

**AN ASSESSMENT OF THE IMPACT OF VOLUNTARY MEDICAL MALE  
CIRCUMCISION CAMPAIGN ON CURBING THE SPREAD OF HIV AND AIDS: A  
CASE STUDY OF KARATENG' LOCATION IN KISUMU COUNTY**

**BY**

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## DECLARATION

This research project is my original work and has not been submitted for any award of degree in any university.

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This research project has been submitted for examination with my approval as the University Supervisor.

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## **DEDICATION**

I dedicate this project to my loving mother Florence Ong'ayo Kibira, Rosemary Oboka, Rose Odhiambo and Judith Alembi for believing and supporting my desire to grow and develop in my scholarly endeavours. I also dedicate it to my loving uncles, Professor Aloo Mojola, Willis Kibira and Philip Ochoro for their tireless efforts to ensure that my dreams remained valid. Sister Dorcas Ramogi, this will never have been a reality without your moral and financial support and your sacrifice to give me a chance in life. Diana, Beatrice, Jacqueline, Joyce, Edna, Leonard, Wanga, Ainea, Gilland, Patrick, Martin, Stanley, Jack, I owe you a lot. My departed loving brothers, David Osanya and Tom Kadenge; your memories will live forever. A special thanks to my best friends Nils, Karen, Christine, Chess, Kerich, Amani, Grace, James, Argwings, Steve, Monica, Ibrahim, Rajab, Matieku, Mwere, Paul, Alex, Madrid, Kituto, "Mathe", Mwangoo, J. Gichia, Gabriel and many others who encouraged and supported this noble cause. May the Almighty God richly bless you.

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## LIST OF ABBREVIATIONS

AIDS	Acquired Immuno Deficiency Syndrome
CDC	Centers for Disease Control
FGD	Focus Group Discussion
GOK	Government of Kenya
HIV	Human Immuno Virus
HPV	Human Papiloma Virus
KAIS	Kenya Aids Indicator Survey
KDHS	Kenya Demographic and Health Survey
KNBS	Kenya National Bureau of Statistics
MOH	Ministry of Health
NACC	National Aids Control Council
NASCOP	National Aids and STI Control Programme
PEPFAR	Presidential Emergency Plan for Aids Relief
RCT	Randomised Controlled Trial
UNAIDS	United Nations Aids
USA	United States of America
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organisation

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## **ABSTRACT**

This study assessed the impact of voluntary medical male circumcision on curbing the spread of HIV and AIDS. The study had five objectives. It used descriptive research design and purposive sampling, where participants, opinion leaders and health workers were targeted for data collection. It used qualitative data collection technique, where interview guides and schedules were applied to collect data from Focus Group Discussions and key informants. Thematic data analysis was used and presentation done using narrative approach. The findings indicate that despite people, especially the young, embracing circumcision, the practice has not changed behaviour patterns, as people continue to engage in risky sexual encounters that expose them to HIV. The study also found out that most people who underwent the cut were influenced by peers and opinion leaders, with majority saying careless sexual behaviours among the circumcised had increased. It also established that communication on reasons for circumcision was not well stipulated; a shortfall that has kept away the older population, as the already circumcised believe transmission was due to the foreskin, hence removal thereby meant lowering risk. The study recommends enhancing communication campaigns to reach the public and to clarify what it can achieve and what cannot be guaranteed. The study also recommends the 60 percent prevention success be accompanied by a rider message that if circumcised population adheres to other interventions such as condom use, being faithful and testing. It also recommends the health sector injects more resources that will enhance the campaign, while circumcising more young male population, who will then cascade benefits to older population. This way, all males who go for circumcision will be informed on its benefits.

# CHAPTER ONE

## INTRODUCTION

### **1.0 Background of the Study**

In a bid to address the longest health burden that has bedevilled Kenya since independence, the country, like many other states that have recorded a high prevalence of HIV and AIDS, is rapidly reaching a point where incremental improvements will become harder as most interventions have been explored [Bukonya, 2013]. According to the Kenya National AIDS and STI Control program (NASCOP), Kenya is home to one of the world's harshest HIV and AIDS epidemics with an estimated 1.6 million people living with the virus, 1.1 million children having been orphaned by AIDS, while in 2011 62,000 people reported as having died from AIDS-related illnesses [NASCOP, 2012].

NASCOP under the Ministry of Health (MoH) disseminated preliminary results of the Kenya AIDS Indicator Survey (KAIS) 2012 in September 2013, which showed a significant reduction of the national prevalence from 7.2percent to 5.6percent [KAIS, 2013]. Determined to further lower the overall prevalence, Kenya has continued to strengthen traditional interventions that include voluntary counselling and testing services [VCT], prevention of mother to child transmissions [PMCTs], advocacy for abstinence, being faithful and condom use [ABCs of AIDS] as well as enhanced educational campaigns and awareness initiatives [NACC, 2012].

In line with global goals such as the sixth Millennium Development Goal to halt and reverse the spread of HIV and AIDS, and the World Health Organisation [WHO] Global Health Sector Strategy on HIV/AIDS, a five-year joint strategic action framework to accelerate the scale-up of Voluntary Medical Male Circumcision [VMMC] for HIV prevention in Eastern and Southern Africa 2012-2016 was developed by WHO and United Nations AIDS [UNAIDS], in collaboration with the United States of America [USA] President's Emergency Plan for AIDS Relief (PEPFAR), the Bill and Melinda Gates Foundation and the World Bank, in consultation with specific national ministries of Health [WHO, 2007].

As an intervention to curb the spread of HIV and AIDS in Kenya, VMMC was introduced, especially in predominantly non-circumcising regions such as Luo Nyanza and the Turkana region in northern Kenya. VMMC was also expected to stop traditional bush circumcision, which is being practiced in a section of Nyanza and Western Provinces, as it is deemed unhygienic and unsafe, with cases of some victims being chopped off their organs and genitalia [NASCOP, 2007].

In light of substantial evidence showing that male circumcision significantly reduces a man's risk of acquiring HIV during heterosexual intercourse, NASCOP developed a policy on male circumcision. The policy was aimed at reducing the number of new HIV infections with the goal of creating an AIDS free generation. According to the programme, 150,000 male circumcisions were expected to be undertaken per year for five years in order for Kenya to reach its target [NASCOP, 2007].

In 2007, the national prevalence of HIV in Kenya was 7.1percent among persons aged 15–64 years, with provincial prevalence rates ranging from 0.8percent in North Eastern Province to 14.9percent in Nyanza Province. Although an estimated 85.0 percent of males in Kenya are circumcised, nearly half of all uncircumcised men live in Nyanza Province, where circumcision prevalence is only 48.2percent [NASCOP et al, 2007]. Kenya's Ministry of Health [MoH] prioritized the implementation of VMMC services by targeting areas with low prevalence of male circumcision and high HIV prevalence [NASCOP et al, 2007].

Members of the Luo community constitute approximately 70 percent of Kenya's traditionally non-circumcising ethnic communities. Other non-circumcising ethnic communities include the Turkana, Teso, and segments among the Luhya and Pokot ethnic groups. Together, these communities constitute approximately 15percent of Kenya's population [NASCOP, 2007].

