaviour change Communication factors that influence the take-up of the voluntary medical male circumcision among the explicitly dynamic populaces from the generally non-circumcising networks in Funyula Sub-County in Busia County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section tends to the exploration strategies that were utilized in this study. First the part centers around the study structure which was utilized in the investigation. A meaning of the study configuration is given just as its appropriateness for the investigation clarified. The second territory of the investigation in this part is the site of the study. The investigation populace is distinguished and explanations behind determination. The investigation populace is recognized and the explanations behind the choice are given. The study population is followed by sampling techniques. The examining strategies are clarified and reasons given for determination. This is trailed by the example estimate where clarifications are given on why and how it was landed at. The next segment is the method of data collection. The accompanying segment is the techniques for information gathering. The strategies for information gathering are distinguished, explanations behind their determination given and clarified. The segment likewise recognizes subjective and quantitative information. The favorable position and detriment of every strategy for information accumulation and each sort of information gathered and clarified. The pilot think about segment comes after strategies for information accumulation and study. Clarifications are given on what occurred amid the pilot concentrate and how advantageous it was for the study. The following segment is on information introduction and study where the systems utilized are clarified. In conclusion, the moral contemplations as saw in the study ponder are featured.

3.2 Research Design

To evaluate the social and behaviour change Communication factors influencing the take-up of VMMC among the generally non-circumcising in Busia County, blended techniques inquire about structure was used at the essential exact research level where

the scientist gathered subjective and quantitative information specifically from the exploration members through surveys, meetings and center gathering exchanges at that point joined the information gathered in the study contemplate. On the other hand (Wimmer & Dominick, 2006) allude to the blended techniques examine as triangulation where both subjective and subjective strategies are utilized to completely comprehend the idea of a study issue.

As indicated by (Creswell, 2014) blended techniques inquire about structure is a ground-breaking method for improving legitimacy of results. This view is additionally upheld by (Almalki, 2016) who takes note of that blended techniques are utilized to inquire about a similar issue with same unit of investigation consequently cross checking one outcome against the other accordingly expanding dependability and legitimacy of research results. By receiving the blended techniques inquire about plan, the scientist could comprehend why there was low take-up of VMMC in the district and this conquered the shortcoming and issues liable to emerge from single strategy look into studies. (Frankfort-Nachmias & Nachmias, 2008) Concur that information delivered by joined techniques improves the legitimacy and unwavering quality of discoveries. The use of both subjective and quantitative techniques in this investigation helped in getting affirmation of discoveries through assembly of alternate points of view that influence the take-up of voluntary medical male circumcision in generally non circumcising network in Funyula, Busia County. Because of the mix, the investigation profited from the upside of test overview and measurable strategies (measurement, representativeness and attribution) and the benefits of the subjective and participatory methodologies.

3.3 Site of the Study

This study was done in Funyula Sub County. Funyula sub area is found in Busia County which covers 1694.5 km² (IEBC, 2012). Busia County has been recognized among the best 5 districts in Kenya where there is earnest requirement for VMMC dependent on geometric mean of MC inclusion and HIV rate (MoH, 2015). Funyula Sub County was picked for this study since its occupants are for the most part Samia who are customarily

a non-circumcising network, and the rates of HIV contamination is generally high (NAS COP, 2014).

3.4 Study Population

The study was essentially keen on the male populace of Busia County. Busia County has a populace of 825,836 containing 398,648 (48%) males and 472,188 (52%) females. HIV pervasiveness in Busia is 1.1 occasions higher than the national predominance at 6.7%. The district contributed 1.4% and 2.0% of the complete new HIV diseases in Kenya among the kids and grown-ups individually (MoH, Kenya HIV Estimates 2015). The investigation in this manner tried to target explicitly dynamic male populace matured 20 years or more in Funyula Sub-County. Research ponders concentrating on VMMC uncover hesitance of males matured 20 years or more to get circumcised (Osaki, et al., 2015).

3.5 Sampling Frame

According to (Lewis-Beck, Bryman, & Liao, 2004) a sampling frame is a list used to define a researcher's population of interest. The sampling frame for this study was 2018 enrollment lists from Bumble Technical Institute, Nangina Youth Polytechnic and Namasali Youth Polytechnic. The unit of analysis was the males enrolled in the selected tertiary institutions. Therefore the report showed total enrollment of 1529, comprising of 677 males and 852 female enrolled in the in institutions. Key informants for interviews were 8 Key informants professionals working with HIV and AIDs Funyula based projects supporting VMMC from the Public Health (Sio-Port), Population Service International (PSI), FHI 360 (C- Change Programme Department), the Impact Research and Development Organization (IRDO), the Family AIDs Care and Educational Services, the Aphia II Western Programme (Engender Health) and the Catholic Medical Mission Board in Funyula town.

The analyst subsequently focused on males matured somewhere in the range of 20 and 49 years selected in tertiary foundations in Funyula Sub-County. There are five youth polytechnics and one specialized establishment in Funyula Sub County, of these; just three tertiary foundations (two Youth Polytechnics and one specialized organization) were picked since they profit by government activities along these lines are probably going to be progressively delegated. The exploration consideration was directed in Bumble Technical Institute, Nangina and Namasali Youth Polytechnic. The young polytechnic and the specialized establishment have a sum of 1529 learners.

Table 3.1: Number of Trainees Enrolled in Government Sponsored Tertiary Institutions in Funyula

| Institution Name | Male Enrollment | Female Enrollment | Total Enrollment |
|----------------------------|------------------------|--------------------------|-------------------------|
| Bumble Technical Institute | 578 | 622 | 1200 |
| Nangina Youth Polytechnic | 59 | 154 | 213 |
| Namasali Youth Polytechnic | 40 | 76 | 116 |
| Total | 677 | 852 | 1529 |

3.6 Sample and Sampling Techniques

3.6.1 Sample Size

The sample size was determined using Yamane simplified formula since the population was finite. According to (Israel, 2003) Yamane (1967) provides a simplified formula to calculate sample sizes, the researcher therefore adopted this formula to calculate the required sample size for this particular study as demonstrated below;

$$n = \frac{N}{1 + N(e)^2}$$

Where;

n is the sample size,

N is the population size,

e is the level of precision.

The Yamane formula assumes 95% confidence level and P=0.5

The sample size therefore was;

$$n = \frac{677}{1 + 677(.05)^2}$$

$$n = \mathbf{251}$$

The minimum quantitative sample for this research study therefore was **251** males students randomly selected from the three institutions. However, to cater for any non-response encountered in course of carrying out the research, the researcher oversampled.

According (Israel, 2003), many researchers commonly add 10% to the sample size to compensate for persons that the researcher is unable to contact. The researcher therefore oversampled by adding 10%, therefore;

$$10\% \text{ of } 251=276$$

A total of **276** males students spread across 3 government funded institutions in Funyula Sub-County were the quantitative sample for this research study.

In addition, **24** informants were purposively selected as the qualitative sample; 16 as participants in two focus group discussions held in Bumbe Technical Institute and Nangina Youth Polytechnic. 8 key informant interviewees were purposively selected from institutions that are on the forefront matters VMMC in Busia County. According to (Guest, Bunce, & Johnson, 2006) which is simply a phenomena where no new information are observed in data occur in the first 12 interviews although basic elements for meta-themes present as early as 6 interviews; the 8 key informants identified for this research study were deemed as sufficient to provide meaningful interpretations and explanations for the quantitative data collected.

3.6.2 Sampling Techniques

Purposive sampling was used to sample the site of study where only the government funded institutions were considered since they offer equal chances to individuals from diversified economic backgrounds. From the three government funded institutions identified, the researcher established a representative sample from each institution as indicated table 3.2.

Table 3.2: Number of males to be sampled

| Name of Institution | Total no. of males | No. of males to be sampled |
|----------------------------|---------------------------|-----------------------------------|
| Bumbe Technical Institute | 578 | 236 |
| Nangina Youth Polytechnic | 59 | 24 |
| Namasali Youth Polytechnic | 40 | 16 |
| Total | 677 | 276 |

The scientist at that point connected basic irregular testing to choose the males that would partake in the study utilizing table of arbitrary digits for simplicity of choosing irregular examples. As indicated by (Nachmias & Nachmias, 2006) arbitrary determination techniques guarantee that each examining unit of the populace has an equivalent and known likelihood of being incorporated into the example.

3.7 Data Collection Instruments

The specialist utilized three instruments to gather information for study. A poll was utilized to complete a study for quantitative information accumulation while a center gathering exchange guide and meeting guide were utilized to gather subjective information.

3.7.1 Questionnaire

A questionnaire that used both open and closed questions was used to collect quantitative data.

3.7.2 Interview Guide

A semi-organized meeting guide (see Appendix 4) was structured according to the exploration ponder destinations with the point of getting data encompassing take-up of VMMC among the non-circumcising networks in Western Kenya from key sources speaking to the administration and non-legislative establishments pushing for VMMC situated in Busia County. A recording device was utilized to record the discussions about VMMC uptake.

3.7.3 Focus Group Discussion Guide

So as further investigate the study discoveries that couldn't be clarified measurably, the analyst planned a center gathering dialog direct (see Appendix 3) which would be critical to start discourses on exceptional subjects of premium, for example, absence of undertaking circumcision notwithstanding the VMMC crusades, sees on the circumcision strategy among different encounters. The exchanges were likewise recorded for straightforwardness amid deciphering process.

3.8 Data Collection Procedure

This area plots how the different research instruments were used in order to gather inquire about information significant to the study. In that capacity, an overview, key witness meetings and center gathering talks were directed to gather the exploration information.

3.8.1 Questionnaire

Having set up the required numbered of males to take part in the exploration consider, the specialist visited the three tertiary establishments in the wake of getting authorization with the significant experts. He quickly tended to the males enlisted in the foundations about the exploration ponder and guaranteed them that the data got would be utilized in certainty. He then issued them with the surveys and left them to fill at their own time.

Inferable from the touchy idea of inquiries encompassing male circumcision, the scientist selected to embrace a drop and pick strategy to the respondents as they are seen giving secrecy consequently are bound to yield progressively exact information on delicate issues, for example, those encompassing VMMC in a non-circumcising district. The scientist at that point liaised with preselected delegates who gathered the surveys for his sake for accumulation at a later day. As per (Jackson-Smith, et al., 2016) with declining overview reaction rates, the Drop-Off/Pick-Up (DOPU) study technique is a viable choice to mail and web modes which ensures higher consummation rates.

3.8.2 Key Informant Interviews

To get top to bottom data on the social and communication factors influencing take-up of VMMC among the non-circumcising networks in Busia County, the inside and out meetings gave further knowledge in understanding the low, medium and non-take-up of VMMC in the Funyula. Key sources were proficient working with eight HIV and AIDs Funyula based ventures supporting VMMC. Eight key respondents were chosen from each undertaking from the Public Health (Sio-Port), Population Service International (PSI), FHI 360 (C-Change Program Department), the Impact Research and Development Organization (IRDO), the Family AIDs Care and Educational Services, the Aphia II Western Program (Engender Health) and the Catholic Medical Mission Board in Funyula town.

The 8 enter witnesses took an interest in the inside and out meetings by revealing insight into the Social and Behavior Change Communication factors that influence the take-up of VMMC among the customarily non circumcising populace in Western Kenya Region. Every one of these members was exclusively met to take into account definite examining and protection. The scientist endeavored to lessen the restriction of the meetings, for example, respondent's reservations by building up an inviting air and uplifting demeanor towards respondents. Prior to leading the meetings, the authorities were called to settle on multi day and time that they were OK with for meeting.

Amid the meetings, a semi-organized calendar was used to gather data from the authorities and the discussions were recorded with the official's authorization to empower simplicity of information study. The analyst urged the respondents to express their perspectives unreservedly. The scientist guaranteed he set up an affinity with the sources preceding the meeting and he gave the data required before beginning the meeting. The discourses were copied to empower the specialist to tune in to the stream of the talk later on. The specialist led meetings himself. As per Sekaran, (2003), the foundation of affinity between the scientist and the member is an essential for an effective meeting. The key witnesses were purposively chosen dependent on dynamic interest in the related tasks or exercises in the sub-area.

Campbell et al. (1999) see that key sources meet are a conversational style instead of a formal inquiry answer design. The sources were given issues to be secured amid the meetings that included components of individual, social, authoritative, condition and Communication factors that influence the selection of VMMC as social and behaviour change process among the generally non-circumcising networks in Kenya.

3.8.3 Focus Group Discussions

Center gathering dialogs in this exploration examine were vital in order to request respondents. dispositions, observations and encounters with the VMMC program in the district. As indicated by (Eeuwijk & Angehrn, 2017) bunch forms enacted amid a FGD help to distinguish and elucidate shared information and encounters among gatherings and networks which would somehow or another be hard to get with a progression of individual meetings. Center gatherings ought to be made out of homogenous individuals from the objective populace.

There are three government tertiary organizations in Funyula Sub County specifically Bume Technical, Namasali Youth Polytechnic and Nangina Youth Polytechnic. The scientist directed center gathering dialogs from Bume Technical Institute and Nangina Youth Polytechnic which are government organizations in the area. Namasali Youth

Polytechnic was forgotten in light of the fact that it has comparative attributes to Nangina Youth Polytechnic and in this way spoke to. In this investigation, two center gathering dialogs were held in Bumble Technical Institute and Nangina Youth Polytechnic. Each FGD comprised of eight members (Students) drawn purposively from each. The individuals who were chosen had not found the opportunity to take part to react to the surveys. Accordingly first year delivered 4 members and the equivalent connected second year learners in both Nangina Polytechnic and Bumble specialized foundation individually. From every tertiary school, eight learners took an interest in the Focus Group Discussion. Altogether, 16 understudies took an interest in the FGDs. Every discourse endured somewhere in the range of 60 and a hour and a half while being copied

Homogeneity as far as age and other significant elements or attributes were considered in shaping up the FGDs. This decreased the risk of the exchanges being hindered by contemplations of status or chain of command (Campbell et al., 1990). Center Group Discussions in this study consider were critical in getting an extensive comprehension of the respondents. dispositions, discernments and encounters with VMMC program in the area. Bites and sodas were given to the FGD members who were additionally given a token of gratefulness in type of broadcast appointment for setting aside their opportunity to take an interest in the talks.

3.9 Pilot Testing

The pilot about is a plausibility ponder done in anticipation of the significant investigation (Pilot et al., 2001; Mberia, 2009). The pilot contemplate in creating and pre-testing research instruments (Baker, 1994).The research instruments were pretested utilizing an example of 10% of the example estimate according to suggestions by Mugenda and Mugenda (1999,2003) who see that an effective pilot study utilized 1% to 10% of the genuine example measure. These respondents were chosen from an example that is like the one contemplated.

3.9.1 Validity of the Study

The understudies were arbitrarily chosen from each class in the school. Methodology utilized in pre-testing the survey were like those utilized in the real study. This aided in clearing up inquiries, and in refining information study techniques (Mugenda & Mugenda, 1999, 2003). From the reactions got, the utilization of terms obtained from the parts of the wellbeing conviction display in a portion of the inquiries in the poll was observed to be specialized for a portion of the understudies to get it. Also, the reactions acquired empowered the incorporation of a few inquiries in the poll to provide food for data which had not been anticipated. Thirdly, the reactions empowered the analyst to distinguish immaterial inquiries and this reworded the inquiries.

3.9.2 Reliability of Study

A pretest test of 30 randomly selected respondents from Bukoma Youth Polytechnic in Budalangi Sub County was utilized for piloting. This was a tenth of the absolute example populace with homogeneous qualities as proper for guiding and was deemed reliable. Bukoma Youth Polytechnic was picked in light of the fact that it neighbors Samia Sub County and in this manner it could display comparable attributes to those of tested youth polytechnics and the specialized foundation in Samia.

Steering helped the specialist to check the suitability of the research instrument and aided in producing information and the lucidity of the questions. It helped the scientist to catch critical proposals and remarks from the respondents that enhanced the exploration instruments. It likewise gave a fundamental sign of the time required for controlling the apparatus. Directing changes were made arranged by a few inquiries and equivocality was expelled from the poll.

This study received a Cronbach Alpha limit of 0.7, Table 3.3 demonstrates the discoveries. All factors gave a Cronbach Alpha estimation of somewhere in the range of 0.779 and 0.822 and thusly all were held for the investigation. Unwavering quality has

been characterized by researchers like Lehmann and Joseph (2005), Darek (2012) and Cooper and Schindler, (2008) as the repeatability, security or inward consistency of a survey. Bryman and Bell (2008) propose that where Cronbach Alpha is utilized for unwavering quality test, as a standard guideline, the incentive for things incorporated into an investigation ought not be lower than 0.8 while Glem and Glem (2003) as referred to by Nyabwanga et al. (2012) prescribes a Cronbach Alpha of at the very least 0.7.