Approximately half (52.9percent) of the uncircumcised males reside in Nyanza Province, with most of the remainder residing in Rift Valley, Nairobi, and Western provinces. In total, 73percent of the estimated 1.4 million HIV-infected persons in Kenya hail from the same four provinces. The highest HIV prevalence rates among uncircumcised males aged 15–64 years are in Nairobi (20.2percent), Nyanza (17.3percent), Rift Valley (7.0 percent), and Western Province (6.8percent) [Mwandi et al, 2007]. These areas were selected as priority regions for implementation of VMMC to achieve 80 percent coverage

(860,000 circumcisions) by July 2013 to reduce HIV transmission in Kenya [KNBS et al, 2008].

Kenya's Prime Minister, Honourable Raila Odinga launched the VMMC for HIV prevention programme in 2008 following intense public consultations among various stakeholders, including youths, religious leaders, women's groups, professionals, and the Luo Council of Elders [CDC, 2012]. WHO and UNAIDS issued recommendations on VMMC as an additional HIV prevention strategy based on strong and consistent scientific evidence. Three randomised controlled trials undertaken in Kisumu, Kenya, Rakai District, Uganda, and Orange Farm, South Africa have shown that medical male circumcision reduces the risk of sexual transmission of HIV from women to men by approximately 60 percent [WHO et al, 2007].

The report says that a one-time intervention, medical male circumcision provides men life-long partial protection against HIV as well as other sexually transmitted infections. It should always be considered as part of a comprehensive HIV prevention package of services and be used in conjunction with other methods of prevention, such as female and male condoms [WHO et al, 2007].

The most recent data from Uganda shows that in the five years since the Uganda trial was completed; high effectiveness has been maintained among the men who were circumcised, with a 73percent protective effect against HIV infection [WHO et al, 2007].

This study notes that political and sports stories are given more prominence in media compared to human interest ones, which occupy inside, middle pages. Rarely do health stories get published on front pages, or be broadcast as lead items, unless in the event of a standoff involving the health workforce or whenever there is a calamity that overwhelms healthcare facilities, leading to a challenge in the provision of services. In rare circumstances, health stories, such as VMMC, Ebola or polio outbreaks may feature prominently whenever a national or international crisis occurs.

### **1.1 Problem statement**

Although Kenya has seen a dramatic reduction in HIV prevalence figures since 2000, the country is still facing a severe AIDS epidemic. While the changes and improvements are significant, HIV is still a huge threat in the country and Kenya remains among the most HIV-burdened countries in the world. With the rates of circumcision increasing from 10,000 to 90,000 in just over a year during 2009 and the statistics rising higher the following year to an estimated 139,905, falling just below the annual target, cases of HIV and AIDS are still rampant in areas where VMMC was introduced. This is despite increasing circumcision among older, sexually active men who were identified as critical if HIV infection was to be reduced among this age group [KAIS, 2013].

Although VMMC was successfully rolled out, the initiative still faces challenges that range from incomplete communication on its benefits to lack of strengthened advocacy and innovative approaches to service delivery. Supply chain logistics and a limitation of

human resource still pose a challenge, with the earlier strong demand for services having reduced [Muthivhl, 2011].

Kenya's HIV epidemic has been categorised as generalised. This means that HIV and AIDS affect all sectors of the population, with the prevalence differing according to location, gender, cultural practices and age. Nearly half of all new infections in 2008 were transmitted during heterosexual sex while in a relationship and 20 percent during casual heterosexual sex [KAIS, 2013].

Despite the noble goal behind VMMC campaign, the practice has been marred with confusion, and in some instances, failed to meet its desired results. Some males who undertook the cut continue to engage in unprotected sexual behaviours with the belief that they are safe after circumcision. They continue to have sex with multiple partners and practice wife inheritance; customs that are traditionally associated with the spread of HIV and AIDS, leading to high prevalence rates [Muthivhl, 2011].

Preliminary results from the Kenya Demographic and Health Survey [KDHS, 2009] revealed that of respondents who in the last 12 months had sex with two or more partners, only 32percent of women and 37percent of men reported using a condom. However, UNAIDS says that the challenges faced in scaling-up VMMC are greatly outweighed by the benefits of its impact on the HIV epidemic.

Despite tremendous progress in HIV prevention, for every one person started on Anti Retroviral Therapy [ART] today in sub-Saharan Africa, there are still two to three more who become newly infected with HIV and AIDS [UNAIDS, 2012].

This means that the message has not been adequately disseminated, as the behaviours have not changed to reverse the high HIV transmission rate in the region. According to KAIS,2013 report, Nyanza region still leads in the incidence, at 15.1percent, against the national 5.6percentprevalence rate; a figure that is almost triple that of the overall national incidence.

Political prioritisation for planning and implementing VMMC programmes has been challenging. Though mathematical models project that millions of new HIV infections may be prevented by male circumcision and billions of dollars may be saved in HIV care and treatment costs, these benefits accrue over a generation's time. Njeuhmeli et al [2011] says that other health care needs range from low funding, poor infrastructure, unrest and inadequate skilled personnel, illiteracy, ignorance and poverty, which are more immediate and tangible, and dedicating scarce resources -human and material- to an elective medical procedure may be unpopular.

Auvert et al, 2001 says that although ecological and observational data indicate a causal relationship between circumcision and reduced HIV incidence, doubts remain due to potential confounding by unknown or inadequately measured factors including sexual behaviours, cultural practices, religion, and hygiene. Media campaigns have not been



sufficient in sensitising and educating the public on the reasons for VMMC; its importance, what it can achieve and what it cannot guarantee. Although there has been a significant reduction in cases of HIV/AIDS nationally, the disease is still rated as a major killer, and continues to affect the mainstream society.

Although VMMC is one of the behaviour change initiatives that was rolled out to further reduce the HIV and AIDS prevalence rate and prevent its transmission among men up to 60 percent, there exist numerous gaps that have affected the actualisation of the results, with the main target region Nyanza still leading in the prevalence rate [KAIS, 2013].

## **1.2 Objectives**

### **1.2.1 Overall Objective**

The overall objective of this study was to assess the impact of voluntary medical male circumcision in reducing HIV and AIDS pandemic in Karateng' Location in Kisumu County.

### **1.2.2 Specific Objectives**

- i. To establish the role of communication on influencing VMMC as an intervention on behaviour change and reduction of HIV and AIDS prevalence.
- ii. To find out the knowledge level on the impact of VMMC towards the reduction of HIV and AIDS.
- iii. To identify the communication interventions in the VMMC programme that affect appropriate uptake of circumcision services.
- iv. To identify the communication interventions that can be applied in the VMMC

programme to make it more effective.

### **1.3 Research questions**

- i. Have the various communication channels enabled the public to understand the role of VMMC?
- ii. Does VMMC intervention contribute to a reduction in the prevalence of HIV and AIDS?
- iii. What other factors that are not addressed by VMMC programme contribute to high HIV and AIDS prevalence?
- iv. Are there other appropriate interventions that can be communicated in line with VMMC to address HIV and AIDS prevalence?
- v. Can varied communication messages be integrated with VMMC campaign and result in the reduction of HIV and AIDS prevalence?

### **1.4 Significance of the study**

HIV and AIDS continue to affect the economic and development objectives of the Kenyan people who have endured huge losses from the disease for over 30 years since the first case was reported. To address the problem, the government of Kenya facilitated the development of the Kenya National HIV/AIDS Strategic Plan, the National Health Sector Strategic Plan II and other strategic documents in 2005, which were jointly agreed upon by stakeholders within government, civil society, the private sector and development partners.

The documents formed a basis for the scaling up of HIV prevention, care and treatment and the strengthening of health care delivery in a bid to further reduce the national prevalence rate [Auvert et al, 2005]. Although traditionally media plays a key role of communicating, informing and educating the public on various subjects, the noble goal behind VMMC has not been adequately disseminated especially to the target community; a situation that continues to reverse its gains. From a health perspective, media is supposed to inform public on other ailments such as measles, cancer, malaria, tuberculosis, polio, waterborne diseases and environmental health. It is also tasked with the responsibility of educating the public on the new challenges affecting the society, with the view of spearheading behaviour change.

Media must also communicate the health structure under the devolved system, from national government to counties. The information is supposed to enable the public make choices, with regard to where and when to seek for medical advice and treatment in line with the devolved structure. Media must therefore play a key role of ensuring that it highlights and communicate the importance of behaviour change in regard to attitudes, traditions and norms, by spelling out risks and benefits accrued to embracing change. This must be disseminated through various channels to reach out to a wide heterogeneous public.

Ndati [2013] says understanding the way perception of HIV risk is shaped and constructed is crucial in understanding why it has been so difficult to mitigate the spread of HIV and AIDS. The association between HIV infection and the perception of risk in

different regions of the world has emphasised the need to re-evaluate the public health measures being implemented to control the spread of HIV and AIDS, particularly among the youth who are mostly at risk.

Based on this, the study investigated the extent to which media has contributed to behaviour change through dissemination of education and information regarding VMMC. It sought to highlight the gaps that have been occasioned by low prioritisation of VMMC as a crucial public health concern in media reporting. Specifically, the study sought to establish if critical issues regarding VMMC from national to the local level had been understood and appreciated by the public, courtesy of media dissemination. It suggested possible solutions that if implemented, would improve and contribute towards knowledge on VMMC through media reporting.

### **1.5 Limitations of the study**

While male circumcision is practiced in over 70 percent of communities in Kenya for among other reasons, as a rite of passage, the practice is against the cultural beliefs and practices of the Luo community that removes the six lower teeth. Although VMMC campaigns have been rolled out to reduce the rate of HIV infections among non-circumcising communities, it takes time to change the attitudes, perceptions and beliefs of a given population. The researcher faced a challenge of accessing information from the population that traditionally does not practice male circumcision.

VMMC being an additional intervention towards curbing the high rate of HIV transmission, information on rolling out of the programme and statistics of achieved targets was available. However, given that the campaign was still ongoing, accessing information on its impact towards reducing the spread of HIV and AIDS posed a challenge.

The researcher collected data of the study from Kisumu County in Western Kenya; this posed a challenge to the researcher in logistical costs and time. Language barrier between the researcher and participants was also a challenge.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

HIV and AIDS continues to affect the mainstream society, with sub-Saharan Africa recording high prevalence rates, a move that compelled WHO and specific country Ministries of Health to device appropriate means of containing the scourge. In Kenya, various interventions have seen the prevalence reduce from highs of 7.2percent among adults aged 15-64 years nationally to the current 5.6percent, and among children aged 18 months to 14 years at 0.9percent [KAIS, 2013].

Although most regions have shown decreased prevalence, the disease continues to record high prevalence rate in some regions more than others. According to KAIS [2013] report, the prevalence is highest in the Nyanza region at 15.1percent and lowest in the North Eastern region at 0.9percent.

Although an estimated 85.0 percent of males in Kenya are circumcised, nearly half of all uncircumcised men live in Nyanza Province, where circumcision prevalence is only 48.2percent; a move that informed Kenya's Ministry of Health (MoH) to prioritise the implementation of VMMC services by targeting areas with low prevalence of male circumcision and high HIV prevalence [NAS COP, 2008].

WHO [2012] defines male circumcision as the surgical removal of the foreskin - the retractable fold of tissue that covers the head of the penis. The inner aspect of the foreskin is highly susceptible to HIV infections. Trained health professionals can safely remove the foreskin of infants, adolescents and adults (medical male circumcision).

## **2.1 Male Circumcision: Situation in Kenya**

Male circumcision is practiced by most communities in Kenya as a religious practice and as a rite of passage. According to data from KDHS [2003], 84percent of Kenyan men are circumcised, with a lower proportion of men aged 15-19 years having been circumcised, which translates to 72percent, compared to older ages at a minimum of 84percent. These findings indicate a decline in the practice; however, it is established that some men do not go through the circumcision process until after attaining 20 years. More than 90 percent of men are circumcised in North Eastern, Eastern, Coast, and Central Provinces; more than 80 percent in Nairobi, Rift Valley and Western Provinces, while the prevalence in Nyanza stands at 46percent, with wide variation within districts ranging from 17percent to 99percent [KDHS, 2003].

Nationally, HIV prevalence among adults is estimated at 5.6percent with a significant proportion of new infections occurring among sexually active young adults. HIV prevalence exhibits similar regional variations with a low of 0.9percent in North-Eastern province peaking at 15.1percent in Nyanza [KAIS, 2013]. Based on 2009 census data, members of the Luo community constitute approximately 70 percent of Kenya's traditionally non-circumcising ethnic communities, with others not cutting their males

including Turkana, Teso, and segments among the Luhya and Pokot ethnic groups. Together, these communities constitute approximately 15percent of Kenya's population. An estimated half (52.9percent) of the uncircumcised males reside in Nyanza province, with most of the remainder residing in Rift Valley, Nairobi, and Western provinces [CDC, 2012].

The Kenyan government selected the areas as priority regions for implementation of VMMC to achieve 80 percent coverage (860,000 circumcisions) by July 2013 in its bid to reduce HIV transmission in Kenya, through an exercise that was to take a three-phase approach [NASCO, 2008].

### **2.1.1 Scientific and Historical evidence of the Impact of Medical Male Circumcision**

Numerous studies have substantiated the biological plausibility for a causal link between male circumcision and lower susceptibility to HIV infection. Compared with the tissue of the outer foreskin, the inner foreskin may be more prone to micro tears during intercourse and has HIV target cells (Langerhan cell with CD4 receptors) closer to the epithelial surface [Serour et al, 1997].

The warm moist micro-environment under the foreskin hosts a high density and diversity of anaerobic bacteria, providing conditions that may be conducive to greater risk of HIV acquisition in men with an intact foreskin. Circumcised men also have a lower susceptibility to other sexually transmitted infections, including *Mycoplasma genitalium*



and herpes simplex virus type 2, and human papilloma virus (HPV), including high-risk strains of HPV [Price et al, 2010].