Table 3.3: Reliability Test Results

| Variable | Composite Measures | Cronbach Alpha |
|------------------------|---------------------------|-----------------------|
| Personal factors | 5 | .820 |
| Social factors | 4 | .779 |
| Organizational factors | 3 | .822 |
| Environmental factors | 3 | .819 |
| Communication factors | 6 | .815 |

3.10 Data Processing and Analysis

Kombo and Tromp (2006) characterize information investigation as the way toward inspecting what has been gathered from the field, handling and overseeing it in a way that licenses simpler conclusions and inductions to be made dependent on the study information. It includes examining the gained data and making surmising or speculations dependent on it. Quantitative techniques for information study endeavor to draw important outcomes from an expansive assortment of quantitative information and give methods for isolating out the huge number of bewildering factors that frequently dark the principle quantitative discoveries (Abeyasekera, 2005).

Clear and inferential measurements were utilized to translate the quantitative information on the factors important to the investigation goals. Measurable Product for Social Sciences (SPSS) was utilized for information study. Distinct insights, for example, frequencies were utilized to outline clear cut factors. Inferential measurements were utilized particularly the Pearson's Product Moment to set up the connection among social and behaviour factors with VMMC. Subjective information investigation can be characterized as an iterative and reflexive process that starts with information gathering instead of one that closes with information accumulation (Stake, 1995). Chambliss and Schutt, (2015) saw subjective investigation as an inductive procedure in which information is first composed into classes, example and association distinguished and their impact on each other.

In this study subjective, information was gathered from the Focus Group Discussions and the key witnesses meet and were interpreted and coded into normal topics. The subjects were deciphered utilizing topical study. At that point, a story report enhanced with citations was composed. The composed subjective information report from the key sources and FGDs were triangulated with the quantitative reactions (overview information) to upgrade the dependability and legitimacy of the investigation.

3.11 Ethical Considerations

Permission to carry out this research was applied for and obtained from the National Commission for Science, Technology and Innovation (NACOSTI) as per the regulations (see Appendix 5 & 6). The researcher then obtained an approval from the County Director of Education, Busia County following which visitation was done to each of tertiary institutions research would be carried out to explain the purpose and arrange for the dates to collect data from the administration. Having obtained consent from the administration of the tertiary institutions namely; Nangina Youth Polytechnic, Namasali Youth Polytechnic and Bumbe Technical Institute the researcher then embarked on the data collection from the targeted respondents.

During data collection, the students were requested to give accurate information regarding voluntary male medical circumcision (VMMC) and their knowledge and experience on how they are communicated with assurance of confidentiality that data obtained would be used for purposes of the research only and that it would not be used to ridicule them in any way. Respondents taking part in the interviews and focus group discussions were informed that a tape recorder would be used to record the conversations. The assurance to the respondents that confidentiality would be maintained was upheld.

3.12 Operationalization of Study Variables

Table3.4: Operationalization of Study Variables

| Variable | Variable Type | Indicators | Measurements |
|--|----------------------|---|---------------------|
| Personal Factors | Independent | <ul style="list-style-type: none"> •Demographic factors •Attitude and beliefs •Feelings and emotions •Individual Biases | ANOVA tests |
| Social Factors | Independent | <ul style="list-style-type: none"> •Self-Efficacies •Social Values •Social Norms | ANOVA tests |
| Organizational Factors | Independent | <ul style="list-style-type: none"> •Traditions and culture •Family •School •Religious groups | ANOVA tests |
| Environmental Factors | Independent | <ul style="list-style-type: none"> •Work places •Health policy •Economic factors | ANOVA tests |
| Communication methods | Independent | <ul style="list-style-type: none"> •Physical environment factors •Advocacy •Social mobilization; | ANOVA tests |
| Uptake of Voluntary Medical Male Circumcision | Dependent | <ul style="list-style-type: none"> •Informal personal contacts •High uptake •Low Uptake •No uptake | ANOVA tests |

CHAPTER FOUR

RESEARCH FINDINGS

4.1 Introduction

The purpose of this study was to determine the Social and Behavior Change Communication factors affecting the uptake of Voluntary Medical Male Circumcision (VMMC) among the traditionally non-circumcising in Kenya. The key objectives analysed were; personal factors, social factors, organizational factors, environmental factors and communication factors. This chapter reports and presents the results of the data analysis which include the response rate, the demographics, descriptive analysis, reliability and validity, correlation, regression and ANOVA analysis. The chapter further presents the findings from the tests of the five hypotheses drawn from the study objectives.

4.2 Pilot Test Results

A pilot study was carried out to check on validity and reliability of the questionnaire in gathering the data. Thirty questionnaires were administered to respondents who were not part of the study. This constituted 10% of the 276 respondents to be studied. Factor analysis was carried out with a benchmark of more 0.4 of factor loading. The findings are shown in Table 4.1. Those composite measures which had a load of less than 0.4 were dropped. The composite measures that remained constituted the questions in the questionnaires administered to the respondents during the main study.

Table 4.1: Factor Analysis Results

| | Composite Measures | Dropped Measures | Retained Measure |
|------------------------|---------------------------|-------------------------|-------------------------|
| Personal factors | 6 | 1 | 5 |
| Social factors | 5 | 1 | 4 |
| Organizational factors | 4 | 1 | 3 |
| Environmental factors | 3 | 0 | 3 |
| Communication factors | 5 | 2 | 3 |

4.3 Response Rate

A total of **276** males spread across 3 tertiary institutions in Funyula Sub-County, Busia County was the quantitative sample for this research study. As such, 276 questionnaires were issued, out of these, **249** were sufficiently completed. This represented a 90.2% response rate; this high response rate was realized as a result of the researcher utilizing the Drop-Off/Pick-Up (DOPU) survey method which according to (Jackson-Smith, et al., 2016) guarantees higher completion rates.

Table 4.2: Distribution of Survey Respondents

| Name of Institution | Males to be sampled | Actual Males Sampled |
|----------------------------|----------------------------|-----------------------------|
| Bumbe Technical Institute | 236 | 221 |
| Nangina Youth Polytechnic | 24 | 19 |
| Namasali Youth Polytechnic | 16 | 9 |
| Total | 276 | 249 |

4.4 Demographic Information of Respondents

Study of demographic information is reviewed at this section as obtained from the 249 respondents specifically their age, marital status and education level.

Table 4.3: Age of Respondents

| Age bracket | Frequency | Valid Percent |
|--------------------|------------------|----------------------|
| 20-35years | 132 | 53.0 |
| 35-45years | 77 | 30.9 |
| >45years | 40 | 16.1 |
| Total | 249 | 100.0 |

The research targeted respondents between 20 and 49 years. As indicated in the table 4.3, the majority of the respondents who participated in this study were aged between 18-35years at 53% while 30.9% of the respondents were between 36 and 45 years while 16% were those above 45 years. According to (Avert, 2017) UNAIDS and the WHO advise that prioritizing circumcision of young men between 12 and 30 years will have the greatest public health benefit though recently emphasis is also being placed to target older men so as to achieve the 80% coverage target and to maximize the population wide prevention benefits of VMMC.

Table 4.4: Marital Status of Respondents

| | Frequency | Valid Percent |
|--------------|------------------|----------------------|
| Single | 99 | 39.8 |
| Married | 79 | 31.7 |
| Divorced | 42 | 16.9 |
| Widowed | 29 | 11.6 |
| Total | 249 | 100.0 |

As indicated in Table 4.4, a majority of the respondents at 39.8% were single while 31.7% indicated that they were married. Other respondents at 16.9% and 11.6% indicated that they were divorced and widowed respectively.

Table 4.5: Highest Education Level of Respondents

| | Frequency | Valid Percent |
|--------------|------------------|----------------------|
| Primary | 70 | 28.2 |
| Secondary | 41 | 16.5 |
| Certificate | 94 | 37.8 |
| Diploma | 44 | 17.6 |
| Total | 249 | 100.0 |

A majority of respondents indicated that they had secondary education and above; 28.2% had primary education level, 16.5% had secondary education level, 37.8% had certificate education level while 17.6% had diploma education level. It was imperative that the researcher established if the education level influenced the uptake of VMMC among the respondents.

Table 4.6: Undergone Circumcision

| | Frequency | Valid Percent |
|--------------|------------------|----------------------|
| Yes | 101 | 40.6 |
| No | 148 | 59.4 |
| Total | 249 | 100.0 |

As the study aimed to determine the social and behavior Communication factors that influenced the uptake of VMMC among the traditionally non-circumcising, it was important therefore to determine if the research participants had undergone circumcision or not. As indicated in Table 4.6, the study revealed that a majority of the respondents at 59.4% were not circumcised while only 40.6% indicated that they were circumcised. The efforts to encourage VMMC should continue so as to increase the numbers. The

researcher through the focus groups discussions sought to find out more from the uncircumcised respondents why they were yet to undergo the procedure. Some of the reasons given from the discussions are outlined below;

Participant 1: My friend undertook circumcision and I saw how much he was in pain...why would I want to undergo such a painful procedure? I would rather opt out. My wife doesn't mind me being uncircumcised.

Participant 2: I have been married for about 8 years now and blessed with two children. Being the sole provider in my family, I would not undergo circumcision as that would mean I don't work for over a month. How would my family survive? I would rather not get circumcised

Participant 3: My spouse thinks that circumcision is for the men who have many sexual partners. Undergoing circumcision would strain my relationship. I would rather remain uncircumcised.

Participant 4: My father and other men in previous generations never underwent circumcision; our culture has never upheld circumcision. I would rather not defile myself with this craze going on. My religion doesn't recommend it either.

Participant 5: Not circumcising is a significant cultural characteristic that distinguishes our men from other communities. Introducing circumcision will cause loss of this great cultural identity!

Table 4.7: Recommends Circumcision

| | | Frequency | Valid Percent |
|--------------|-----|------------------|----------------------|
| Valid | Yes | 60 | 59.4 |
| | No | 41 | 40.6 |
| Total | | 101 | 100 |

The research further sought to determine if those who had undergone circumcision would recommend it to others, as indicated in Table 4.7. A majority at 59.4% agreed that they would recommend it to others while 40.6% said that they wouldn't recommend it. From the focus group discussions, some participants revealed that though they had undergone circumcision they wouldn't recommend it to others as it was a painful procedure and that the healing process took a long time. Some excerpts as obtained from the focus are outlined below;

Participant 1: I underwent circumcision when I had not yet gotten married. I would recommend to any young man to be circumcised before getting married as it is easier....Of course there was pain but I find it more hygienic so I don't regret getting the cut.

Participant 2: That procedure was too painful; I am not still sure why I even agreed to get circumcised in the first place. I would never recommend to any sane man to undergo circumcision even if it is free. My son's won't be circumcised.

Participant 3: It was the persistence of my wife that made me get circumcised. I don't mind the pain, if my wife is happy then I am happy. I would recommend circumcision as I have seen it boost my self-esteem as well as my performance.

Table 4.8: Reasons for not undertaking circumcision

| | Frequency | Valid Percent |
|--------------------------------|-----------|---------------|
| Services not readily available | 48 | 19.3 |
| Don't see the need to | 77 | 30.9 |
| Afraid of the procedure | 52 | 20.9 |
| My family/wife disapproves | 83 | 33.3 |

*multiple answer question

It was important to determine the reasons for not undertaking circumcision among those who were uncircumcised. As indicated in Table 4. , most of the respondents at 33.3% and 30.9% said that their families disapproved and that they didn't see the need to get

circumcised. This shows that awareness campaigns to change the mindset of not only the uncircumcised men but also their families. Other respondents at 20.9% and 19.3% indicated that they were afraid of the procedure and the services were not readily available respectively, this is in tandem with (Semeere, Bbaale, Kigozi, & Coutiho, 2016) who note that intimate partners have a key role in generating demand of VMMC and list some key individual barriers affecting uptake of VMMC as fear of pain and access to services. Negative experiences also play a role in discouraging others from undertaking VMMC. From the focus group discussions a participant who had undergone the procedure discouraged others from trying it out as it was painful and was ridiculed by his other friends. The 28 year old respondent who had undergone VMMC had this to say about his experience:-

.I went to a VMMC site which is within our village. The process of waiting for doctors took so long that I started feeling tired. Meanwhile the other people who were at the clinic kept looking at me and this made me feel alone. After the induction, I was ushered into the surgery room. The doctor to operate on me did not talk to me or even explain to me what he intended to do to. Instead, I was asked to lie on the bed, my penis was clamped and anesthesia injected right into it. The needle she used was very big and the whole process was so scaring. I bled a lot and the pain after the operation was too much. I really struggled to get back home since walking was so difficult. Later, I had to deal with the stigma from the other boys around who gave me funny names. Do it at your own risk.

VMMC can only be a success if the services are offered in a friendly environment and post-operative care and counseling is given to those who undertake the procedure so as to ensure that they become strong ambassadors to those yet to undergo the procedure. Reviews need to be behaviourised on how the exercise is being rolled out to avoid having negative experiences being peddled which could impact on the success of the project.

Table 4.9: Cross tabulation of Education Level and whether circumcised

| | | Circumcised | | Total |
|-----------|-------------|-------------|-----|-------|
| | | Yes | No | |
| Education | Primary | 20 | 111 | 131 |
| | Secondary | 20 | 13 | 33 |
| | Certificate | 30 | 11 | 41 |
| | Diploma | 31 | 13 | 44 |
| Total | | 101 | 148 | 249 |

It was important to determine if education level did influence whether the respondents were circumcised or not. From the findings as indicated in Table 4.9, a majority of the respondents with primary education and above level were not circumcised. This is tandem with study by (Nyaga, 2015) which established that respondents who have attained secondary level of education and above were more likely to have been circumcised as compared to those who had primary education level.

4.5 Analysis of Study Variables

4.5.1 Personal Factors and Uptake of Voluntary Medical Male Circumcision

Closely related to health knowledge are behavioural intentions and attitudes. A particular behaviour is most likely to occur if a person has a strong intention to perform it among other factors (Fishbein & Ajzein, 2010). If people believe that performing a particular behaviour is a good thing, then they are more strongly motivated actually to perform the behaviour than if they believe that performing the behaviour is a bad thing. The researcher therefore among other issues sought to establish various attitudes and beliefs among the respondents that could influence uptake of VMMC such as but not limited to safe sex practices, sexual performance perceptions, HIV status and fear of infidelity.

Table 4.10: Safe Sex and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 135 | 54.2 |
| Agree | 34 | 13.7 |
| Not Sure | 19 | 7.6 |
| Disagree | 27 | 10.8 |
| Strongly Disagree | 34 | 13.7 |
| Total | 249 | 100.0 |

A majority of the respondents at 54.2% believed that if one practiced safe sex they didn't need to undertake voluntary medical male circumcision (Table 4.10) While it is not guaranteed that one would in their lifetime always practice safe sex, it would be vital that this personal belief is put in consideration while designing communication messages to be used when carrying out campaigns to promote VMMC. Similar study by (Nyaga, 2015) establishes that frequency of condom use during sexual intercourse decreased uptake of VMMC. It is imperative therefore that campaign strategists include in their messages such males who could lack a motivator to circumcise because they practice safe sex by emphasizing other benefits of VMMC such as improved sexual performance, hygiene and prevention of STIs among other benefits.

Table 4.11: Unsafe Sex and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 162 | 65.1 |
| Agree | 34 | 13.7 |
| Not Sure | 17 | 6.8 |
| Disagree | 12 | 4.8 |
| Strongly Disagree | 24 | 9.6 |
| Total | 249 | 100.0 |

Most respondents at 78.7% were in agreement that they believed if one practiced unsafe sex they needed to undertake VMMC with 65.1% strongly agreeing and 13.7% simply agreeing (Table 4.) According to (Mbonye, Kuteesa, Seeley, Levin, Weiss, & Kamali, 2016) VMMC in a number of African countries is being scaled up as a means to provide partial HIV protection which could be a reason why most respondents would vouch for VMMC especially where they engaged in unsafe sex. Communication messages need to clearly outline that undertaking VMMC doesn't guarantee complete protection against HIV/AIDS and other sexually transmitted diseases. A key informant from PSI had the following to say;

.Though the response has been good towards VMMC there is still a challenge in advocating for safe sex among those who get circumcised because there is a misconstrued belief that they cannot contract HIV yet condoms are readily available. More awareness campaigns need to be held to advocate for safe sex even after getting circumcised otherwise we will be fighting a losing battle. (Research Officer, PSI)

Table 4.12: Monogamy and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 159 | 63.9 |
| Agree | 30 | 12.0 |
| Not Sure | 18 | 7.2 |
| Disagree | 19 | 7.6 |
| Strongly Disagree | 23 | 9.2 |
| Total | 249 | 100.0 |

Most of the respondents at 75.9% were of the belief that if one was in a monogamous relationship then there was no need to undertake VMMC with 63.9% strongly agreeing and 12% simply agreeing. According to report by Action Catalyst Tools (malecircumcision.org, 2017) men in monogamous relationships may find themselves in

a realm where they may not find the benefits of VMMC relevant to their present context thus fail to undertake in VMMC as they don.t relate with it. It is important therefore to consider reframing communication messages targeting such men so as to focus on other benefits accruing from VMMC other than HIV protection as this may not resonate with men in monogamous relationships.