Male circumcision has for generations been performed for cultural and religious reasons. The health benefits were documented as early as 1855, when Hutchinson's observational studies of Jewish and Christian patients with venereal disease in London showed "the well-known greater exemption of the Jew to syphilitic infection, owing to the protecting influence of circumcision. A study on environmental factors impacting on carcinoma of the cervix detailed the association of cervical cancer with a lack of circumcision in women's sex partners [Wynder et al, 1954].

A meta-analysis of 27 observational studies from sub-Saharan Africa demonstrated a 58percent protective effect of circumcision in general population males [Weiss HA, 2000]. In another prospective study of discordant couples conducted in Rakai, Uganda, the findings showed zero sero-conversions among 50 circumcised male partners of HIV-positive women, compared with an incidence of 17percent among the 137 couples where the male partner was uncircumcised [Quinn et al, 2000].

In a study of male clients of female sex workers in Nairobi, a research that sought to establish the co-relation of female to male transmission of HIV type 1 found a greater than 8-fold increased risk of HIV acquisition among uncircumcised men. The researchers further looked to ecological data and found many populations where lack of circumcision was correlated with higher HIV prevalence [Cameron et al, 1989]. In 2010, investigators

in Orange Farm, South Africa, conducted a cross-sectional study of HIV incidence by laboratory assay methods and found that after adjusting for confounding; HIV incidence was reduced by 76percent in circumcised versus uncircumcised men [Auvert et al, 2011].

In 2007, WHO and UNAIDS issued recommendations on medical male circumcision as an additional HIV prevention strategy based on strong and consistent scientific evidence. Three randomized controlled trials (RCTs) undertaken in Kisumu, Kenya, Rakai District, Uganda, and Orange Farm, South Africa have shown that medical male circumcision reduces the risk of sexual transmission of HIV from women to men by approximately 60 percent. Three RCTs among 10,000 HIV-negative African men were conducted to establish the incident for HIV infections [WHO, 2012].

The findings showed 60 percent, 53percent, and 51percent reductions in HIV incidence in circumcised compared with uncircumcised male study participants from South Africa, Kenya, and Uganda, respectively. Men in the Kenya and Uganda studies who underwent extended follow-up at 66 months (Kenya) and 5 years (Uganda) exhibited sustained reductions in HIV incidence of 64percent and 73percent respectively [Auvert et al, 2005].

According to the WHO and UNAIDS[2012] report, the most recent data from Uganda showed that in the five years since the Uganda trial was completed; high effectiveness has been maintained among the men who were circumcised, with a 73percent protective effect against HIV infection. The report says medical male circumcision for HIV prevention offers excellent value for money, and further says that recent modelling

studies had found that reaching 80 percent coverage among men aged 15 - 49 years old in the priority countries, by performing approximately 20 million circumcisions, would result in net savings of money due to averted treatment and care costs. It also says that achieving, and maintaining, 80 percent coverage through 2025 would avert 3.4 million new HIV infections.

To benefit from the initiative, WHO and UNAIDS recommended the intervention be added in countries with high HIV prevalence, generalised heterosexual HIV epidemics, and low levels of male circumcision where the intervention is likely to have the greatest public health impact [WHO and UNAIDS, 2012]. Fourteen priority countries that were enlisted to scale up VMMC included Kenya Botswana, Ethiopia, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe [WHO, 2007].

The report highlights male circumcision as a proven intervention that offers partial protection against sexually acquired HIV in men and recommends that it should always be considered as part of a comprehensive HIV prevention package which includes, HIV testing and counselling, correct and consistent use of female or male condoms, treatment for sexually transmitted infections and promotion of safer sexual practices, such as avoidance of penetrative sex [WHO and UNAIDS, 2012].

Provision of antiretroviral treatment for people living with HIV who are eligible for treatment should also be considered as part of a combination prevention package to

reduce HIV transmission in couples where one partner has HIV [WHO, 2007]. Reed et al, [2007] argues that mathematical models forecast that quickly reaching a large number of uncircumcised men with VMMC in strategically chosen populations may dramatically reduce community-level HIV incidence and save billions of dollars in HIV care and treatment costs. The paper further says that because VMMC is a one-time procedure that confers life-long partial protection against HIV, programmes for adult men are vital short-term investments with long-term benefits.

Reed further argues that VMMC is a pivotal public health investment owing to a number of unique characteristics, and that it is among the highest HIV prevention priorities. The researcher says that the initiative is highly effective, relatively quick, and a cost-saving intervention that does not require repeated treatment to maintain the benefits. The PEPFAR paper indicates that VMMC also reduces HIV risk for women, circumcised men, and eventually infants. With the risk of new HIV infection reduced in men as a direct result of becoming circumcised, the incidence and prevalence of HIV among men in the population decreases. Consequently, the likelihood that women will encounter HIV-infected male sex partners also decreases [Hawxhurst, 2011].

It is argued that increasing the prevalence of circumcision from country-specific baseline levels to 80 percent equally across males aged 15–49 years in the priority countries within the next 5 years, can result in preventing nearly an equal number of new HIV infections annually in women as in men within 15 years [WHO and UNAIDS, 2012].

According to Morbidity and Mortality weekly report, by December 2011, a total of 340,958 males had been circumcised in 260 CDC-supported sites. Among those circumcised, 280,713 (82.3percent) were conducted in Nyanza Province, with a total of 273,115 (80.1percent) clients aged above 15 years, and 49,162 clients (14.4percent) aged above 25 years. The findings revealed that VMMCs performed among clients aged above 25 years increased from 5,938 (11.9percent) in 2009 to 24,945 (14.9percent) in 2011, [CDC, 2012].

A study conducted by a Kenya-based organisation, Impact Research and Development Organisation, which is funded by PEPFAR, through a cooperative agreement with CDC, in its third year targeting sexually active populations aged 15-49 year olds recommended that VMMC information targeting the older populations be framed to emphasise the benefits the practice has for spouses such as preventing cervical cancer [IRDO 2011].

IRDO, whose goal is to expand VMMC services in Kenya to reduce the spread of HIV among currently non-circumcising communities, says in its report that was compiled after three years, that adult respondents under the study justified their willingness to access services upon learning of their status during a physical encounter with other peers who had undergone VMMC and felt challenged [IRDO, 2011].

The organisation, which has bases in seven districts in Nyanza that include Kisumu East, Nyando, Suba, Rongo, Migori, Homabay and Nyatike, spent six months setting up VMMC services in Nairobi from July 2010, and circumcised over 7,000 men. It was also

involved in training of MoH staff to provide the services and improve the quality status of facilities, awareness creation and service provision, with demand creation strategies including night service provision, radio programmes, camping, mobile outreaches, mobilisation using friendly community mobilisers and road shows. It has provided over 110,000 males with VMMC services since its inception in October 2008 [IRDO, 2011].

## **2.2 Research Gaps in the reviewed literature**

Results from randomised controlled trials have shown that voluntary medical male circumcision (VMMC) reduces HIV acquisition by about 60 percent for men. The success rate remains minimal, with a small percentage accessing the service [Hershow, 2013]. In response to the RCTs, WHO and UNAIDS have pushed for the implementation of VMMC programmes as a component of comprehensive HIV prevention strategies in countries with low male circumcision rates and high HIV prevalence or high risk for HIV infection such as Kenya [UNAIDS, 2012]. Hershow says that despite support from several large global initiatives, only 555,202 males had been circumcised in priority countries at the end of 2010 against the programme goal to reach 20 million males.