Table 4.13: Polygamy and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 151 | 60.6 |
| Agree | 13 | 5.2 |
| Not Sure | 40 | 16.1 |
| Disagree | 29 | 11.6 |
| Strongly Disagree | 16 | 6.4 |
| Total | 249 | 100.0 |

A majority of respondents at 60.6% strongly agreed that they believed that if one was in a polygamous relationship they needed to undertake VMMC. Though men in polygamous relationships are highly likely to participate in VMMC the overall objective it seeks to achieve of reduce new HIV infections may not be realized. (Mojola, 2011) notes that the practice of having multiple partners is associated with high risk behavior which though may influence uptake of circumcision may not avert HIV infections. Further, (Andersson, Owens, & Paltiel, 2011) note that belief in the efficacy of circumcision to provide protection among polygamous men may make even condom use less likely. Communication messages should clearly explain that VMMC only offers partial protection from HIV and therefore condoms should always be used when having sexual relations with multiple partners.

Table 4.14: Sexual Performance Affected by VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 108 | 43.4 |
| Agree | 21 | 8.4 |
| Not Sure | 49 | 19.7 |
| Disagree | 26 | 10.4 |
| Strongly Disagree | 45 | 18.1 |
| Total | 249 | 100.0 |

More than half of the respondents at 51.8% agreed that they believed sexual performance was affected if one undertook VMMC with 43.4% strongly agreeing and 8.4% simply agreeing. Considering that a majority of the respondents also reported not to be circumcised, there is a possibility that is one of the beliefs negatively impacting on them to partake in VMMC. The strategy that could be utilized could be using those already circumcised to avert this claim that getting circumcised could affect sexual performance. A research study by (Lissouba, et al., 2011) establishes that a majority of circumcised men report to have increased sexual performance after undergoing the procedure. Having such testimonials from circumcised men could help eliminate such beliefs on decreased sexual performance.

Table 4.15: HIV/AIDS Infected and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 157 | 63.1 |
| Agree | 14 | 5.6 |
| Not Sure | 31 | 12.4 |
| Disagree | 24 | 9.6 |
| Strongly Disagree | 23 | 9.2 |
| Total | 249 | 100.0 |

A majority of the respondents at 63.1% strongly agreed that they believed that those already infected with HIV/AIDs didn't require to undertake VMMC. It is critical to examine if this is a factor that could contribute to low number of men participating in VMMC programs. Fear of HIV tests has been a contributor to men shunning VMMC (Mbonye, Kuteesa, Seeley, Levin, Weiss, & Kamali, 2016). Communication messages targeting men to participate in VMMC should advise them also that free HIV testing accompanies the service and that there are available support programs for the infected. It should be communicated also that regardless of the HIV status, VMMC services are available on request even to the infected (MPHS-Kenya, 2009) as there are other benefits such as personal hygiene that come with circumcision.

A 26 year old respondent from the focus group discussions who had undergone VMMC in 2014 had this to say about the procedure:

When you get to the clinic, you are first of all counseled on health issues such as HIV and STIs. Then one is taken through counseling on what male circumcision entails and its advantages. After the counseling session and if one is ready to undergo MC, they are tested for HIV and other infections. Those who are found to be unwell are then treated for their ailments while those who are well are prepared for the surgery.

Table 4.16: HIV Free and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 159 | 63.9 |
| Agree | 26 | 10.4 |
| Not Sure | 39 | 15.7 |
| Disagree | 17 | 6.8 |
| Strongly Disagree | 8 | 3.2 |
| Total | 249 | 100.0 |

A majority of the respondents at 63.9% strongly agreed that they believed that those who are HIV free should undertake voluntary medical male circumcision. One of the key highlights in VMMC campaigns is that circumcision reduces HIV infections among those who aren't infected which could explain the high awareness among respondents that those who were HIV free ought to be circumcised. Clinical trials and observational studies have consistently shown relationship of circumcision and reduction of HIV acquisition risk among heterosexual men (Semeere, Bbaale, Kigozi, & Coutiho, 2016). In addition to reducing HIV infections, communication messages targeting uncircumcised men need to include persuasion aspects such as other benefits accruing from circumcision so as to increase the numbers of men participating in the VMMC programs.

Table 4.17: Personal Hygiene and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 75 | 30.1 |
| Agree | 14 | 5.6 |
| Not Sure | 70 | 28.1 |
| Disagree | 53 | 21.3 |
| Strongly Disagree | 37 | 14.9 |
| Total | 249 | 100.0 |

A majority of the respondents at 36.2% weren't aware that VMMC improved personal hygiene; 14.9% strongly disagreed while 21.3% disagreed. A good number too at 28.1% were not sure if VMMC improved personal hygiene or not. Only 30.1% of the respondents were highly aware and believed that male circumcision improved hygiene. This is a strategic benefit that ought to be embedded in persuasion messages to get more men to participate in VMMC programs. Post circumcision research studies reveal that one key factor that could increase uptake of VMMC is penile hygiene (Hermann-Roloff, Otieno, Agot, Ndinya-Achola, & Bailey, 2011)

Table 4.18: VMMC Prevention of Cervical Cancer

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 88 | 35.3 |
| Agree | 29 | 11.6 |
| Not Sure | 51 | 20.5 |
| Disagree | 40 | 16.1 |
| Strongly Disagree | 41 | 16.5 |
| Total | 249 | 100.0 |

Though a good number of the respondents at 46.9% were in agreement that they believed VMMC reduces a woman’s chance of getting cervical cancer with 35.3% strongly agreeing and 11.6% simply agreeing, there were those who seemingly didn’t know about this for sure at 20.5% while 32.6% had no idea that VMMC reduced cervical cancer. A similar study by (Hatzold, et al., 2014) indicates that knowledge on VMMC prevention of cervical cancer in women is a motivator to uptake of VMMC though some males didn't know this. This knowledge can be applied to secondary audiences such as men’s spouses who can be crucial in encouraging their partners to be circumcised if they understand this inherent benefit of their men getting circumcised.

Table 4.19: Infidelity and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 114 | 45.8 |
| Agree | 32 | 12.9 |
| Not Sure | 28 | 11.2 |
| Disagree | 32 | 12.9 |
| Strongly Disagree | 43 | 17.3 |
| Total | 249 | 100.0 |

A majority of the respondents at 58.7% expressed fear of partner infidelity during the 6 week healing period. Having such doubts could negatively affect uptake of VMMC, research studies have established infidelity fears as a reason why most men refuse to get circumcised. (Evens, Lanham, Hart, Loolpapit, Oguma, & Obiero, 2014) In their study for instance found out that both men and women expressed fear that their partners would be unfaithful during the 6 weeks of medically advised abstinence. This can only be addressed by engaging couples in pre-counseling activities to ensure that they hold each other accountable and adhere to the stipulations.

Table 4.20: Correlations between Personal Factors and VMMC

| | | VMMC | Personal Factors |
|------------------|---------------------|--------|------------------|
| VMMC | Pearson Correlation | 1 | .437** |
| | Sig. (2-tailed) | | .001 |
| | N | 249 | 249 |
| Personal Factors | Pearson Correlation | .437** | 1 |
| | Sig. (2-tailed) | .001 | |
| | N | 249 | 249 |

** . Correlation is significant at the 0.01 level (2-tailed).

A correlation analysis was behaviourised to establish the degree of linear association between personal factors and uptake of VMMC. The results shown in Table 4.20, Indicate that the Pearson correlation coefficient is ($r=0.437$, $p=0.001$), revealing a positive significant linear relationship between personal factors and uptake of VMMC since $P<0.05$. If respondents are highly aware of how various personal factors contributed positively to their wellbeing then they are likely to undertake VMMC. According to (Hatzold, et al., 2014), the strongest predictor of VMMC uptake is self-efficacy and that men with high levels of self-efficacy (one's belief that one can make

the decision to go for VMMC) were eight times more likely to be circumcised than men with low levels of self-efficacy.

Table 4.21: Correlation between Education and Personal Factors affecting uptake of VMMC

| | | Personal Factors | Education |
|------------------|---------------------|-------------------------|------------------|
| Personal Factors | Pearson Correlation | 1 | .339** |
| | Sig. (2-tailed) | | .000 |
| | N | 249 | 249 |
| Education | Pearson Correlation | .339** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 249 | 249 |

** . Correlation is significant at the 0.01 level (2-tailed).

A correlation analysis was conducted to establish the association between education level and personal factors affecting uptake of VMMC. The results shown in Table 4.21, indicate that the Pearson correlation coefficient is ($r=0.339$, $p=0.000$), revealing a positive significant relationship between education level and personal factors affecting uptake of VMMC since $P<0.05$. Low knowledge levels in various personal factors are likely to negatively affect uptake of VMMC and vice versa. It is imperative therefore, that when designing messages, education background of respondents is taken in consideration so that messages are designed in a simple way that effectively communicates.

4.5.2 Social Factors and Uptake of Voluntary Medical Male Circumcision

Cultural factors are crucial in the prevention of HIV and AIDS, and more specifically uptake of VMMC. Cultural factors shape related beliefs, behaviours and values. It is therefore important that cultural roots of a problem be identified for it to be adequately solved. In adopting VMMC, therefore, cultural traits of a community can hamper its adoption. Other cultures abhor the use of VMMC, as they say, this is an abomination and can bring bad luck, especially the traditionally non-circumcising cultures. Efforts should, therefore, be made that stigmatisation of VMMC is removed and the youth equipped to deal with cultural orientations that hinder it. The research therefore designed questions to establish various views relating to cultural factors such as but not limited to cultural values, age group and shame in seeking VMMC services which could affect its uptake.

Table 4.22: Culture and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 47 | 18.9 |
| Agree | 102 | 41.0 |
| Not Sure | 24 | 9.6 |
| Disagree | 24 | 9.6 |
| Strongly Disagree | 52 | 20.9 |
| Total | 249 | 100.0 |

A majority of the respondents at 49.9% were of the view that since their culture didn't uphold male circumcision then VMMC wasn't a priority. There is sufficient evidence that male circumcision can be an element of cultural studies as reported in research studies on VMMC acceptability where in traditionally circumcising ethnic groups it may be considered as an integral rite of passage to manhood in contrast with traditionally non-circumcising ethnic groups where absence of circumcision is an element of ethnic

identity thus may not be a crucial element of ethnic identity (Hermann-Roloff, Otieno, Agot, Ndinya-Achola, & Bailey, 2011). Designing communication messages targeting non-circumcising communities needs therefore to take persuasive angle to break through the cultural barriers that may be deeply embedded.

Table 4.23: Abomination/Bad Luck and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 119 | 47.8 |
| Agree | 17 | 6.8 |
| Not Sure | 26 | 10.4 |
| Disagree | 27 | 10.8 |
| Strongly Disagree | 60 | 24.1 |
| Total | 249 | 100.0 |

More than half of the respondents at 54.6% were of the view that male circumcision is an abomination that can bring bad luck therefore VMMC shouldn't be upheld with 47.8% strongly agreeing and 6.8% agreeing to that view. 34.9% of the respondents however, disagreed with this view. Such a view could harbor implementation of VMMC among the non-circumcising communities. It is imperative to work with community elders to break through such notions. According to (Bulled & Green, 2015) key local traditional leaders might be helpful in providing support for approaches that take into account local beliefs about circumcision which could increase its uptake.

Table 4.24: Low Libido and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 70 | 28.1 |
| Agree | 69 | 27.7 |
| Not Sure | 14 | 5.6 |
| Disagree | 28 | 11.2 |
| Strongly Disagree | 68 | 27.3 |
| Total | 249 | 100.0 |

Most respondents at 55.8% were of opinion that male circumcision reduces sexual pleasure therefore were reluctant in undertaking VMMC with 28.1% strongly agreeing and 27.7 simply agreeing. Such baseless beliefs may negatively impact successful implementation of VMMC programs thus it's imperative to address such fears by designing effective communication campaign messages. According to (Hermann-Roloff, Otieno, Agot, Ndinya-Achola, & Bailey, 2011) perception of decreased sexual satisfaction after circumcision procedure is a key barrier to uptake of VMMC. This belief therefore cannot be ignored as it could influence uptake of VMMC among the traditionally non-circumcising communities.

Table 4.25: Healing Period of VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 59 | 23.7 |
| Agree | 80 | 32.1 |
| Not Sure | 24 | 9.6 |
| Disagree | 26 | 10.4 |
| Strongly Disagree | 60 | 24.1 |
| Total | 249 | 100.0 |

A majority of the respondents at 55.8% indicated that the healing period after male circumcision took too long so they were hesitant to undertake VMMC; 23.7% strongly agreed while 32.1% simply agreed. These findings imply that such perception could negatively influence uptake of VMMC. According to (Evens, Lanham, Hart, Loolpapit, Oguma, & Obiero, 2014) the 6-8week healing and abstinence period after circumcision is a challenge not only for the men but the women, VMMC communication messages need to address these concerns truthfully and openly so as to push for uptake of VMMC while emphasizing other secondary benefits that tally with getting circumcised. A health officer had the following to say in regard to uptake of VMMC in the region;

.There has been a shift in the mindset of many men in regards to VMMC; many now understand how it is important in preventing HIV and STIs. There is still however, those who won.t bring themselves to undertake the procedure because they are afraid of the pain and others because of the long healing process which means they abstain. Those have been some of the major inhibitions towards undertaking male circumcision. (Engender Health Officer)

Table 4.26: VMMC Inappropriate for Older Males

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 37 | 14.9 |
| Agree | 89 | 35.7 |
| Not Sure | 24 | 9.6 |
| Disagree | 27 | 10.8 |
| Strongly Disagree | 72 | 28.9 |
| Total | 249 | 100.0 |

Half of all the respondents who participated in the research at 50.6% were in agreement that circumcision procedure was not appropriate for older males (those past the age of puberty) with 35.7% just agreeing and 14.9% strongly agreeing. Report by (Wouabe, 2013) show that in different interventions to scale up VMMC, most of those who participate are those in younger age groups with older males expressing reluctance in getting circumcised. According to (malecircumcision.org, 2017) VMMC demand generation remains a challenge with older males (18-29years) yet there is a shift in focus to older men to achieve a more immediate impact on the HIV epidemic. Communication strategies need to incorporate the different age groups so as to effectively persuade them to participate in VMMC programs. A Public Health Officer based in Funyula expounded on the challenge of age groups;

.One major challenge in successfully implementing VMMC in this region has been the reluctance of older men those above 30 years and married. The situation is further complicated when they have sons. It is embarrassing for such men to be circumcised especially the thought that their children may get to know. So basically speaking, VMMC acceptability has been generally higher among younger men compared to older men. (Public Health Officer, Funyula)

Table 4.27: VMMC Shameful

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 75 | 30.1 |
| Agree | 117 | 47.0 |
| Not Sure | 25 | 10.0 |
| Disagree | 19 | 7.6 |
| Strongly Disagree | 13 | 5.2 |
| Total | 249 | 100.0 |

A majority of the respondents at 77.1% expressed that there was shame in seeking circumcision services alongside much younger males (under the age of 15 years) with 30.1% strongly agreeing and 47% agreeing, this view could hamper uptake of VMMC as the older males felt ashamed to be seen by the younger males undergoing the same procedure. The VMMC Demand Creation Tool (malecircumcision.org, 2017) recommends providing separate VMMC services for older males and younger males so as to enable them access the services without feeling violated.

Table 4.28: Correlations between Social Factors and VMMC

| | | VMMC | Social Factors |
|----------------|---------------------|---------|----------------|
| VMMC | Pearson Correlation | 1 | -.236** |
| | Sig. (2-tailed) | | .000 |
| | N | 249 | 249 |
| Social Factors | Pearson Correlation | -.236** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 249 | 249 |

** . Correlation is significant at the 0.01 level (2-tailed).

The study sought to describe through the correlation coefficient statistic the degree of linear association of social factors and uptake of VMCC. The findings are shown in Table 4.27, revealing that the Pearson correlation coefficient was ($r=-0.236$, $P=0.000$) which indicate that social factors have a statistically negative relationship with VMMC since $P<0.05$. If respondents aligned with various social factors then uptake of VMMC is expected to be low and vice versa. According to (Mbonye, Kuteesa, Seeley, Levin, Weiss, & Kamali, 2016), local beliefs and practices about VMMC may influence uptake and effectiveness.

4.5.3 Organizational Factors and Uptake of Voluntary Medical Male Circumcision

Organization in the environment of individuals such as the family, clans, peer organizations, religious groups, cultural groups, and HIV and AIDS support groups have influence in the adoption of behavior and social practices such as the VMMC (Obure, 2009). The research study therefore designed questions surrounding the family, church, learning institutions among others to determine how they influenced uptake of VMMC among the traditionally non-circumcising.

Table 4.29: Spouse Unsupportive of VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 123 | 49.4 |
| Agree | 16 | 6.4 |
| Not Sure | 30 | 12.0 |
| Disagree | 31 | 12.4 |
| Strongly Disagree | 49 | 19.7 |
| Total | 249 | 100.0 |

A majority of the respondents at 49.4% strongly agreed that since their spouses didn't support male circumcision they wouldn't undertake VMMC. With that information, lack of inclusion of women/partners in VMMC campaigns is bound to affect uptake of VMMC. Previous studies link uptake of male circumcision and spouses influence. According to (Kibira, Daniel, Atuyambe, Makumbi, & Sandøy, 2017) men's motivation to seek circumcision is strongly related to their sexual partners where they could influence directly or indirectly by explicitly telling them to seek VMMC services or inexplicitly discussing circumcision benefits. An interview with a Program Officer expounded on effects of unsupportive spouse as outlined in the excerpt below;

.We are working towards including working with men spouses so as to encourage older men to get involved in the VMMC programs. Women be it wives, girlfriends and mothers can be effective change agents thus it has been important as we push for male circumcision to work with them closely especially where men are reluctant because of their age or marital status. It is also important for women to understand that VMMC benefits not only the men but also the women in terms of preventing cervical cancer and enhanced sexual performance. We can attribute involvement of a good number of married men due to influence from their spouses. (Impact Research Org, Program Officer)

Table 4.30: Spouse Supports VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 35 | 14.1 |
| Agree | 12 | 4.8 |
| Not Sure | 127 | 51.0 |
| Disagree | 23 | 9.2 |
| Strongly Disagree | 52 | 20.9 |
| Total | 249 | 100.0 |

Only 14.1% of the respondents strongly agreed that their spouses supported male circumcision so they would undertake voluntary medical male circumcision, a majority of the respondents at 51% indicated that they were not sure if their spouse supported male circumcision which ultimately affects their decision on participating in VMMC. This uncertainty would affect uptake of VMMC thus campaign messages ought to target the women as well. According to (Kabira, Gachukia, & Matiangi, 1997) African women are considered health custodians in their communities; in this light, women therefore have an integral role in raising demand for VMMC given their influence on men. The VMMC communication campaigns will be more effective if women are factored in as well.

Table 4.31: Supports VMMC despite Family being unsupportive

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 66 | 26.5 |
| Agree | 28 | 11.2 |
| Not Sure | 77 | 30.9 |
| Disagree | 29 | 11.6 |
| Strongly Disagree | 49 | 19.7 |
| Total | 249 | 100.0 |

Only 37.7% of the respondents indicated that though their family didn't support male circumcision they would participate in VMMC, 30.9% were not sure if they would while 31.3% of the respondents disagreed. The influence of family in uptake of VMMC cannot be underestimated and as such campaign messages need to factor in secondary audiences as they are key in ensuring effectiveness of VMMC programs. A case study as outlined in (Semeere, Bbaale, Kigozi, & Coutiho, 2016) shows the power of family as an uncircumcised male refuses to participate in VMMC program because the family has cautioned him not to partake of it. The influence of other family members cannot be underestimated and messages need to factor that in.

Table 4.32: Church and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 45 | 18.1 |
| Agree | 26 | 10.4 |
| Not Sure | 66 | 26.5 |
| Disagree | 53 | 21.3 |
| Strongly Disagree | 59 | 23.7 |
| Total | 249 | 100.0 |

28. 5% of the respondents agreed that since their church did not support male circumcision they wouldn't participate in VMMC compared to 45% who didn't ascribe to this view, 26.5% were not sure. Every avenue that can push for uptake of VMMC needs to be included in designing and passing messages to encourage males to be part of the program. Religion has been reported as a barrier to seeking VMMC in many studies examining acceptability of male circumcision (Wouabe, 2013) it is therefore prudent to work with churches as they can be crucial in influencing uptake of circumcision especially amongst the traditionally non circumcising communities.

Table 4.33: Would Recommend VMMC to others

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 110 | 44.2 |
| Agree | 12 | 4.8 |
| Not Sure | 61 | 24.5 |
| Disagree | 40 | 16.1 |
| Strongly Disagree | 26 | 10.4 |
| Total | 249 | 100.0 |

A majority of respondents at 44.2% strongly agreed that having undergone male circumcision they would encourage my other family members and friends to undertake VMMC. The best drivers to increase VMMC uptake can only be those who have undergone the procedure as their testimonials can go a long way to positively influence those yet to be circumcised. Use of testimonials in VMMC campaign messages needs to be factored in as it is a persuasive way of encouraging others to be part of it. Use of men who have undergone VMMC and satisfied by the results are being utilized in other non-circumcising areas to motivate others which has seen its uptake go up (Hatzold, et al., 2014). Thus it is a sure motivator to generate demand for VMMC in non-circumcising regions.

Table 4.34: Anti-VMMC because of Clan Disapproval

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 91 | 36.5 |
| Agree | 13 | 5.2 |
| Not Sure | 76 | 30.5 |
| Disagree | 29 | 11.6 |
| Strongly Disagree | 40 | 16.1 |
| Total | 249 | 100.0 |

A majority of the respondents at 41.7% were of opinion that since their clan disapproved male circumcision they wouldn't therefore undertake VMMC, 30.5% were not sure while 27.7% disagreed. Without a traditional custom of circumcision many people may not see a compelling reason to undergo VMMC. Report by (Wouabe, 2013) indicates that to avoid conflicts with elders or family who don't approve contravening traditions, men may shun VMMC programs. It is therefore crucial to consider working with secondary audiences such as clan elders when planning VMMC campaign messages.

Table 4.35: Undertook VMMC because of peer pressure in learning institutions

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 62 | 24.9 |
| Agree | 16 | 6.4 |
| Not Sure | 31 | 12.4 |
| Disagree | 48 | 19.3 |
| Strongly Disagree | 92 | 36.9 |
| Total | 249 | 100.0 |

Only 31.3% of the respondents indicated that they undertook VMMC because of peer pressure in the learning institutions. Social pressure has been recognized as a factor that could influence uptake of VMMC (Wouabe, 2013). This however, is applicable in younger males in learning institutions where they move in groups and are likely to influence one another. According to (Muhangi, 2010) peer pressure was a key determinant of the uptake of VMMC among young people mostly in the non-circumcising areas.

Table 4.36: Implementation of programs supporting VMMC at work places

| | Frequency | Valid Percent |
|-------------------|------------|---------------|
| Strongly Agree | 165 | 66.3 |
| Agree | 23 | 9.2 |
| Not Sure | 31 | 12.4 |
| Disagree | 14 | 5.6 |
| Strongly Disagree | 16 | 6.4 |
| Total | 249 | 100.0 |

A majority of respondents at 66.3% strongly agreed that implementation of programs ensuring employers support employees who undergo circumcision and provide time off work would promote VMMC. Study by (Hermann-Roloff, Otieno, Agot, Ndinya-Achola, & Bailey, 2011) points out that too much time away from work especially where man is the sole provider for the family as the most significant barrier to seeking VMMC services. There is need for VMMC campaigners to work with employers in areas where circumcision isn.t a priority to implement programs that support time away for men who undertake VMMC.

Table 4.37: Correlations between organizational factors and VMMC

| | | VMMC | Organizational Factors |
|------------------------|---------------------|--------|------------------------|
| VMMC | Pearson Correlation | 1 | .203** |
| | Sig. (2-tailed) | | .001 |
| | N | 249 | 249 |
| Organizational Factors | Pearson Correlation | .203** | 1 |
| | Sig. (2-tailed) | .001 | |
| | N | 249 | 249 |

** . Correlation is significant at the 0.01 level (2-tailed).

The study further sought to describe the linear relationship between organizational factors and uptake of VMMC. The findings are shown in Table 4.36, which indicate that the Pearson correlation is ($r=0.203$, $P=0.001$) which signifies a statistically significant association between organizational factors and uptake of VMMC since $P<0.05$. It is true therefore to conclude if organizational influences go up then the likelihood to undertake VMMC also goes up.

4.5.4 Environmental Factors and Uptake of Voluntary Medical Male Circumcision

Behavioural changes are affected by a host of environmental factors. They include social constraints, political constraints, legal and ethical constraints, cultural constraints among others. Analysing and understanding environmental constraints and their dynamics are fundamental to positive behaviour change. Environmental factors affect the uptake of VMMC and therefore research questions around the subject of accessibility of the services and condoms, perceived costs among others were asked to determine how they influence uptake to VMMC.

Table 4.38: No Law demands of VMMC

| | Frequency | Valid Percent |
|-------------------|------------|---------------|
| Strongly Agree | 152 | 61.0 |
| Agree | 13 | 5.2 |
| Not Sure | 41 | 16.5 |
| Disagree | 23 | 9.2 |
| Strongly Disagree | 20 | 8.0 |
| Total | 249 | 100.0 |

A majority of respondents at 61% strongly agreed that since no law required one to undertake VMMC it was not a must. Considering that the researcher was in a non-circumcising area, this is an alarming attitude that could negatively impact on uptake of

VMMC. Consistent behavior change communication messages need to be disseminated so as to promote more positive attitude towards male circumcision. Campaigns across non-circumcising communities is now moving from VMMC as a HIV prevention method to a lifestyle choice so as to increase acceptance of the service by both men and women (Hatzold et al., 2014)

Table 4.39: VMMC Non-Issue

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 201 | 80.7 |
| Agree | 16 | 6.4 |
| Not Sure | 4 | 1.6 |
| Disagree | 8 | 3.2 |
| Strongly Disagree | 20 | 8.0 |
| Total | 249 | 100.0 |

An overwhelming majority at 80.7% strongly agreed that VMMC was a non-issue and that there are more important issues such as poverty eradication in the society. Campaign messages need to emphasize on implications of the HIV/AIDS pandemic which if not contained can be a national disaster, there needs to be an understanding that VMMC prevents escalation of new HIV infections and as such containing spread of HIV/AIDS.

Table 4.40: VMMC Unnecessary because of condoms availability

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 104 | 41.8 |
| Agree | 18 | 7.2 |
| Not Sure | 27 | 10.8 |
| Disagree | 44 | 17.7 |
| Strongly Disagree | 56 | 22.5 |
| Total | 249 | 100.0 |

41.8% of the respondents strongly agreed that since condoms were readily available there is no need for VMMC. It is important that campaign messages emphasize that availability of condoms doesn't mean that VMMC isn't necessary. Circumcision benefits besides reduced HIV and other STI infections need to be clearly outlined in communication messages so as to persuade more males to undertake VMMC. Interestingly, other studies show reluctance in condom use once males undertake VMMC due to confidence in protection provided by circumcision (Andersson, Owens, & Paltiel, 2011), this shows that campaigners need to deliver information effectively to avoid miscommunication.

Table 4.41: VMMC services charged

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 24 | 9.6 |
| Agree | 28 | 11.2 |
| Not Sure | 71 | 28.5 |
| Disagree | 55 | 22.1 |
| Strongly Disagree | 71 | 28.5 |
| Total | 249 | 100.0 |

Though a majority of respondents displayed knowledge that VMMC services were not charged with 28.5% strongly disagreeing and 22.1% simply disagreeing, a good number at 28.5% were not sure whether the services were charged or not while 20.8% thought that the services were charged which discouraged them not to seek for VMMC services. Cost has been identified as a key barrier to getting circumcised (Mattson, Bailey, Muga, Poulussen, & Onyango, 2005) therefore the VMMC communication messages need to clearly indicate that the services attract no charges so as to encourage more men to participate in the programs.

Table 4.42: Lack of privacy

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 70 | 28.1 |
| Agree | 27 | 10.8 |
| Not Sure | 56 | 22.5 |
| Disagree | 52 | 20.9 |
| Strongly Disagree | 44 | 17.7 |
| Total | 249 | 100.0 |

Lack of privacy at the medical centers emerged as a concern among some respondents with 38.9% indicating that they wouldn't undertake VMMC because of lack of privacy while 22.5% indicated that there were not sure if the medical centers had privacy or not. According to (Masese, Chimango, & Mbirimtengerenji, 2017) lack of privacy is a barrier to uptake of VMMC where males express concern for hospitals failure to purposely provide secretive and all male environment similar to that of traditional male circumcision setting. Such concerns need be addressed and assurance needs to be given to men with such concerns so as to encourage uptake of VMMC especially among the uncircumcised men.

Table 4.43: Difficulties accessing VMMC services

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 82 | 32.9 |
| Agree | 46 | 18.5 |
| Not Sure | 33 | 13.3 |
| Disagree | 38 | 15.3 |
| Strongly Disagree | 50 | 20.1 |
| Total | 249 | 100.0 |

32.9% of the respondents strongly agreed that the medical centers were located far off making access to VMMC services difficult while 18.5% agreed. Difficulties in accessing VMMC services regardless of the incessant campaigns are bound to negatively affect the uptake of VMMC by the non-circumcised. In a similar study by (Masese, Chimango, & Mbirimtengerenji, 2017) it emerged that lack of funds/transport for many males to undergo circumcision especially where they were located in far off areas was a major deterrent in undertaking VMMC. Rural areas where there are poor infrastructure coupled with inaccessible road networks and long distances to health centers need to be provided with mobile health centers so as to bring VMMC services closer to those in need. From the focus group discussions, it emerged that some participants who were yet to participate in the VMMC programs were located far off from the medical centers while others expressed that the medical centers environment was dirty and with arrogant personnel. Some discussions are outlined below;

Participant 3: In as far as service providers attitude and service provision are concerned, the barrier to MC uptake is the long distance to the health facilities. Take for instance where I come from, the nearest center from my home is 55kms away. How is a freshly circumcised man expected to get home

from the facility (especially if they are weak and in pain), and still seek follow-up care?

Participant 2: The clinics are rarely as clean as they are supposed to be, and some medical practitioners are very rude. Though I am a VMMC beneficiary, the service providers at the center I went to were not willing to be asked questions and were in a hurry to get the procedure done.

Table 4.44: VMMC services readily available

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 146 | 58.6 |
| Agree | 46 | 18.5 |
| Not Sure | 34 | 13.7 |
| Disagree | 13 | 5.2 |
| Strongly Disagree | 10 | 4.0 |
| Total | 249 | 100.0 |

A majority of the respondents at 58.6% strongly agreed that VMMC services were readily available which encouraged many males to get circumcised. This denotes positive perception towards VMMC which could be attributed to incessant campaigns targeting the non-circumcising communities. According to (Mapingure, et al., 2016) knowledge about VMMC and perceived availability of services ultimately reflects in increased demand of VMMC services. From the study findings, it came out that a large number of the youth in this area have the proper information on what MC entails. This clearly came out during the Focus Group Discussions where the participants were able to graphically explain the process that they were taken through during their visits to the VMMC sites. Some discussions are elucidated below;

Participant 1: My friends and I casually walked into one of the medical centers and the medical personnel were quite approachable and explained to us on what to expect during circumcision procedure and the benefits resulting from it. It is true that the services are readily available

Participant 2: The VMMC services are readily available. They need however to consider having mobile clinics to access the interior parts of our County which can be a resource to inform more males yet to be circumcised on benefits and be able quickly perform the procedure without them travelling far to access the services.

Table 4.45: Correlations between Environmental Factors and VMMC

| | | VMMC | Environmental Factors |
|-----------------------|---------------------|---------|-----------------------|
| VMMC | Pearson Correlation | 1 | -.247** |
| | Sig. (2-tailed) | | .000 |
| | N | 249 | 249 |
| Environmental Factors | Pearson Correlation | -.247** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 249 | 249 |

** . Correlation is significant at the 0.01 level (2-tailed).

The research sought to establish the degree of linear relationship between environmental factors and VMMC through the use of Pearson Correlation statistic. The results are shown in Table 4.44($r=-0.247$, $P=0.000$) which indicate that environmental factors have a statistically negative relationship with uptake of VMMC since $P<0.05$.

4.5.5 Communication factors and Uptake of Voluntary Medical Male Circumcision

Multi-faceted communication interventions (e.g., using mass-, social-, and traditional media, information communication technology (ICTs), and/or *mHealth*) aimed at changing individual behavior play an important role as a foundation for social change communication. In addition interpersonal communication is hailed as very central in the

success of communication intervention. Research questions were therefore designed to determine how various interventions had helped push for uptake of VMMC.

Table 4.46: Media and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 62 | 24.9 |
| Agree | 113 | 45.4 |
| Not Sure | 32 | 12.9 |
| Disagree | 19 | 7.6 |
| Strongly Disagree | 23 | 9.2 |
| Total | 249 | 100.0 |

A majority of the respondents at 70.3% were in agreement that media campaigns on VMMC have helped increase its uptake. According to (FHI360, 2014) media coverage can influence people’s attitudes towards and adoption of health interventions such as VMMC for HIV prevention. A study by (Hatzold, et al., 2014) also indicates that a majority of the respondents had mostly learned of VMMC from television and radio campaigns. It is imperative that media campaigns are intensified especially in areas where demand generation is below par so as to get more men to participate in VMMC programs. A representative involved in media campaigns expounded on the same;

.Though media campaigns have especially been crucial in getting the information on VMMC far and wide it is important to also incorporate use of interpersonal communication through the community mobilizers to demand generation of VMMC even further. Interpersonal communication is especially important in addressing individual clients concerns pertaining the procedure and breaking down any personal inhibitions they may harbor in regards to the VMMC. (Family AIDS Care Representative)

Table 4.47: Politicians and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 34 | 13.7 |
| Agree | 54 | 21.7 |
| Not Sure | 100 | 40.2 |
| Disagree | 28 | 11.2 |
| Strongly Disagree | 33 | 13.3 |
| Total | 249 | 100.0 |

A majority of the respondents at 40.2% were not sure if appeals by popular politicians have pushed many males to undertake voluntary medical male circumcision which indicates that politicians are not largely involved as they should in VMMC campaigns. Previous studies reveal that in absence of strong political support, VMMC initiatives inevitably lag behind (AVAC, 2012). It is important therefore that in whichever areas the VMMC campaigners are to identify key political figures they can work with to be able to demand generation for VMMC. Politicians are considered as opinion leaders and more often than not they pass their own interpretations in addition to actual media content thus are quite influential in getting people to change their attitudes and behaviors.