While 80 percent of the studies conducted to establish the impact of VMMC in the fight against HIV and AIDS indicate a success rate of prevention up to 60 percent, useful information of other interventions that must be employed to achieve and sustain prevention of the virus has not been highlighted [Bailey, 2010].

According to Auvert [2008], creating demand for VMMC among men aged 25 years and above has proven more difficult in some settings than attracting adolescents and younger men to VMMC services. The researcher says that in estimating future costs, it is essential to take into account the additional costs of strategies tailored to reach this “harder to reach” segment of the population. Targeting educational institutions that allow programmes to reach adolescents and young men who have proven most receptive to VMMC has not been fully utilised.

Integrating VMMC messages into the broader context of HIV prevention (and not as an isolated topic) is essential, yet VMMC campaign is primarily targeted as an initiative intended to lower HIV and AIDS. The messages fail to communicate that VMMC is only partially protective against HIV transmission and that behavioural risk-reduction strategies remain essential to safer sex strategies that aim to protect oneself and one's sexual partners, for instance correct and consistent condom use and reducing one's number of partners [Aremu, 2010].

Although VMMC has been proved to reduce transmission of HIV and AIDS up to 60 percent, other regions in Kenya that practice up to 99percent male circumcision are still adversely affected by HIV and AIDS [NAS COP et al, 2008].

The International Initiative for Impact Evaluation [3ie] report says that the main intervention used by countries in conducting VMMC is behavioural change communication, yet a small percentage of evidence exists to show that BCC activities

have been effective. The findings show peer pressure and influence of female intimate partners as playing major facilitators for decisions to undertake the circumcision [Hershow, 2013]. Instability in government as a result of national elections, civil unrest, worsening domestic and international war and economic crises, and Global Fund Round 11 cancellation have among others transpired in the implementing five-year period, impacting the programme planning and implementation [Amy et al, 2011]. The 2013 3ie report on promoting implementation of innovative male circumcision uptake interventions, the study cites fear of pain, costs, complications and lengthy healing periods, as well as perceived threats to masculinity as barriers to consistent uptake of the services [Hershow, 2013].

Although Lande [2008] cites interpersonal communication as an essential component for demand creation of VMMC using community health workers, community mobilisers, and small media [brochures], the strategy remains a challenge as culturally male circumcision was prohibited by non-circumcising communities that practiced alternative rite of passage, making it insensitive to talk about the practice. The researcher says mass media can create awareness of VMMC, but interpersonal communication serves as the catalyst to action.

Rather than individual programme branding, a strong national VMMC symbol, such as a logo that links the media messages to actual VMMC service delivery sites, would facilitate personal action by men who have been motivated to seek services [Snyder, 2007]. Although VMMC has been proved to offer excellent value for money through



saving costs, by averting new HIV infections and reducing the number of people in need of HIV treatment and care, WHO/UNAIDS fail to highlight the most effective and traditional approaches that were used to control HIV and AIDS. They were dubbed as A, B, C's of AIDS [Abstinence, Being faithful to one tested and negative partner, and using Condoms to prevent the spread] [NASCOP, 2008].

The study says that a one-time intervention, medical male circumcision provides men life-long partial protection against HIV and other sexually transmitted infections and that it should always be considered as part of a comprehensive HIV prevention package of services, and be used in conjunction with other methods of prevention, such as female and male condoms. While this works to reduce the spread of HIV, other underlying cultural practices such as polygamy and wife inheritance have proved to be major causes of HIV transmission, especially in Nyanza, where cultural practices uphold the two practices [Mattson et al, 2008].

Although various communities circumcise their males at varied stages, most of them perform it as a rite of passage into adulthood, which is normally prior to attaining 20 years. This has exposed uncircumcised males aged above 20 years to stigma and discrimination from peers and communities, forcing others in the same age group to abandon the practice all together [GoK, 2009]. Poor communication as a result of incomplete messages and wrong choices of channels which inform target audience that circumcision will prevent it from contracting HIV has led to increased risky behaviours where circumcised males are assured of protection as a result of removal of the foreskin.

According to them, the foreskin is the hindrance and main cause of contracting HIV. Instead of behaviour change, such audience continues to engage in unprotected sex that further exposes them [Muthivhl et al, 2011].

Whereas it is appropriate for VMMC and health caregivers to conduct HIV counselling and testing, tracing the males upon healing to conduct HIV testing is a challenge. Studies show that fewer males compared to females voluntarily offer themselves for testing, making it difficult to measure impact of the campaign [NASCO, 2008]. Data collection and storage remains a challenge to the health sector record keeping, which is majorly manual. This affects data storage and ability to access accurate information on cases attended to and the impact of the exercise [WHO et al, 2009].

Although VMMC can lead to the prevention of HIV and AIDS infection up to 60 percent, the initiative did not incorporate appropriate interpersonal communication to understand the risk of the disease. Risk perception has been theorised as an important antecedent for adopting protective behaviour change. In relation to HIV, risk perception is an indicator of perceived susceptibility to infection, a measure of one's understanding of HIV transmission as well as the willingness to consider behaviour changes [Ndati, 2013].

The scholar further says that HIV and AIDS knowledge is an important component of HIV and AIDS risk prevention strategies that may influence engagement in high risk behaviour. He reiterates the need for cultural sensitivity in order to appreciate the extent to which cultural characteristics, experiences, norms, values, behavioural patterns and

beliefs of selected populations should be incorporated in the design, delivery and evaluation of targeted health promotion materials and programmes [Ndati, 2013].

## **2.3 Theoretical Review**

This study used two theories; the Health Promotion Model by Nola J. Pender and Social Marketing theory by Craig Lefebvre.

### **2.3.1 Health Promotion Model**

The health promotion model (HPM) as proposed by Nola J. Pender (1996) was designed to be a complementary counterpart to models of health protection. It defines health as a positive dynamic state not merely the absence of disease. It is directed at increasing a client's level of well-being. The model describes the multi-dimensional nature of persons as they interact within their environment to pursue health.

The model anticipates positive outcomes that will occur from health behaviour through the intended actions. It anticipates imagined or real blocks and personal costs of understanding a given behaviour as a major perceived barrier to action.

Pender, a former professor of nursing at the University of Michigan focuses on;

- ✓ Individual characteristics and experiences
- ✓ Behaviour-specific cognitions and affect
- ✓ Behavioural outcomes

The model notes that each person has unique personal characteristics and experiences that affect subsequent actions, the set of variables for behavioural specific knowledge and

affect have important motivational significance and that the variables can be modified through nursing actions. Pender notes that health promoting behaviour is the desired behavioural outcome and is the end point in the HPM.

The theory says that health promoting behaviours should result in improved health, enhanced functional ability and better quality of life at all stages of development. It further states that the final behavioural demand is influenced by the immediate competing demand and preferences, which can derail an intended health promoting action.