Table 4.48: Elders and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 39 | 15.7 |
| Agree | 46 | 18.5 |
| Not Sure | 52 | 20.9 |
| Disagree | 91 | 36.5 |
| Strongly Disagree | 21 | 8.4 |
| Total | 249 | 100.0 |

44.9% of the respondents felt that clan elders weren't involved in promoting the VMMC program compared to 34.2% of the respondents who were of opinion that the clan elders have been useful in changing attitudes on male circumcision and influenced many to undertake VMMC. Clan elders are a useful component in promoting VMMC at the grassroots levels; according to (Katisi & Daniel, 2015) obstacles mar VMMC programs when traditional leaders are not engaged in the process. Campaign planners need to consider working closely with the clan elders as they are crucial in promoting uptake of VMMC.

Table 4.49: Religious Leaders and VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 30 | 12.0 |
| Agree | 32 | 12.9 |
| Neutral | 45 | 18.1 |
| Disagree | 48 | 19.3 |
| Strongly Disagree | 94 | 37.8 |
| Total | 249 | 100.0 |

A majority of the respondents at 57.1% were of the view that religious leaders hadn't been useful in changing attitudes on male circumcision to influence uptake of VMMC. Designing communication messages to appeal to men to participate in VMMC isn't enough; working with revered individuals could go a long way in pushing for more men to get circumcised. According to (Bulled & Green, 2015) key people such as religious leaders could be helpful in influencing men to undertake in circumcision. An officer who has been involved in VMMC program based with the Catholic Medical Mission Board in Funyula had the following to say about working with community leaders;

“As the program still rolls out and targets areas that have had low demand generation, it is has proved important to plan VMMC advocacy with community leaders such as political, traditional and religious leaders through existing community structures. Tribal/religious leaders have especially been vital in helping change existing norms, giving reassurance and giving authority to the VMMC programs. Not including them in advocacy campaigns is a sure way to fail in implementation of VMMC in any given area” (CMMB Officer)

Table 4.50: Correlations between Communication factors and VMMC

| | | VMMC Communication factors | |
|-----------------------|---------------------|----------------------------|--------|
| VMMC | Pearson Correlation | 1 | .431** |
| | Sig. (2-tailed) | | .000 |
| | N | 249 | 249 |
| Communication factors | Pearson Correlation | .431** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 249 | 249 |

*. Correlation is significant at the 0.01 level (2-tailed).

It was vital for the study to establish the relationship of Communication factors and uptake of VMMC among the traditionally non-circumcising. The findings as shown in Table 4.49, reveal that the Pearson correlation coefficient was ($r=0.431$, $P=0.000$) which indicate that Communication factors have a statistically positive relationship with VMMC since $P<0.05$. Communication factors prove to be a vital element in promoting VMMC with key stakeholders such as the Kenya Ministry of Public Health and Sanitation and the C-Change Kenya producing VMMC Communication Toolkits which outline how to effectively work with mass media, community and religious leaders among others to push for uptake of VMMC in non-circumcising regions in Kenya.

4.5.6 Uptake of Voluntary Medical Male Circumcision

From the research study, various issues contributing either to; high, low or no uptake of VMMC among the traditionally non-circumcising communities emerged. The researcher picked out key issues from the five objectives to establish how they could influence uptake of VMMC.

Table 4.51: Media Campaigns Key in Promoting VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 125 | 50.4 |
| Agree | 18 | 7.1 |
| Neutral | 30 | 12.0 |
| Disagree | 34 | 13.7 |
| Strongly Disagree | 42 | 16.9 |
| Total | 249 | 100.0 |

A majority of the respondents at 50.4% were of the opinion that media campaigns have been key in pushing males from Busia County to undertake VMMC. Mass media such as radio, television, pamphlets, and posters among others provide an excellent opportunity to communicate to the general public on a myriad of issues. According to (Muzyka, Thompson, Bombak, Driedger, & Lorway, 2012), most people's knowledge, attitudes and beliefs about a certain topic or event are shaped in part by media framing. The uptake of VMMC can therefore be influenced by effectively designed messages disseminated through various media platforms.

Table 4.52: Mobile Clinics in Promoting VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 100 | 45.2 |
| Agree | 41 | 11.5 |
| Neutral | 37 | 16.9 |
| Disagree | 38 | 14.3 |
| Strongly Disagree | 33 | 12.3 |
| Total | 249 | 100.0 |

A majority of the respondents were of the opinion that utilizing mobile clinics to provide circumcision services would greatly enhance uptake of VMMC with 45.2% strongly agreeing and 11.5% agreeing. From the research study, one of the challenges contributing to low uptake of VMMC was accessibility to the medical centers where some men cited that they were too far from their abodes. High uptake of VMMC in other countries such as South Africa has been realized through delivery of services in mobile units which allows the programs to extend reach to more remote areas (Kufa, Chetty-Makkan, Maraisane, Charalambous, Chihota, & Toledo, 2016). Introduction of mobile clinics therefore in non-circumcising regions in Kenya would help push the uptake of VMMC.

Table 4.53: Women in promotion of VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 146 | 58.6 |
| Agree | 46 | 10.5 |
| Not Sure | 34 | 18.7 |
| Disagree | 13 | 6.2 |
| Strongly Disagree | 10 | 7.0 |
| Total | 249 | 100.0 |

A majority of the respondents felt that if women were engaged in circumcision campaigns it would encourage more males to undertake VMMC with 58.6% strongly agreeing and 10.5% agreeing. Some of the men that participated in this study revealed that fear of irking their partners prevented them from participating in VMMC. According to (Lanham, L’Engle, Loolpait, & Oguma, 2012) female partners are an important element in pushing for uptake of VMMC as a majority are able to influence their spouses to undergo the procedure which has scaled up slower than anticipated in most priority countries where there are non-circumcising communities. Including women in VMMC communication messages will help in increasing its uptake especially in the non-circumcising regions in Kenya.

Table 4.54: Community and Religious Leaders in Promotion of VMMC

| | Frequency | Valid Percent |
|-------------------|------------------|----------------------|
| Strongly Agree | 98 | 35.4 |
| Agree | 18 | 7.2 |
| Neutral | 58 | 23.3 |
| Disagree | 44 | 17.7 |
| Strongly Disagree | 31 | 16.4 |
| Total | 249 | 100.0 |

35.4% of the respondents strongly agreed that engaging community and religious leaders would encourage more males to participate in VMMC programs. The research through the focus group discussions and interviews was able to establish that community and religious leaders were vital especially in influencing the older males who were already set in their ways and didn’t see need to get circumcised. Reports on non-circumcising regions that had seen increased number of older males taking part in the VMMC programs confirmed that use of community and religious leaders as integral (World-Health-Organisation, 2013). Low uptake among older males in non-circumcising regions

has been recorded, it is imperative to consider utilizing the community and religious leaders to increase uptake among the older males.

Table 4.55: Introducing less painful methods to promote VMMC

| | Frequency | Valid Percent |
|-------------------|------------|---------------|
| Strongly Agree | 165 | 66.3 |
| Agree | 23 | 10.2 |
| Not Sure | 31 | 10.4 |
| Disagree | 14 | 6.6 |
| Strongly Disagree | 16 | 6.4 |
| Total | 249 | 100.0 |

A majority of the respondents were of opinion that introducing less painful methods would encourage more males to undertake VMMC with 66.3% strongly agreeing and 10.2% agreeing. Both circumcised and non-circumcised males from this study felt that the painful procedure contributed to its low uptake. The government and other non-governmental organizations pushing for VMMC in non-circumcising regions need to get strategies in place to introduce less painful methods such as the PrePex method (Tobian, Adam, Jason, Kiggundu, Yazdi, & Njeuhmeli, 2015) which is WHO approved and tested.

4.5.7 Overall Perception of VMMC Uptake

The research further sought to establish the overall perception of VMMC uptake amongst the traditionally non-circumcising at an individual level and if there was goodwill to continue the practice by endorsing it and recommending it to family and friends and if they would ensure that their sons undertook circumcision which would ultimately ensure that male circumcision becomes a way of life amongst the traditionally non-circumcising communities.

Table 4.56: Overall Perceptions of VMMC Uptake among the Traditionally Non-Circumcising

| | SA | A | N | D | SD |
|--|-----------|----------|----------|----------|-----------|
| It is important to undertake voluntary medical male circumcision | 41.4% | 16.1% | 12.0% | 13.7% | 16.9% |
| I would recommend to any male to undertake voluntary medical male circumcision | 34.5% | 9.6% | 20.1% | 18.5% | 17.3% |
| My family/relatives have undertaken voluntary medical male circumcision | 40.2% | 16.5% | 14.9% | 15.3% | 13.3% |
| When of age my sons will have to undertake voluntary medical male circumcision | 39.4% | 7.2% | 23.3% | 17.7% | 12.4% |

Not exactly 50% of the respondents at 41.4% unequivocally concurred that it is critical to embrace VMMC. Endeavors need to keep on urging more males to get circumcised by going along data that constrains them to get occupied with VMMC as well as consider connecting about it. Influential messages should be reliably passed along in order to guarantee that more males feel constrained to get occupied with VMMC.

Just 34.5% of the respondents unequivocally concurred that they would prescribe to any male to attempt VMMC. The program must be a triumph if lion’s share of the general population persuade indicted to be envoys by understanding the significance of circumcision in lessening HIV diseases. By expanding the quantity of those getting circumcised then there can be more ministers who can likewise be used to drive the VMMC motivation among the non-circumcising and make it much progressively fruitful.

Over portion of the respondents who took an interest in the exploration as 56.7% showed that their family/relatives had embraced VMMC. The crusades have been effective in getting numerous males circumcised however they have to proceed in order to get the numbers further up by pushing the male circumcision to be a direction for living. It is basic additionally that battles focus on the nuclear family as opposed to singular males

in order to guarantee that more men get associated with the projects without dread of what other relatives may think about their choice.

Not exactly 50% of the considerable number of respondents at 46.6% were persuaded that when of age their children would attempt VMMC. The program must be a triumph if more males can feel constrained to guarantee that all males in their family are circumcised. Male circumcision should be depicted to a greater extent a direction for living than a preventive measure which will see it be a triumph and embraced among the generally non-circumcising in Kenya.

4.6 Correlation Analysis

Table 4.57: Overall Pearson Correlation Matrix

| | | Personal Factors | Social Factors | Organization Factors | Environmental Factors | Communication factors | VMMC uptake | Education Level |
|------------------------------|---------------------|------------------|----------------|----------------------|-----------------------|-----------------------|-------------|-----------------|
| Personal Factors | Pearson Correlation | 1 | | | | | | |
| | Sig. (2-tailed) | | | | | | | |
| | N | 249 | | | | | | |
| Social Factors | Pearson Correlation | -.045 | 1 | | | | | |
| | Sig. (2-tailed) | .484 | | | | | | |
| | N | 249 | 249 | | | | | |
| Organization Factors | Pearson Correlation | .107 | -.287** | 1 | | | | |
| | Sig. (2-tailed) | .092 | .000 | | | | | |
| | N | 249 | 249 | 249 | | | | |
| Environmental Factors | Pearson Correlation | .060 | .680** | -.124 | 1 | | | |
| | Sig. (2-tailed) | .344 | .000 | .051 | | | | |
| | N | 249 | 249 | 249 | 249 | | | |
| Communication factors | Pearson Correlation | .067 | -.098 | -.027 | -.190** | 1 | | |
| | Sig. (2-tailed) | .292 | .122 | .668 | .003 | | | |
| | N | 249 | 249 | 249 | 249 | 249 | | |
| VMMC Uptake | Pearson Correlation | .437** | -.236** | .218** | -.247** | .431* | 1 | |
| | Sig. (2-tailed) | .000 | .000 | .001 | .000 | .030 | | |
| | N | 249 | 249 | 249 | 249 | 249 | 249 | |
| Education Level | Pearson Correlation | .096 | .181** | -.032 | .260** | -.029 | .339** | 1 |
| | Sig. (2-tailed) | .132 | .004 | .620 | .000 | .651 | .000 | |
| | N | 249 | 249 | 249 | 249 | 249 | 249 | 249 |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

A general relationship study was done to build up how the autonomous factors (individual elements, social components, authoritative elements, natural elements and Communication factors) interrelated among themselves too with the needy factors (take-up of VMMC). Training level is additionally acquainted with perceive how it relates with the free and the reliant variable.

From the connection lattice, the study discoveries demonstrate that there was huge connection between all the free factors and the reliant variable with individual elements and Communication factors having the most grounded connections at ($r=0.437$ $P=0.001$) and ($r=0.431$ $P=0.001$) separately. Social variables and natural elements have a negative association with take-up of VMMC with co-proficient components of ($r=-0.236$ $P=0.001$) and ($r=-0.247$, $P=0.001$) individually. Association factors had a positive association with take-up of VMMC with co-productive components of ($r=0.218$ $P=0.001$). All the autonomous factors had a factually critical association with the reliant variable.

There rose some between connections among the free factors, the natural components and social elements showed a solid positive association with co-productive variables of ($r=0.680$ $P=0.001$) while the association elements and social elements had a negative relationship ($r=-0.287$ $P=0.001$). A positive relationship of instruction level and social factors just as with ecological elements developed ($r=0.181$ $P=0.001$) and ($r=0.260$ $P=0.001$) separately. A positive relationship of instruction level and take-up of VMMC additionally rises in the grid with co-effective of assurance ($r=0.338$ $P=0.001$).

4.7 Test of Assumptions

Test presumptions are required to be led before information investigation. The scientist hence, led the trial of presumptions and specifically the trial of ordinariness and multi Collinearity test to decide whether the study discoveries were definitive to induce from.

4.7.1 Multi Collinearity Test

The investigation tried to test for multicollinearity. The discoveries are appeared Table 4.55. The investigation received a VIF dimension of 4.0 as the limit as prescribed by Garson (2012). The discoveries show that individual variables had a VIF of 1.034, social components 2.035, hierarchical elements 1.113, ecological elements 1.962 and Communication factors 1.049. The outcomes demonstrate that the VIF dimensions of the free factors were inside the edge of 4.0 inferring there was no danger of multicollinearity issue and in this manner the study utilized direct relapse show.

Multicollinearity is an unsuitable abnormal state of bury relationship among autonomous factors with the end goal that impacts of the factors can't be isolated (Gujarati& Porter 2009). Fluctuation Inflater factor (VIF) is a factor by which the change of a given halfway relapse coefficient increments because of given factors degree of connection with different indicators in the model (Dennis, 2011). Verbeek (2012) attest that in different relapse, the Variance expansion factor (VIF) is utilized as a pointer of multi collinearity. More elevated amounts of VIF are known to influence unfavorably the outcomes related with various relapse study in this way making lower VIF dimensions of change increasingly alluring. Garson (2012) express that the standard guideline is that $VIF > 4.0$ shows multi collinearity as an issue while different researchers like Verbeek, (2012) and Gujarati& Porter (2009), advocate for a progressively indulgent cut off of $VIF > 5.0$. Be that as it may, O.Brien (2007) proposes that this standard guideline ought to be surveyed in relevant premise considering factor that impact the difference of relapse coefficient.

Table 4.58: Collinearity Statistics

| <u>Collinearity Statistics</u> | | |
|--------------------------------|-----------|-------|
| | Tolerance | VIF |
| Personal factors | .968 | 1.034 |
| Social factors | .491 | 2.035 |
| Organizational factors | .899 | 1.113 |
| Environmental factors | .510 | 1.962 |
| Communication factors | .953 | 1.049 |

4.7.2 Test of Normality

A test of normality was run to establish if data was normally distributed. Normality was therefore checked using the Shapiro-Wilk test which checks the skewness or kurtosis of data and its statistic ranges from 0 to 1 where P-values of less 0.05 indicate that the data is normally distributed (Razali & Wah, 2011). All the variables recorded P-values of less than 0.05 thus the data was deemed to be normally distributed.

Table 4.59: Tests of Normality

| | Kolmogorov-Smirnov^a | | | Shapiro-Wilk | | |
|-----------------------|---------------------------------------|-----------|-------------|---------------------|-----------|-------------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Personal Factors | .354 | 249 | .000 | .371 | 249 | .000 |
| Social Factors | .196 | 249 | .000 | .876 | 249 | .000 |
| Organization Factors | .111 | 249 | .000 | .972 | 249 | .000 |
| Environmental Factors | .076 | 249 | .001 | .981 | 249 | .002 |
| Communication Factors | .087 | 249 | .000 | .979 | 249 | .001 |

4.8 Overall Model

Multiple regression analysis was used to determine whether the independent variables namely; personal factors, social factors, organizational factors,

environmental factors and Communication factors affect the dependent variable which is uptake of VMMC. The model used for regression analysis was expressed in the general form as given below;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where;

Y = Uptake of VMMC (Dependent variable)

α = Constant (Co-efficient of intercept)

X_1 = Personal Factors

X_2 = Social Factors

X_3 = Organizational Factors

X_4 = Environmental Factors

X_5 = Communication factors

e = Error term

β_1 β_5 = Regression co-efficient of the five variables.