### **2.3.2 HPM Propositions and their Relevance to VMMC**

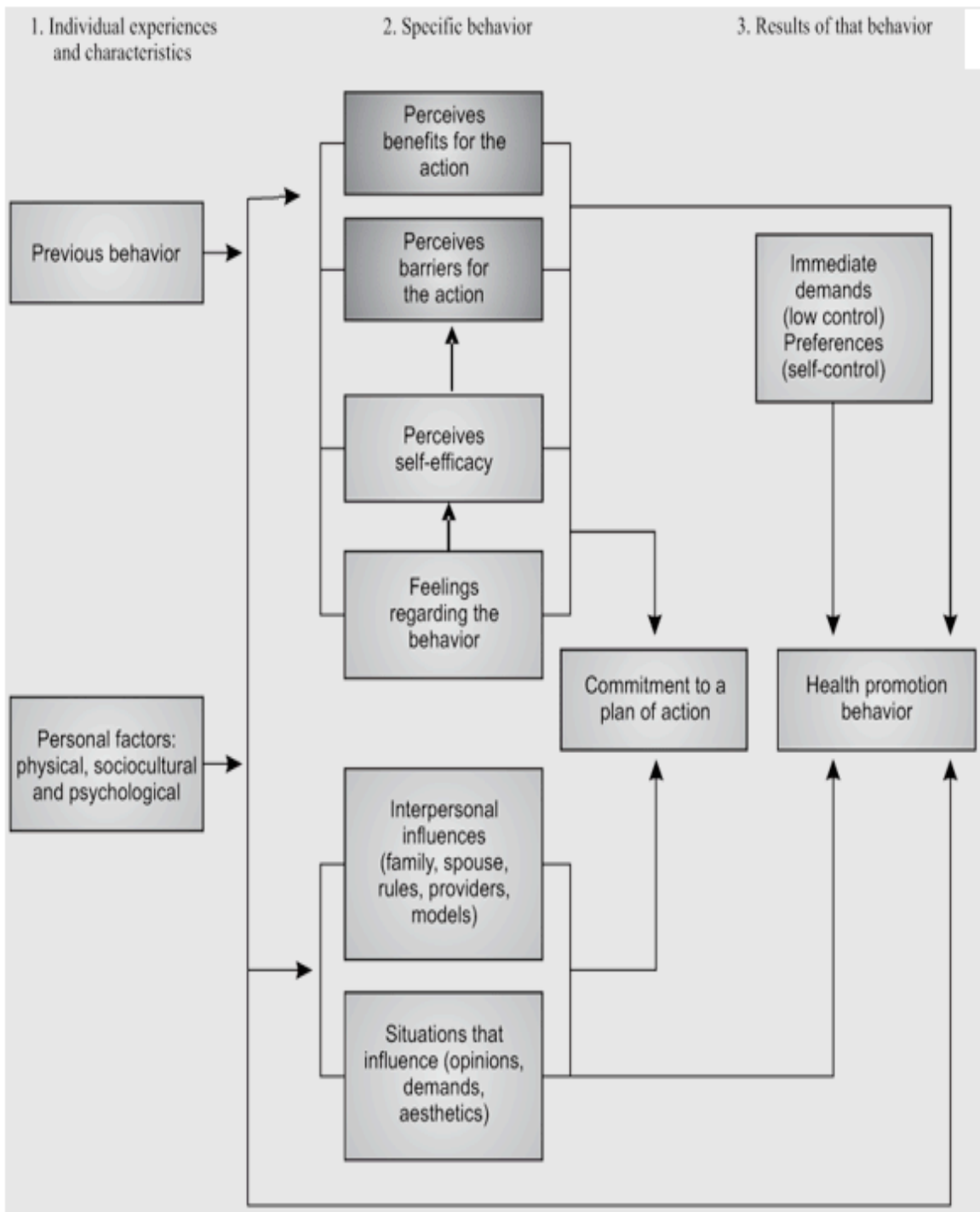
The Health Promotion Model is based on the propositions that prior behaviour, inherited and acquired characteristics influence beliefs, affect, and enactment of health-promoting behaviour, while highlighting that persons commit to engaging in behaviours from which they anticipate deriving personally valued benefits. It states that perceived barriers can constrain commitment to action, a mediator of behaviour as well as actual behaviour. It also says that perceived competence or self-efficacy to execute a given behaviour increases the likelihood of commitment to action and actual performance of the behaviour, with greater perceived self-efficacy results in fewer perceived barriers to specific health behaviour.

Pender says that positive affect toward a behaviour results in greater perceived self-efficacy, which can in turn, result in increased positive affect. She emphasises that when positive emotions or affect are associated with behaviour, the probability of commitment

and action is increased. HPM states that persons are more likely to commit to and engage in health-promoting behaviours when significant others model the behaviour, expect the behaviour to occur, and provide assistance and support to enable the behaviour, with families, peers, and healthcare providers serving as important sources of interpersonal influence, which can increase or decrease commitment to and engagement in health-promoting behaviour.

The model says that situational influences in the external environment can increase or decrease commitment to or participation in health-promoting behaviour. It says that the greater the commitments to a specific plan of action, the more likely health-promoting behaviours are to be maintained over time. Commitment to a plan of action is less likely to result in the desired behaviour when competing demands, over which persons have little control, require immediate attention, with commitment to a plan of action being less likely to result in the desired behaviour when other actions are more attractive and preferred over the targeted behaviour. This affects persons to modify cognitions, affect, and the interpersonal and physical environment to create incentives for health actions.

### 2.3.3 The HPM Structure



**Diagram of the health promotion model – Fortaleza – 2002**

## **Explanation of the Health Promotion Model diagram**

According to the above diagram, HPM can be classified into three categories;

The first category is Individual Experiences and Characteristics: They include previous behaviour that an individual engaged in and which were detrimental to the overall wellbeing. It also includes personal factors that range from physical, socio-cultural and psychological.

The second category is the Specific Behaviour: Here, the individual tends to develop specific feelings regarding the behaviour, and then perceives self efficacy for the behaviour. This then leads to the individual perceiving barriers for the action, and later perceives the benefits for the particular action. The individual then draws a plan of action that is meant to guide the process of changing behaviour. The action plan is influenced by interpersonal entities that include family, spouse, rules, providers and models. It is further influenced by situations such as opinions, demands and aesthetics.

The third category includes Results of that Behaviour: Here, perceptions, influences and situations lead to immediate demands [low controls] and preferences [self control]. This then leads to health promotion behaviour.

### **2.3.4 Assumptions of HPM**

- ✓ Individuals seek to actively regulate their own behaviour.
- ✓ Individuals in all their bio psychosocial complexity interact with the environment, progressively transforming the environment and being transformed over time.
- ✓ Health professionals constitute a part of the interpersonal environment, which exerts influence on persons throughout their life span.

- ✓ Self-initiated reconfiguration of person-environment interactive patterns is essential to behaviour change

### 2.3.5 Personal Factors

Pender categorises personal factors as biological, psychological and socio-cultural.

She says that the factors are predictive of a given behaviour and shaped by nature of the target behaviour being considered.