Table 4.60: Overall Regression Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------|-------------------|-----------------|--------------------------|-----------------------------------|
| 1 | .769 ^a | .591 | .582 | 3.34867 |

a. Predictors: (Constant), Personal Factors, Social Factors, Organization Factors, Environmental Factors, Communication factors

The results in Table 4.56 depicts a statistically significant relationship among; personal factors, social factors, organization factors, environmental factors, Communication factors and uptake of VMMC in which the value of correlation coefficient for all the variables is 0.769. The adjusted $R^2=0.582$ which indicates that 58.2% of uptake of VMMC can be explained by the independent variables (personal factors, social factors, organization factors, environmental factors, Communication factors). The remaining 41.8% of the variation in uptake of VMMC is affected by other variables not included in the model.

Table 4.61: ANOVA^b for all variables

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|------------|-----------------------|-----------|--------------------|----------|-------------------|
| 1 | Regression | 3935.156 | 5 | 787.031 | 70.186 | .000 ^a |
| | Residual | 2724.901 | 243 | 11.214 | | |
| | Total | 6660.056 | 248 | | | |

a. Predictors: (Constant), Personal Factors, Social Factors, Organization Factors, Environmental Factors, Communication factors
b. Dependent Variable: Uptake of VMMC

The analysis of variance findings in Table 4.57 for all the study variables show the significance of the F statistics value 70.186 and p-value 0.000 which indicate the overall model is statistically significant since P is less than 0.05. This infers that the independent variables had significant influence on uptake of VMMC thus the overall regression model resulted in a statistically significant good prediction of uptake of VMMC

Table 4.62: Coefficients^a for all variables

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|-------|-----------------------|-----------------------------|------------|---------------------------|---------|------|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 4.036 | 1.620 | | 2.491 | .013 |
| | Personal Factors | -1.527 | .228 | -.287 | -6.701 | .000 |
| | Social Factors | -.141 | .032 | -.187 | -4.424 | .000 |
| | Organization Factors | -.007 | .002 | -.171 | -4.040 | .000 |
| | Environmental Factors | 4.885 | .541 | .495 | 9.025 | .000 |
| | Communication factors | -2.701 | .203 | -.716 | -13.328 | .000 |

a. Dependent Variable: VMMC

The coefficients summary in Table 4.58 indicates that the P values for all the predictor variables was less than 0.05 revealing that the overall model was statistically significant and reliable.

The overall model was therefore defined as;

$$Y=4.036-1.527X_1-0.141X_2-0.007X_3+0.4.885X_4-2.701X_5$$

4.9 Optimal Conceptual Framework

All the variables under study were found to affect VMMC.

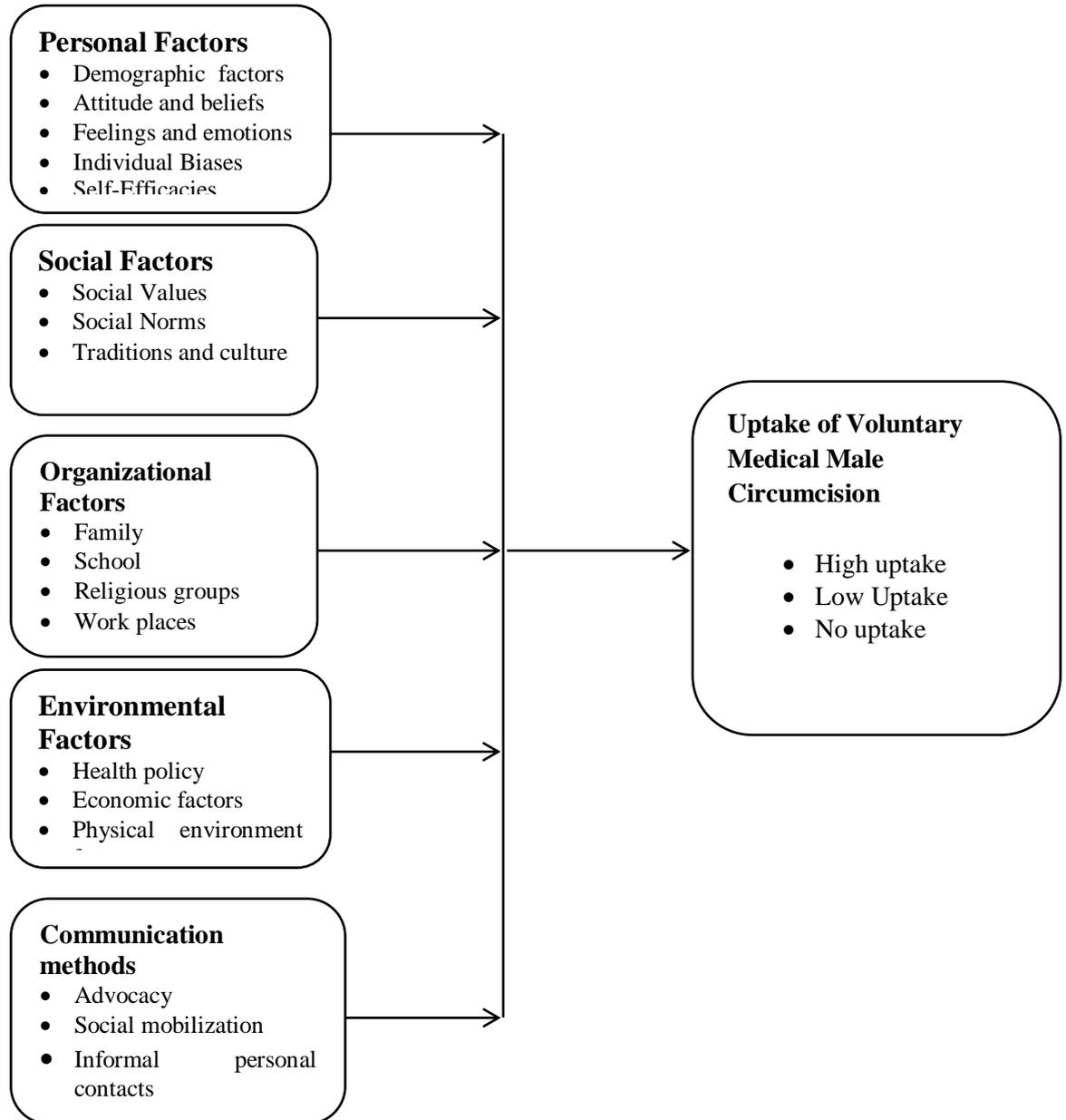


Figure 4.1: Optimal Conceptual Model

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This part displays the synopsis of real discoveries of the investigation and in general end. The primary target of this investigation was to decide the Social and Behavior Change Communication factors influencing the take-up of Voluntary Medical Male Circumcision (VMMC) among the generally non-circumcising in Kenya. From the primary target, explicit goals were drawn which were: to decide the impact of individual factors on take-up of Voluntary Medical Male Circumcision; to decide the impact of social factors on take-up of Voluntary Medical Male Circumcision; to decide the impact of hierarchical and additionally institutional factors on take-up of Voluntary Medical Male Circumcision and to decide the impact of ecological factors on the take-up of Voluntary Medical Male Circumcision and to investigate the directing impact of Communication factors on the take-up of Voluntary Medical Male Circumcision . The part likewise features proposals for further research.

5.2 Summary of Findings

5.2.1 Personal variables

The research could build up that different dispositions and convictions among the respondents were probably going to impact in the event that they embraced VMMC or not. A lion's share of the respondents at 54.2% were of conclusion that in the event that one rehearsed safe sex they didn't have to attempt voluntary medical male circumcision. Despite what might be expected, most respondents at 78.7% were in assertion that in the event that one rehearsed perilous sex they expected to attempt VMMC. Concentrate by (Nyaga, 2015) builds up that recurrence of condom use amid sex diminishes take-up of VMMC. Structuring of VMMC communication messages needs to take in thought the sex practices of people with the goal that suitable inspiration systems are contribution to the messages.

The greater part of the respondents at 75.9% were of view that on the off chance that one was in a monogamous relationship, there was no compelling reason to attempt VMMC while a larger part of respondents at 60.6% firmly concurred that in the event that one was in a polygamous relationship they expected to embrace VMMC. Sort of relationship that the men were in is an essential thought when planning messages focusing on them as they are subject to the inspiration to get associated with VMMC.

A larger part of the respondents at 63.1% firmly concurred that those officially contaminated with HIV/AIDs didn't require to embrace VMMC. It is basic to analyze if this is a factor that could add to low number of men partaking in VMMC programs. Despite what might be expected, a lion's share at 63.9% firmly concurred that the individuals who are serious ought to embrace VMMC. It likewise rose up out of the FGDs that a portion of the uncircumcised men feared the HIV tests as they didn't know their status.

The study uncovered that 36.2% of respondents didn't know that VMMC enhanced individual cleanliness, another 43.4% were worried about the possibility that that circumcision contrarily influenced sexual execution while just 35.3% were profoundly mindful that VMMC had an impact in anticipating cervical malignant growth. A lion's share of the respondents at 45.8% also communicated dread that their accomplices would be unfaithful amid the long recuperating period.

A connection study could set up a connection between close to home components and VMMC take-up ($r=0.209$, $P=0.001$) If respondents are very mindful of how different individual variables contributed decidedly to their prosperity then they are probably going to embrace VMMC. It was additionally settled through connection that there was a connection between instruction level and individual variables influencing take-up of VMMC ($r=0.339$, $P=0.001$). Low information levels in different individual elements are probably going to adversely influence take-up of VMMC and the other way around.

5.2.2 Social Factors

Social components shape related convictions, practices and qualities. It is in this way critical that social underlying foundations of an issue be distinguished for it to be enough explained. In receiving VMMC, in this manner, social attributes of a network can hamper its appropriation. Synopses of the discoveries on social variables influencing take-up of VMMC are sketched out.

A larger part of the respondents at 49.9% were of the view that since their way of life didn't maintain male circumcision then VMMC wasn't a need. In a customarily non-circumcising gathering, for example, the Samia, nonattendance of circumcision is a component of ethnic personality in this way VMMC may not be an essential component of ethnic character. Another greater part at 47.8% were of the view that male circumcision is a plague that can bring misfortune along these lines shouldn't be maintained, such a view could harbor execution of VMMC among the non-circumcising networks.

28.1% of the respondents were of conclusion that male circumcision diminishes sexual joy in this way were hesitant in embraced VMMC while 23.7% showed that the recuperating time frame after male circumcision took excessively long so they were reluctant to attempt VMMC. Over portion of the considerable number of respondents who partook in the exploration at 50.6% were in assertion that circumcision method was not proper for more seasoned males (those past the period of pubescence) with 35.7% simply concurring and 14.9% emphatically concurring.

A dominant part of the respondents at 77.1% communicated that there was disgrace in looking for circumcision benefits close by a lot more youthful males (younger than 15 years) with 30.1% unequivocally concurring and 47% concurring, this view could hamper take-up of VMMC as the more seasoned males felt embarrassed to be seen by the more youthful males experiencing a similar strategy.

The study consider through a connection investigation built up a negative connection between social components and VMMC ($r=-0.236$, $P=0.000$). On the off chance that respondents lined up with different social elements, take-up of VMMC is relied upon

to be low and the other way around. As per (Mbonye, Kuteesa, Seeley, Levin, Weiss, & Kamali, 2016), neighborhood convictions and practices about VMMC may impact take-up and adequacy.

5.2.3 Organizational Factors

Association and establishments in the earth of people, for example, the family, factions, peer associations, religious gatherings, social gatherings, and HIV and AIDS bolster bunches impact the reception of behaviour and social practices, for example, the VMMC. The rundown of research consider discoveries on inquiries encompassing the family, church, learning establishments among others to decide how they impact take-up of VMMC among the customarily non-circumcising are illustrated.

A lion's share of the respondents at 49.4% unequivocally concurred that since their companions didn't bolster male circumcision they wouldn't embrace VMMC showing that absence of consideration of ladies/accomplices in VMMC battles will undoubtedly influence take-up of VMMC. Past studies connect take-up of male circumcision and mate's impact. Just 14.1% of the respondents firmly concurred that their companion's upheld male circumcision so they would attempt voluntary medical male circumcision, a lion's share of the respondents at 51% showed that they didn't know whether their mate bolstered male circumcision which at last influences their choice on taking an interest in VMMC. Just 26.5% of the respondents demonstrated that however their family didn't bolster male circumcision they would take part in VMMC, this demonstrates the significance of family bolster in advancing VMMC. Another 28.5% of the respondents concurred that since their congregation did not bolster male circumcision they wouldn't take an interest in VMMC contrasted with 45% who didn't credit to this view, 26.5% didn't know. Each road that can push for take-up of VMMC should be incorporated into structuring and passing messages to urge males to be a piece of the program. Religion has been accounted for as a hindrance to looking for VMMC in numerous investigations inspecting worthiness of male circumcision.

A lion's share of respondents at 44.2% unequivocally concurred that having experienced male circumcision they would energize my other relatives and companions to embrace VMMC. The best drivers to expand VMMC take-up must be the individuals who have experienced the strategy as their tributes can go far too decidedly impact those yet to be circumcised. Utilization of tributes in VMMC battle messages should be calculated in as it is an enticing method for urging others to be a piece of it.

A dominant part of the respondents at 41.7% were of assessment that since their group objected male circumcision they wouldn't along these lines embrace VMMC, 30.5% didn't know while 27.7% oppose this idea. Without a customary custom of circumcision numerous individuals may not see a convincing motivation to experience VMMC. On other hand, just 24.9% of the respondents demonstrated that they attempted VMMC on account of companion weight in the learning organizations. Social weight has been perceived as a factor that could impact take-up of VMMC. This be that as it may, is pertinent in more youthful males in learning organizations where they move in gatherings and are probably going to impact each other. Friend weight has been plot as a key determinant of the take-up of VMMC among youngsters generally in the non-circumcising zones.

A dominant part of respondents at 66.3% firmly concurred that execution of projects guaranteeing managers bolster representatives who experience circumcision and give time off work would advance VMMC. From the center gathering exchanges, it rose that a portion of the individuals who had not experienced circumcision were sole providers and in this way hesitant to embrace VMMC as it would influence their families specifically.

A connection study could uncover a positive connection between authoritative components and take-up to VMMC since ($r=0.203$, $P=0.001$) which implies a factually huge relationship between hierarchical elements and take-up of VMMC since $P<0.05$. It is genuine along these lines to finish up on the off chance that hierarchical impacts go up, the probability to attempt VMMC likewise goes up.

5.2.4 Environmental Factors

Natural variables influence the take-up of VMMC and in this manner rundown of research discoveries around the subject of openness of the administrations and condoms, saw expenses among others and how they impact take-up of VMMC are quickly talked about. A dominant part of respondents at 61% emphatically felt cap since no law expected one to attempt VMMC it was anything but an absolute necessity. Taking into account that the scientist was in a non-circumcising region, this is a disturbing frame of mind that could contrarily effect on take-up of VMMC. Reliable behaviour change communication messages should be dispersed in order to advance progressively inspirational disposition towards male circumcision.

A mind greater part at 80.7% unequivocally concurred that VMMC was a non-issue and that there are progressively critical issues, for example, neediness annihilation in the general public. Crusade messages need to accentuate on ramifications of the HIV/AIDS pandemic which if not contained can be a national fiasco; there should be an understanding that VMMC anticipates acceleration of new HIV contaminations and all things considered containing spread of HIV/AIDS. 41.8% of the respondents firmly concurred that since condoms were promptly accessible there is no requirement for VMMC. It is imperative that crusade messages underline that accessibility of condoms doesn't imply that VMMC isn't fundamental. Circumcision benefits other than decreased HIV and other STI diseases should be obviously sketched out in communication messages in order to convince more males to attempt VMMC.

In spite of the fact that a larger part of respondents showed information that VMMC administrations were not accused of 28.5% emphatically differing and 22.1% just dissenting, a great number at 28.5% were uncertain about whether the administrations were charged or not while 20.8% believed that the administrations were charged which disheartened them not to look for VMMC administrations. Cost has been recognized as a key hindrance to getting circumcised along these lines it's critical for battle messages to underscore that VMMC is gratis.

Absence of security at the medical focuses rose as a worry among a few respondents with 38.9% showing that they wouldn't attempt VMMC on account of absence of protection while 22.5% demonstrated that there didn't know whether the medical focuses had security or not. Absence of protection has been recognized as one of the obstructions to take-up of VMMC

32.9% of the respondents emphatically concurred that the medical focuses were situated far away making access to VMMC administrations troublesome while 18.5% concurred. Troubles in getting to VMMC benefits paying little respect to the perpetual crusades will undoubtedly contrarily influence the take-up of VMMC by the non-circumcised. Comparable investigations have likewise uncovered that absence of assets/transport for some males to experience circumcision particularly where they were situated in distant regions is a noteworthy obstacle in attempted VMMC.

A lion's share of the respondents at 58.6% firmly concurred that VMMC administrations were promptly accessible which urged numerous males to get circumcised. This signifies positive discernment towards VMMC which could be ascribed to unremitting efforts focusing on the non-circumcising networks. A connection study could uncover a negative connection between ecological components and take-up of VMMC ($r=-0.247$, $P=0.000$). A barring domain is probably going to adversely take-up of VMMC and the other way around.