- **Personal biological factors**- They include variable such as age gender body mass index pubertal status, aerobic capacity, strength, agility, or balance.
- **Personal psychological factors** – They include variables such as self esteem, self motivation, personal competence, perceived health status and definition of health.
- **Personal socio-cultural factors** – They include variables such as race ethnicity, acculturation, education and socio-economic status.

Pender highlights activity-related affect as subjective positive or negative feeling that occur before, during and following behaviour based on the stimulus properties of the behaviour itself. She says activity-related affect influences perceived self-efficacy, which means the more positive the subjective feeling, the greater the feeling of efficacy. In turn, increased feelings of efficacy can generate further positive affect.

Pender defines interpersonal influences as cognition concerning behaviours, beliefs, or attitudes of the others, which include norms (expectations of significant others), social support (instrumental and emotional encouragement) and modelling (vicarious learning



through observing others engaged in a particular behaviour). The primary sources include families, peers, and healthcare providers.

### 2.3.6 Behavioural Outcome and Commitment to Plan of Action

HPM says that concept of intention and identification of a planned strategy leads to implementation of health behaviour. It points out a competing demand as that alternative behaviour over which individuals have low control because there are environmental contingencies such as work or family, care, responsibilities with competing preferences being alternative behaviour over which individuals exert relatively high control. The theory says that endpoint or action outcome is directed toward attaining positive health outcome such as optimal well-being, personal fulfilment, and productive living.

### 2.3.7 Summary of HPM

Individual Characteristics and Experiences	Behavior-Specific Cognitions and Affect	Behavioral Outcomes
<ul style="list-style-type: none"> <li>• Prior related behavior</li> <li>• Personal factors: biological, psychological, sociocultural</li> </ul>	<ul style="list-style-type: none"> <li>• Perceived benefits of actions</li> <li>• Perceived barriers to actions</li> <li>• Perceived self-efficacy</li> <li>• Activity-related affect</li> <li>• Interpersonal influences: (family, peers, providers); norms, support, models</li> <li>• Situational influences: options, demand characteristics, aesthetics</li> </ul>	<ul style="list-style-type: none"> <li>• Immediate competing demands (low control) and preferences ( high control)</li> <li>• Commitment to a plan of action</li> <li>• Health promoting behavior</li> </ul>

Source: Nola Pender, 1996

## **2.4 Social Marketing Theory**

Lefebvre [1999] defines social marketing as the application of the marketing discipline to social issues and causes. The theory was developed as a method to achieve broad change among populations and to have a positive impact on people's health and well-being. It is described as a systematic approach on how to think about and solve the toughest problems the world faces.

The researcher used this theory to explain how positive change can be achieved through the choice of appropriate public health indicators and practices, aimed at providing solutions to the health problems facing the world. The study used the theory to show how VMMC campaigns, as social marketing for social change tools are being applied in regions that have high HIV and AIDS prevalence in a bid to lower transmission of the disease and promote good health of the target population.

The theory uses marketing to improve social conditions which are said to change when behaviours, environments and policies change. It singles out marketing, education, and the law as the three strategic tools needed for the management of behaviours related to public health and social issues. It is designed for large-scale change efforts to achieve goals related to organisational practices, social norms, and physical environments. Stressing on Segmentation and Competition, Lefebvre says that the core of social marketing lies in the people targeted for services. The tenet is described as the first critical marketing decision. It groups people with similar characteristics, interests, values, or behaviours together, with the intention of acquiring varied results.

It helps in identifying common characteristics for all groups for messages and products, and the benefits accrued from unique messages, products, and services. This is critical in addressing specific issues such as VMMC, which predominantly affects a section of the society that has a large percentage of its population that does not traditionally practice it.

The theory seeks to give an insight into what makes the behaviours of the consumers, in this case the target audience and the services being offered, [VMMC] attractive, relevant, and compelling. It aims at creating a reassurance that the ideas and tactics identified are appealing, fit into their lives, meet relevant needs, and solve problems from the people's point of view [controlling the spread of HIV and AIDS]. The theory seeks to highlight the traditional marketing four P's; Product, Price, Place and Promotion. They highlight targeted behaviours, location, services being offered, accessibility and opportunities, actual and perceived benefits including incentives and costs of behaviour change. It further underscores the communication strategy to be used, where it is believed that for a campaign to achieve its intended goal the solution lies with the mass media campaign adopted.

Lefebvre notes that without monitoring and evaluation, it is impossible to control resources or make informed decisions about the tactics being used. He says that the objective of a monitoring system is not to track issues most important to the programme's theory, but rather, implementation strategies and ability that mark both progress and setbacks in achieving behavioural and social objectives. The theory's perspective on evaluation is that the targeted programme is an ongoing, dynamic learning experience,

requiring adjustments to the marketing mix, priority groups, and strategies, based on what is working and what is not, rather than the intervention remaining fixed.

## **2.5 Conclusion**

The researcher used Health Promotion Model and Social Marketing theories to highlight self-initiated decisions of persons and how the environment interacts to influence behaviour change that ensures optimal healthy living standards, using professionals who constitute a part of the interpersonal environment that exerts influence on persons throughout their lifespan.

The researcher also highlighted key concepts of Social Marketing for Dissemination and Programme Sustainability, whereby, based on findings, the study informed how social marketing can be used to enhance uptake of programmes and initiatives such as VMMC, with evidence-based practices and policies, which upon implementation by service providers who include health caregivers and community mobilisers such as chiefs and village elders, can lead to sustenance of projects, practices and initiatives in the long term. It also described the barriers that hinder campaigns from being successful, as well as offered possible recommendations on how using communication, the obstacles can be addressed.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter discusses the various procedures that were used in carrying out the study. It also highlights the geographical location where the study was conducted, the study design, the population and sample size that was collected and the procedure that was applied, data collection methods and data analysis.

#### **3.1 Research Design**

This study used a descriptive research design to describe the impact that VMMC has had on the targeted population. The design was used to collect information about the target population's attitudes, opinions and habits. According to Gordon [1998], descriptive design enables the researcher to set out the broad outline and key features of the work to be undertaken, including methods of data collection and analysis to be employed, and showing how the research strategy addresses specific aims and objectives of the study.

The descriptive design provided an accurate portrayal and account of the characteristics in relation to the behaviours, practices, beliefs, and knowledge of the individuals and community members.

### **3.2 Research Site**

This study was conducted in Karateng' Location, which is in Maseno Division, Kisumu County. The predominant ethnic group in this region is Luo, and is neighbouring Luhyas on the northern side, while Kisiis and Kalenjins lie on Southern and Eastern sides.

Due to its proximity with especially Luhyas, the Luo community has integrated with its neighbours and has intermarried with them, resulting in a blend of cross cultures. Karateng', like other Luo Nyanza regions, continues to record numerous HIV transmission, and was among areas the Ministry of Health, in conjunction with its partners, prioritised VMMC to reduce the prevalence rate [UNAIDS, 2012].

The location is located near the Kisumu-Busia highway, which is used by heavy trucks that transport goods from Kenya to Uganda. This corridor has been earmarked as hotspot for the transmission of HIV [Auvert et al, 2001].

To roll out and conduct VMMC, various centres have been established in hospitals and dispensaries, which carry out operations. Within Karateng', Maseno Mission Hospital and Maseno University Dispensary are focal points for the procedures. The two centres formed the central location for the study.