5.2.5 Communication Methods

A larger part of the respondents at 70.3% were in assertion that media crusades on VMMC have helped increment its take-up. Media inclusion can impact individuals' frames of mind towards and appropriation of wellbeing mediations, for example, VMMC for HIV anticipation. Other comparative investigations likewise show that dominant part of the respondents had generally taken in of VMMC from TV and radio battles.

A lion's share of the respondents at 40.2% didn't know whether claims by famous government officials have pushed numerous males to embrace voluntary medical

male circumcision which demonstrates that lawmakers are not generally included as they ought to in VMMC battles. Just 13.2% of the respondents showed that interests by prominent legislators had pushed numerous to attempt VMM. Past studies uncover that without solid political help, VMMC activities definitely fall behind. It is imperative in this manner that in whichever regions the VMMC campaigners are to recognize key political figures they can work with to most likely interest age for VMMC.

44.9% of the respondents felt that family older folks weren't engaged with advancing the VMMC program contrasted with 34.2% of the respondents who were of supposition that the group seniors have been helpful in changing mentalities on male circumcision and affected numerous to attempt VMMC. Group seniors are a valuable part in advancing VMMC at the grassroots dimensions. A larger part of the respondents at 57.1% were of the view that religious heads hadn't been valuable in changing frames of mind on male circumcision to impact take-up of VMMC. Structuring communication messages to speak to men to take an interest in VMMC isn't sufficient; working with loved people could go far in pushing for more men to get circumcised.

5.3 Conclusion

The study reasoned that take-up of VMMC was specifically impacted by the convictions and frames of mind of the male populace being contemplated. Convictions, for example, sexual execution improvement, security from HIV/AIDs contaminations, and dread of accomplice treachery among other individual components influenced take-up of VMMC relying upon the comprehension and learning dimension of the man; for example on the off chance that a man trusted that their sexual execution would be imperiled, there was high protection from attempt male circumcision and the other way around. Tending to different frames of mind and convictions while planning effort messages would help mitigate outlandish feelings of dread that block men from non-circumcising networks to partake in VMMC and increment its take-up.

Besides, the study set up those social characteristics of the non-circumcising networks influenced take-up of VMMC. Examined under the umbrella of social components, emotions that male circumcision was certifiably not a pivotal component of ethnic personality and that it was an evil entity that could bring misfortune made the males from non-circumcising networks feel anxious about participating in the VMMC program. Socially, the old and young fellows are in various positions and all things considered it wouldn't be normal that they share a stage even in social get-togethers. The study inferred that more seasoned males felt awkward reasoning that they would sit at the medical focus lounge areas with more youthful males for the circumcision method which influenced take-up of VMMC.

Thirdly, the investigation inferred that hierarchical variables influenced take-up of VMMC. Life partners of the males from non-circumcising networks impacted on the off chance that they attempted male circumcision or not. The bigger groups of the members additionally apparently impacted the thought of take-up of VMMC with those having circumcised male relatives being bound to be circumcised too. Institutional affiliations likewise, for example, the congregation and learning foundations additionally impacted take-up of VMMC; for example, on the off chance that the congregation a man went to bolstered circumcision, they were probably going to be circumcised.

Fourthly, the exploration ponder reasoned that a barring situation is probably going to adversely take-up of VMMC and the other way around. Natural factors, for example, openness of the circumcision administrations and condoms, saw expenses among others impacted if male embraced circumcision or not. Males situated in faraway zones from the VMMC medical focuses and those that believed that it was costly to travel and scared of how their families would get by as they required significant investment off to recuperate were likely not to take an interest in the program. Accessibility of condoms was likewise seen as reason not to share in VMMC which as indicated by the members expected to comparably avert HIV/AIDs.

Ultimately, the study built up that for the achievement of VMMC to be acknowledged in non-circumcising areas, the proper Communication factors should have been embraced. As much as the broad communications stages are successful, relational Communication factors should be used to enhance. Well known legislators, network and religious seniors were worshipped people that could be used to energize more males particularly those in the more seasoned age sections to take part in VMMC programs. The campaigners additionally expected to utilize techniques, for example, running forceful battles amid Christmas occasions, post-collect, or after the angling season when there were longer occasions and a larger part of the men were accessible.

5.4 Recommendations

Based on the study findings, different suggestions are laid out for different foundations on the cutting edge matters VMMC. The suggestions whenever executed would understand the vision of guaranteeing a greater part of men from non-circumcising networks are circumcised and that circumcision however not their social personality turns into a direction for living guaranteeing its congruity for ages to come. Suggestions are made to the media and practice, government and approach producers, wellbeing experts and future analysts.

5.4.1 Recommendations on Personal Factors

There is need for a change of attitude among the Samia that MC is an alien culture and practicing VMMC, will make them slaves of other people's culture. They should be made to understand that VMMC brings with it a lot of health benefits that make their sex and reproductive lives more enjoyable and satisfying. Further research should be undertaken for a complete understanding of how to overcome cultural barriers and biases that people have.

Health knowledge and behavioral intentions and attitudes should be advocated for. A particular behaviour is most likely to occur if a person has strong intentions to perform it among other factors. If people believe that performing a particular

behaviour is a good thing, then they are more strongly motivated the behaviour than if they believe that performing the behaviour is a bad thing.

5.4.2 Recommendations on Social Factors

The community should also be empowered with what is referred to cultural competence. It is clear that culture does matter in behaviour change. Cultural factors are crucial in the prevention of HIV and AIDS, and more specifically VMMC. Cultural factors shape related beliefs, behaviours and values. Indeed, culture improves adoption of new innovations. Culture is often made synonymous with ethnicity, nationality, and language. It is therefore important that cultural roots of a problem be identified for it to be adequately solved. In VMMC, therefore, cultural traits of a community can hamper its adoption. Other cultures abhor the use of VMMC, as they say; this is an abomination and can bring bad luck, especially the traditionally non-circumcising cultures. Efforts should, therefore, be made that stigmatisation of VMMC is removed and the youth equipped to deal with cultural orientations that hinder it. This cultural competence results to increase VMMC use. There is, therefore, need to increase local competence to control HIV and AIDS through VMMC use by making the youth understand their biological and social knowledge about transmission of the disease to build competence among the youth.

5.4.3 Recommendations on Organizational Factors

There is need to have positive role models in the community. This could involve those who have undergone MC and can share with others the advantages of the undertaking. Organization in the environment of individuals such as the family, clans, peer organizations, religious groups, cultural groups, and HIV and AIDS support groups should have influence in the adoption of behavior and social practices such as the VMMC.

5.4.4 Recommendations on Environmental Factors

The legislature in a joint effort with different partners needs to create arrangements that assistance bolster VMMC programs. Approach Makers can encourage projects,

for example, VMMC to scale up, since the vast majority of the Policy Makers are leaders in Government bodies that aid program arranging and the execution of VMMC in the non-circumcising networks.

A greater part of men for example in the non-circumcising networks fear losing their positions in view of the long mending time frame related with circumcision system. Approaches, for example, those pushing for paid maternity and paternity leaves ought to too be in presence for men in the non-circumcising territories who wish to embrace circumcision. Such paid leaves would urge numerous men to partake in VMMC programs as they would be guaranteed of not losing their positions.

5.4.5 Recommendations on Communication Factors

The media needs to configuration crusade messages for men as well as their companions. The exploration could build up that ladies used a ton of intensity when it came to settling on choices on whether their accomplices got circle the media needs to configuration battle messages for men as well as their companions. The exploration could build up that ladies employed a ton of intensity when it came to settling on choices on whether their accomplices got circumcised or not. Media messages pushing for VMMC have to a great extent concentrated on the essential gathering of people who are men however examine available is demonstrating critical need to join the ladies groups of onlookers in the battle messages if take-up of VMMC is to be fruitful in non-circumcising locales.

The media correspondingly needs to move from mindfulness crusades technique to useful and convincing efforts system to build take-up of VMMC. Men from non-circumcising networks are currently mindful of the VMMC programs yet do not have a more profound comprehension on why they ought to be circumcised. Media is a critical branch in the spread of data on VMMC. Since there is an assortment of data, there is an expansion to an assortment of data on male circumcision. There is have to draw in the media to give the general public the right data about VMMC. Data is control and will be crucial in killing mentalities and convictions that keep men from taking an interest in VMMC programs. Applying influence to a great deal that

comprehends the advantages of being circumcised will at last observe take-up dimensions of VMMC go up among the generally non-circumcising networks.

The exploration additionally suggests that nearby dialect and network radio and TV channels get associated with scattering data about VMMC programs in Busia County. As the maxim goes, .on the off chance that you talk in a man's dialect, that goes to his heart. Using the nearby dialect stations will guarantee that men feel committed to get engaged with a course that won.t just profit them yet their companions also.

5.5 Areas for Further Research

- ✓ Take-up of Voluntary Medical Male Circumcision is influenced by numerous parts. This investigation did not debilitate every one of the parts.
- ✓ Further studies ought to be led. Further research ought to be attempted for a total comprehension of how to conquer social boundaries and inclinations that individuals have towards VMMC.

REFERENCES

- Almalki, S. (2016). Integrating Quantitative and Qualitative Data in Mixed Methods Research—Challenges and Benefits . *Canadian Center of Science and Education* , 288-296.
- Andersson, K., Owens, D., & Paltiel, A. (2011). Scaling up circumcision programs in southern Africa: The potential impact of gender disparities and changes in condom use behaviors on heterosexual HIV transmission. *AIDS and Behavior*, 938-948.
- Anita,G.,Larry,D.,Ann,O.,John,B.,& Zolani,N.(2014). Protective Factors and HIV Risk Behaviour among South African men, in *AIDS and Behaviour*, 18, 1991-1997,
- Auvert, B. Talijarred D, Lagarde E, Sobngwi- Tambekou J, Sitta R, Puren A. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 Trial. *PlosSMed*. 2005; 2005; 2(11): 1112-1122.
- AVAC. (2012). *A call to action on voluntary medical male circumcision- Implementing a key component of combination on HIV prevention*.
- Avert. (2017). *Voluntary medical male circumcision for HIV prevention*. Retrieved July 25, 2018, from www.avert.org: <https://www.avert.org/professionals/hiv-programming/prevention/voluntary-medical-male-circumcision>
- Bailey RC, Moses S, Parker CB, Agot K, Maclean L., Krieger JN, Williams, CF. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomized controlled trial. *Lancet* 2007.
- Bailey R, Muga R, Poulusse R. (2000). Trial intervention introducing male circumcision to reduce HIV/STD infections in Nyanza province, Kenya: Baseline results inter conference Aids 2000, (Abstract No. M. Ora 196).

- Bell, J. (1993). *Doing your Research Project*. London: Open University.
- Bongaarts, J., P. Reining, P. Way and F. Conat 1989. The relationship between male circumcision and HIV infection in African populations. *AIDs* 3:373 – 377.
- Bulled, N., & Green, E. (2015). Making voluntary medical male circumcision a viable HIV prevention strategy in high-prevalence countries by engaging the traditional sector. *Critical Public Health*, 410-426.
- Caldwell, J.C. and P. Caldwell, 1996. The African AIDs epidemic. *Scientific American* 274, 3:40-46.
- Cameroon, D. W, J.N. Simonsen, L.J. D.Costa, (2012) .Female to male transmission of Human Immunodeficiency virus 1. Risk factors for family Health International, (2012)., Male Circumcision for HIV prevention.
- Campbell. Cleland J., Collumbien M., & Southwick K. (1999). *Social Sciences Methods for Research on Reproductive Health*. World Health Organization
- Campbell, C., Nair, Y., & Maimane, S.(2007). .Building contexts that support effective community responses to HIV/AIDS A South African case study, in *American Journal of Community Psychology*,39:347-363
- Chamblis,D. & Schutte,R.(2015).*Making sense of the social world: Methods of investigation*. London: Sage Publications.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches 4th Ed*. London: Sage Publications Ltd.
- Eeuwijk, P. v., & Angehrn, Z. (2017). How to Behaviour a Focus Group Discussion-Methodological Manual. *Swiss Tropical and Public Health Institute/Swiss TPH*, 1-16.
- Evens, E., Lanham, M., Hart, C., Loolpapit, M., Oguma, I., & Obiero, W. (2014). Identifying and Addressing Barriers to Uptake of Voluntary Medical Male

- Circumcision in Nyanza, Kenya among Men 18-35: A Qualitative Study. *PLOS One*.
- FHI360. (2014). *Engaging the Kenyan Media to Inform the Public on Male Circumcision for HIV Prevention*. Nairobi: The Male Circumcision Consortium.
- Frankfort-Nachmias, h.-N., & Nachmias, D. (2008). *Research Methods in the Social Sciences. 7th Edition*. New York: Worth.
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, 18(59), 59-82.
- Hatzold, K., Mavhu, W., Jasi, P., Chatora, K., Cowan, F. M., Taruberekera, N., et al. (2014). Barriers and Motivators to Voluntary Medical Male Circumcision Uptake among Different Age Groups of Men in Zimbabwe: Results from a Mixed Methods Study. *Plos One*, 1-7.
- Hermann-Roloff, A., Otieno, N., Agot, K., Ndinya-Achola, J., & Bailey, R. (2011). Acceptability of medical male circumcision among uncircumcised men in Kenya one year after the launch of the national male circumcision program. *Plos One*, e19814.
- Israel, G. D. (2003). Determining Sample Size. *University of Florida*, 1-5.
- Jackson-Smith, D., Flint, c. G., Dolan, m., Trentelman, c. K., Holyoak, g., Thomas, B., et al. (2016). Effectiveness of the drop-off/pick-up survey methodology in different neighborhood types. *Journal of Rural Social Sciences*, 35-67.
- Kabira, W. M., Gachukia, E. W., & Matiangi, F. (1997). The Effect of Women.s Role on Health: The Paradox. *International Journal of Gynecology and Obstetrics*, 23-34.

- Katisi, M., & Daniel, M. (2015). Safe male circumcision in Botswana: Tension between traditional practices and biomedical marketing. *Global Public Health; An International Journal for Research, Policy and Practice*, 739-756.
- Kibira, S. P., Daniel, M., Atuyambe, L. M., Makumbi, F. E., & Sandøy, I. F. (2017). Exploring drivers for safe male circumcision: Experiences with health education and understanding of partial HIV protection among newly circumcised men in Wakiso, Uganda. *Plos One*, 1-16.
- Kufa, T., Chetty-Makkan, C., Maraisane, M., Charalambous, S., Chihota, V., & Toledo, C. (2016). Delivering PrePex Medical Male Circumcision Services Through a Mobile Clinic: The Experience From a Pilot Project in North West Province, South Africa. *J Acquir Immune Defic Syndr*.
- Lanham, M., L.Engle, K. L., Loolpapit, M., & Oguma, I. O. (2012). Women's Roles in Voluntary Medical Male Circumcision in Nyanza Province, Kenya. *PLOS One*.
- Lewis-Beck, M. S., Bryman, A., & Liao, T. F. (2004). Sampling Frame. *Sage*.
- Lissouba, P., Taljaard, D., Dermaux-Msimang, V., Legeai, C., Lewis, D., Singh, B., et al. (2011). Adult male circumcision as an intervention against HIV: An operational study of uptake in a South African Community. *BMC Infectious Diseases*, 253.
- malecircumcision.org. (2017). *VMMC Behavioral Framework: Lessons from Quantitative and Qualitative Market Research*. malecircumcision.org.
- Mapingure, M., Tapera, O., Munjoma, M., Mutedzi, B., Dhodho, E., Hatzold, K., et al. (2016). Reaching the higher hanging fruits: Tracking VMMC uptake and Behavioral Determinant: Results from Multi-Year National Cross Sectional Surveys in Zimbabwe. *PSI*.
- Masese, R. J., Chimango, J. L., & Mbirimtengerenji, N. D. (2017). Overcoming barriers to uptake of voluntary medical male circumcision in a traditionally

- circumcising community in Machinga District, Malawi . *World Journal of AIDS*, 40-58.
- Mattson, C., Bailey, R., Muga, R., Poulussen, R., & Onyango, T. (2005). Acceptability of male circumcision and predictors of circumcision preference among men and women in Nyanza Province, Kenya. *AIDS Care*, 182-194.
- Mbonye, M., Kuteesa, M., Seeley, J., Levin, J., Weiss, H., & Kamali, A. (2016). Voluntary Medical Male Circumcision for HIV prevention in Fishing Communities in Uganda: The Influence of Local Beliefs and Practice. *African Journal of AIDS Research*, 211-218.
- MoH. (2015). *National Voluntary Male Medical Circumcision Strategy 2014/15-2018/19*. Nairobi: National AIDS and STI Control Program (NASCO).
- MoH. (2016). *Kenya HIV Estimates 2015*. Nairobi: NASCO.
- Mojola, S. (2011). Fishing in dangerous waters: Ecology, Gender and Economy in HIV risk. *Social Science and Medicine*, 149-156.
- MPHS-Kenya. (2009). *Kenya National Health Strategy for Voluntary Medical Male Circumcision*. Nairobi: Ministry of Public Health and Sanitation-Kenya.
- Muhangi, D. (2010). *Factors that influence decisions to seek medical male circumcision services*. USAID/JHU Associate Cooperative Agreement no. 617-A-00-07.0005-00.
- Muzyka, C. N., Thompson, L. H., Bombak, A. E., Driedger, S. M., & Lorway, R. (2012). A Kenyan newspaper analysis of the limitations of voluntary medical male circumcision and the importance of sustained condom use. *BMC Public Health*.
- Nachmias, C. F., & Nachmias, D. (2006). *Research Methods in the Social Sciences* (6th ed.). New York: Worth Publishers.

- NASCOP. (2014). *Kenya AIDS Indicator Survey 2012: Final Report*. Nairobi: National AIDS and STI Control Programme.
- Nyaga, E. M. (2015). *Factors associated with uptake of voluntary medical male circumcision among men aged 18-50 years in kibera sub-county, nairobi county*. Nairobi: Unpublished Thesis.
- Osaki, H., Mshana, G., Wambura, M., Grund, J., Neke, N., Kuringe, E., et al. (2015). *If You Are Not Circumcised, I Cannot Say Yes.: The Role of Women in Promoting the Uptake of Voluntary Medical Male Circumcision in Tanzania*. Plos One.
- Prot, S., Anderson, C. A., Gentile, D. A., Warburton, W., Saleem, M., Groves, C. L., et al. (2015). Media as agents of socialization. *J.E.Grusec and P. D. Hastings (Eds.), Handbook of Socialization (second edition)*, 276-300.
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, 21-33.
- Semeere, A. S., Bbaale, D. S., Kigozi, J., & Coutiho, A. G. (2016). Innovative Demand Creation for Voluntary Medical Male Circumcision Targeting a High Impact Male Population: A Pilot Study Engaging Pregnant Women at Antenatal Clinics in Kampala, Uganda. *Journal of Acquired Immune Deficiency Syndrome*, 278-284.
- Singh, A. S., & Masuku, M. B. (2014, October 15). Sampling Techniques and Determination of Sample Size in Applied Statistics Research: An Overview. *International Journal of Economics, Commerce and Management*, 2(11), 1-22.
- Tobian, A. A., Adam, T., J. B., Kiggundu, V., Yazdi, Y., & Njeuhmeli, E. (2015). *Voluntary medical male circumcision in resource constrained settings*. Macmillan Publishers Limited.

Wimmer, R. D., & Dominick, J. R. (2006). *Mass Media Research: An Introduction 8th Edition*. Wadsworth Cengage Learning.

World-Health-Organisation. (2013). *Progress in scaling up voluntary medical male circumcision for HIV prevention in East and Southern Africa January-December 2012*. Brazaville: World-Health-Organisation.

Wouabe, E. D. (2013). *Scoping Report on Interventions for Increasing the Demand for Voluntary Medical Male Circumcision*. International Initiative for Impact Evaluation.

APPENDICES

Appendix I: Letter of Introduction

Dan Macho Okumu

Jomo Kenyatta University of Agriculture and Technology

Department of Media Technology and Applied Communication

P O Box 62000 – 00200, NAIROBI

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: COLLECTION OF RESEARCH DATA

I am a post graduate student at Jomo Kenyatta University of Agriculture and Technology, School of Communication and Development Studies, Department of Media Technology and Applied Communication pursuing a Doctor of Philosophy degree in Mass Communication. Undertaking a research study is required for award of the doctorate degree.

I am carrying out a research entitled *.Social and Behavior Change Communication factors Affecting the Uptake of Voluntary Medical Male Circumcision (VMMC) among the Traditionally Non-Circumcising in Kenya..* My target audience is males aged 20-49 years.

I kindly request you to allow me collect data from the male students in your institution by filling out the attached questionnaire. The information provided will be used exclusively for academic purposes and will be treated with total confidentiality.

Your assistance will be highly appreciated.

Dan Macho Okumu

danmachio@yahoo.com

Appendix II: Questionnaire

Part 1: Demographic Information

1. What is your age bracket? (Tick appropriately)

20-30 years 30-40 years 40-49 years

2. What is your marital status? (Tick appropriately)

| | |
|--------------------|--------------------------|
| Single | <input type="checkbox"/> |
| Married | <input type="checkbox"/> |
| Divorced/Separated | <input type="checkbox"/> |
| Widowed | <input type="checkbox"/> |

3. What is your highest level of education?(Tick appropriately)

| | |
|-------------|--------------------------|
| None | <input type="checkbox"/> |
| Craft | <input type="checkbox"/> |
| Artisan | <input type="checkbox"/> |
| Certificate | <input type="checkbox"/> |
| Diploma | <input type="checkbox"/> |

4. Have you undertaken voluntary medical male circumcision? (Tick appropriately)

| | |
|-----|--------------------------|
| Yes | <input type="checkbox"/> |
| No | <input type="checkbox"/> |

- a) If yes, would you recommend others to undertake it too?

| | |
|-----|--------------------------|
| Yes | <input type="checkbox"/> |
| No | <input type="checkbox"/> |

- b) If no, why haven.t you undertaken it? (tick all that apply)

| | |
|--------------------------------|--------------------------|
| Services not readily available | <input type="checkbox"/> |
| Don.t see the need to | <input type="checkbox"/> |
| Afraid of the procedure | <input type="checkbox"/> |
| My family/wife disapproves | <input type="checkbox"/> |

Part 2: Personal Factors and Uptake of Voluntary Medical Male Circumcision

| | | SA | A | N | D | SD |
|----|---|----|---|---|---|----|
| 1 | I believe that if one practices safe sex they don.t need to undertake voluntary medical male circumcison | | | | | |
| 2 | I believe that if one practices unsafe sex they need to undertake voluntary medical male circumcison | | | | | |
| 3 | I believe that if in a monogamous relationship there is no need to undertake voluntary medical male circumcison | | | | | |
| 4 | I believe that if one is in a polygamous relationship they need to undertake voluntary medical male circumcison | | | | | |
| 5 | I believe that sexual performance is affected if one undertakes voluntary medical male circumcison | | | | | |
| 6 | I believe that those already infected with HIV/AIDs don.t require to undertake voluntary medical male circumcison | | | | | |
| 7 | I believe that those who are HIV free should undertake voluntary medical male circumcison | | | | | |
| 8 | I believe that undertaking voluntary medical male circumcison improves hygiene | | | | | |
| 9 | I believe that male partners who undertake male circumcison help reduce their partners chance of getting cervical cancer | | | | | |
| 10 | I believe that the fear of partner infidelity during the 6 week healing period affects uptake of medical male circumcison | | | | | |

Part 3: Social Factors and Uptake of Voluntary Medical Male Circumcision

| | | SA | A | N | D | SD |
|---|---|----|---|---|---|----|
| 1 | Since our culture doesn't uphold male circumcision then undertaking voluntary medical male circumcision isn't a priority | | | | | |
| 2 | Male circumcision is an abomination that can bring bad luck therefore voluntary medical male circumcision shouldn't be upheld | | | | | |
| 3 | Male circumcision reduces sexual pleasure therefore I'm reluctant in undertaking voluntary medical male circumcision | | | | | |
| 4 | Healing period after male circumcision takes too long so I'm hesitant to undertake voluntary medical male circumcision | | | | | |
| 5 | Circumcision procedure is not appropriate for older which affects uptake male circumcision | | | | | |
| 6 | There is shame in seeking circumcision services alongside much younger males which affects uptake of male circumcision | | | | | |

Part 4: Organizational Factors and Uptake of Voluntary Medical Male Circumcision

| | | SA | A | N | D | SD |
|---|---|----|---|---|---|----|
| 1 | My spouse doesn't support male circumcision so I wouldn't undertake voluntary medical male circumcision | | | | | |
| 2 | My spouse supports male circumcision so I would undertake voluntary medical male circumcision | | | | | |
| 3 | Though my family doesn't support male circumcision I would participate in voluntary medical male circumcision | | | | | |

| | | | | | | |
|---|---|--|--|--|--|--|
| 4 | My church doesn.t support male circumcision therefore I wouldn.t participate in voluntary medical male circumcision | | | | | |
| 5 | Having undergone male circumcision I would encourage my other family members and friends to undertake voluntary medical male circumcision | | | | | |
| 6 | My clan disapproves male circumcision I wouldn.t therefore undertake voluntary medical male circumcision | | | | | |
| 7 | To avoid discrimination in the learning institutions I undertook voluntary medical male circumcision | | | | | |
| 8 | Implementation of programs ensuring employers support employees who undergo circumcision and provide time off work will promote voluntary medical male circumcision | | | | | |

Part 5: Environmental Factors and Uptake of Voluntary Medical Male Circumcision

| | | SA | A | N | D | SD |
|---|---|----|---|---|---|----|
| 1 | Since no law requires one to undertake voluntary medical male circumcision it is not a must | | | | | |
| 2 | Voluntary medical male circumcision is a non-issue there are more important issues such as poverty eradication in the society | | | | | |
| 3 | Condoms are nowadays readily available thus there is no need for voluntary medical male circumcision | | | | | |
| 4 | The medical centers charge for circumcision services therefore I wouldn.t undertake voluntary medical male circumcision | | | | | |
| 5 | The medical centers lack privacy therefore I wouldn.t undertake voluntary medical male circumcision | | | | | |
| 6 | The medical centers are located far off making access to voluntary medical male circumcision services difficult | | | | | |
| 7 | The voluntary medical male circumcision services are | | | | | |

| | | | | | | |
|--|--|--|--|--|--|--|
| | readily available which has encouraged many males to get circumcised | | | | | |
|--|--|--|--|--|--|--|

Part 6: Communication factors and Uptake of Voluntary Medical Male Circumcision

| | | SA | A | N | D | SD |
|---|--|----|---|---|---|----|
| 1 | Media campaigns on voluntary medical male circumcision have helped increase its uptake | | | | | |
| 2 | Appeals by popular politicians have pushed many males to undertake voluntary medical male circumcision | | | | | |
| 3 | The clan elders have been useful in changing attitudes on male circumcision and influenced many to undertake voluntary medical male circumcision | | | | | |
| 4 | The religious leaders have been useful in changing attitudes on male circumcision and influenced many to undertake voluntary medical male circumcision | | | | | |
| 5 | Plans for campaigns for older males during Christmas holidays, post-harvest, or after the fishing season end to prevent loss of income will enhance voluntary medical male circumcision. | | | | | |

Part 7: Uptake of Voluntary Medical Male Circumcision

| | | SA | A | N | D | SD |
|---|--|-----------|----------|----------|----------|-----------|
| 1 | It is important to undertake voluntary medical male circumcision | | | | | |
| 2 | I would recommend to any male to undertake voluntary medical male circumcision | | | | | |
| 3 | My family/relatives have undertaken voluntary medical male circumcision | | | | | |
| 4 | When of age my sons will have to undertake voluntary medical male circumcision | | | | | |

Appendix III: Focus Group Discussion Guide

Introduction

- Respondents introduce themselves (Name, Marital Status, Age)
- Brief information on why they are in the discussion group and basically make them feel at ease
- Assure them information used at the discussion group will not be used against them and elsewhere
- Inform them discussions will be recorded and pictures taken but will not be used against them
- Lay down rules on the do's and don'ts (no shouting at one another, no laughing at another's ideas and no interrupting one another or name calling)

Personal Factors and Uptake of Voluntary Medical Male Circumcision

- a) If you practice safe sex, is it necessary to undertake VMMC? Please elaborate
- b) Does VMMC enhance hygiene or is it overrated?
- c) Do you think those in monogamous relationships need to participate in VMMC programs?

Social Factors and Uptake of Voluntary Medical Male Circumcision

- a) Is it shameful for an older man to be circumcised along a younger man? If yes, why so?
- b) Is the healing period/abstinence period a deterrent to uptake of VMMC?
- c) Out of experience, does VMMC enhance or reduce sexual pleasure?

Organizational Factors and Uptake of Voluntary Medical Male Circumcision

- a) Are family members important in influencing the uptake of VMMC? Has a family member ever motivated you or someone you know to undertake VMMC?
- b) Would you mind if your spouse brought up the topic of VMMC? Do you think women should be involved in VMMC matters?

Environmental Factors and Uptake of Voluntary Medical Male Circumcision

- a) Are the medical centers easily accessible for VMMC services?
- b) Is the privacy accorded for those undertaking VMMC services sufficient in your opinion?
- c) Are condoms readily available in this region? Do their availability or lack affect VMMC uptake in your opinion?
- d) Do you think VMMC is important? Are there other priority areas in this region you think they should be given more coverage than VMMC?

Communication factors and Uptake of Voluntary Medical Male Circumcision

- a) Have you heard any VMMC campaigns on media? Which radio or television station?
- b) Can you name any politician that you've heard pushing for VMMC campaigns?
- c) Are the clan elders in your region involved in VMMC campaigns?
- d) Do your religious leaders support the VMMC campaigns?

Appendix IV: Interview Schedule

Personal Factors and Uptake of Voluntary Medical Male Circumcision

What are some of the personal attitudes that are affecting uptake of VMMC in this region?

What are some of the measures being undertaken to wan off deterrent personal attitudes and beliefs?

Social Factors and Uptake of Voluntary Medical Male Circumcision

Are there any cultural factors that you can elucidate on that are affecting uptake of VMMC in this region?

Are there any specific measures you apply to counter cultural beliefs that are known to negatively affect uptake of VMMC?

Organizational Factors and Uptake of Voluntary Medical Male Circumcision

How do you reach out to secondary audiences so as to ensure that they don.t act as a deterrent to the uptake of VMMC?

Are there programs that are specifically targeting spouses or rather women in general so as to encourage more men to participate in VMMC programs?

Environmental Factors and Uptake of Voluntary Medical Male Circumcision

Are there mobile medical centers to ease access for VMMC services in this region?

What are the measures taken to accord privacy those undertaking VMMC services?

Are condoms readily available in this region? Do their availability or lack affect VMMC uptake in your opinion?

Communication factors and Uptake of Voluntary Medical Male Circumcision

- e) Who designs which messages get on air? Are the locals involved in the messages? Any use of testimonials to encourage the non-circumcised ones to partake in VMMC?
- f) Are there any politicians who are actively involved in pushing for VMMC campaigns? Are they paid to endorse the messages?
- g) Are the clan elders in this region involved in VMMC campaigns? How do you ensure their support?
- h) How do you get religious leaders to endorse the VMMC campaigns?

Appendix V: University Research Authority



**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
DIRECTOR, BOARD OF POSTGRADUATE STUDIES**

P.O. BOX 62000
NAIROBI – 00200
KENYA
Email: director@bps.jkuat.ac.ke

TEL: 254-067-52711/52181-4
FAX: 254-067-52164/52030

REF: JKU/2/11/HD421-C002-0422/2012

9TH NOVEMBER, 2017

OKUMU DAN MACHO
C/o SCDS
JKUAT

Dear Mr. Okumu,

RE: APPROVAL OF Ph.D. RESEARCH PROPOSAL AND OF SUPERVISORS

Kindly note that your Ph.D. research proposal entitled: **“SOCIAL AND BEHAVIOUR CHANGE COMMUNICATION FACTORS AFFECTING THE UPTAKE OF VOLUNTARY MEDICAL MALE CIRCUMCISION (VMMC) AMONG THE TRADITIONALLY NON-CIRCUMCISING IN KENYA.”** has been approved. The following are your approved supervisors:-

1. Prof. Hellen Mberia
2. Dr. Idah Muchunku

PROF. MATHEW KINYANJUI
DIRECTOR, BOARD OF POSTGRADUATE STUDIES

Copy to: Dean, SCDS
/cm



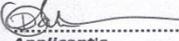
JKUAT is ISO 9001:2008 certified
Setting Trends in Higher Education, Research and Innovation

Appendix VI: NACOSTI Permit

THIS IS TO CERTIFY THAT:
MR. DAN MACHO OKUMU
of **JOMO KENYATTA UNIVERSITY OF**
AGRICULTURE AND TECHNOLOGY, 0-621
NAIROBI, has been permitted to conduct
research in **Busia County**

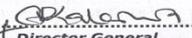
on the topic: SOCIAL AND BEHAVIOR
CHANGE COMMUNICATION FACTORS
AFFECTING THE UP TAKE OF
VOLUNTARY MEDICAL MALE
CIRCUMCISION (VMMC) AMONG THE
TRADITIONALLY NON-CIRCUMCISING IN
KENYA

for the period ending:
30th October, 2018


.....
Applicant's
Signature

Permit No : NACOSTI/P/17/75686/19701
Date Of Issue : 30th October, 2017
Fee Recieved : Ksh 2000




.....
Director General
National Commission for Science,
Technology & Innovation

Appendix VII: Data Collection Authority



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone: 020 400 7000,
0713 788787,0735404245
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/17/75686/19701** Date: **30th October, 2017**

Dan Macho Okumu
Jomo Kenyatta University of
Agriculture and Technology
P.O. Box 62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “*Social and behavior change communication factors affecting the uptake of Voluntary Medical Male Circumcision (VMMC) among the traditionally Non-circumcising in Kenya*” I am pleased to inform you that you have been authorized to undertake research in **Busia County** for the period ending **30th October, 2018**.

You are advised to report to **the County Commissioner and the County Director of Education, Busia 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
Busia County.

Kenya Science, Technology and Innovation is ISO9001:2008 Certified