### **3.3 Target Population**

Burns [1993] defines a population as all elements [individuals, objects and events] that meet the sample criteria for inclusion in a study. This study targeted the Luo community that resides in Karateng' Location, due to its traditional cultural practice of not

circumcising males; a reason attributed to high prevalence of HIV and AIDS [NASCOOP et al, 2007].

Luos are among 15percent of Kenyan communities that do not practice male circumcision. The group further practices polygamy and wife inheritance, also known as *tero buru* in the local language. KAIS [2013] report shows the community and region as the worst hit with HIV, and is ranked highest in the prevalence at 15.1percent, against the overall national percentage of 5.6percent. As a result of cultural integration, Luhyas and Luos influence one another. They both share similar practices such as wife inheritance and polygamy, with a section of Luhyas also not circumcising their males.

### **3.4 Sample Size and Sampling Procedures**

#### **3.4.1 Sample Size**

The study used 50 informants to get qualitative data.

#### **3.4.2 Sampling Technique**

The researcher used purposive sampling, and targeted opinion leaders, doctors and nurses, as they have been used to spearhead VMMC advocacy. Since male circumcision goes against traditional beliefs of the Luo community, using purposive sampling enabled the researcher to get information on the campaign process from opinion leaders. Health workers provided information regarding the extent of the campaign and the level of awareness of the Luo community on the importance of VMMC.

### **3.5 Validity and Reliability**

Borg [1989] defines validity as the degree to which a test measures what it is supposed to measure, while reliability is a measure of how consistent the results from a test are. For validation, the researcher conducted a mock data collection exercise to five respondents. Upon getting responses, the feedback and process of the mock activity formed the basis for refining the data collection tools.

The researcher also examined the content of the interview questions to establish its reliability. This enabled the exclusion of irrelevant questions and unnecessary information.

### **3.6 Data Collection Techniques**

The study used qualitative data collection techniques, where the researcher used interview schedules and interview guides to collect data from Focus Group Discussions and key informants from the target population.

#### **3.6.1 Focus Group Discussion**

The study used FGD as a data collection technique due to its importance in enabling the researcher to obtain information on the participants' beliefs and perceptions on a defined area of interest. Under FGD, the researcher selects the topics to be discussed beforehand, with a list of open ended questions, while the focus relies on discussion among participants about the topics under study [Kombo et al, 2006].



Advantages of FGDs include a group composition of homogenous members of the target population, such as similar age, gender, profession and level of education. FGDs can produce a lot of information within a short duration and are good for identifying and exploring beliefs, ideas or opinions in a given community. They are used to assess needs, develop intervention, test new ideas or programmes or improve existing ones [Kombo et al, 2006].

The researcher conducted three FGDs with 8-10 members per FGD group and divided the participants in age groups. Using FGDs enabled the researcher to obtain information on the participants' beliefs and perceptions about VMMC, as the campaign goes against the Luo community's traditional norms and beliefs.

### **3.6.2 Key Informant Interviews**

The study used interview guides to collect data from informants. The researcher asked every informant the same questions as a way of enhancing reliability. The guides also enabled the study to get in-depth information on VMMC.

### **3.7 Data Analysis and Presentation**

The study used thematic analysis, where related topics were categorised based on the study objectives and various subjects that came up during interview schedules and guides. The researcher developed a coding system based on the data that was collected, grouped the major themes under study and identified their associations. The data was

presented using a narrative approach that was used to highlight the beliefs, habits, attitudes and opinions of the study population.

### **3.8 Ethical Considerations**

The researcher was guided by ethical considerations which included voluntary participation, no harm to respondents, anonymity and confidentiality, identifying purpose and sponsor, and analysis and reporting [McNamara [1994]. To conduct the study, the researcher was equipped with knowledge, expertise and due diligence, and ensured the process observed honesty and integrity, while recognising and protecting the rights of respondents and all involved in the study. The researcher abided by ethical provisions, and remained focused and determined, by ensuring that the prospective respondents were aware of the purpose of the survey and the institution behind it.

The study also ensured that participation by respondents was purely voluntary, and that it did not expose them to any harm; that it respected their rights to confidentiality, prior informed consent and also guaranteed them that their anonymity was not in any way compromised. The researcher accurately reported both the methods and the results of the surveys to colleagues, and was guided by honesty and openness in pointing out problems and weaknesses experienced, as well as positive outcomes of the study.

### **3.9 Conclusion**

This study was aimed at gathering data on voluntary medical male circumcision, which is an international health campaign that is geared towards preventing and reducing the spread of HIV and AIDS.

Its emphasis was on the population that does not traditionally circumcise its males, based on scientific evidence showing that medical male circumcision can lower HIV transmission rate by up to 60 percent [WHO report, 2007]. The researcher used descriptive research design in gathering data for the study through review of available literature on the subject, and interviewed males who had been circumcised under the campaign, health workers, and area opinion leaders.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

#### 4.0 Introduction

This chapter presents how the collected data was analysed and interpreted. It also presents discussions in relation to the objectives of the study. Data was obtained through conducting key informant interviews and focus group discussions. The purpose of the study was to investigate the assessment of the impact of voluntary medical male circumcision campaign on curbing the spread of HIV and AIDS: The chapter was organised into sections mainly based on the research objectives which included establishing the role of communication on influencing VMMC as an intervention on behaviour change and reduction of HIV and AIDS prevalence; Establishing the public knowledge on the impact of VMMC towards the reduction of HIV and AIDS; Identifying the missing communication interventions in the VMMC programme that affect appropriate uptake of the services, and Suggestion of appropriate communication interventions that will improve VMMC programme and help lower the HIV and AIDS prevalence among the Luo community.

#### **4.1 Interview schedule return rate**

The study targeted 50 informants from Karateng' location in Kisumu County; all the targeted 50 respondents filled and returned their completed forms, making the response rate 100 percent.

#### **4.2 Demographic information**

Demographic information was based on the respondents' gender, age bracket, ethnicity, profession and academic qualification.

From the study findings, the gender of participants and informants from Kisumu County was a higher male representation, compared to females. This shows that there were immensely more males than females who participated in the study, indicating the possibility of biasness in the overall feedback.

##### **4.2.1 Participants' age**

From the study findings, majority of participants were aged between 18-23 years with followed by those aged 30-35 years, 24-29 years, over 42 years, with the least number of participants aged 36-41 years. This shows that majority of participants in the study fall within the age bracket of 18-23 years. It can be deduced that the younger generation in Karateng' were active participants of this research, which will majorly have an effect on young people compared to the older ones.

#### **4.2.2 Participants' ethnicity**

From the study findings, majority of participants who formed the largest population of the study were from the Luo community; the second highest group was from the Luhya community, while the remaining were from other communities. This shows that majority of participants were Luos.

Given that VMMC campaign majorly targeted the traditionally non-circumcising communities, majority of the participants who took part in the study were from the Luo community, as they formed the highest percentage of those who accessed the VMMC services. The second highest percentage of participants was the Luhyas, who are the immediate neighbours of the Luo community, followed by members from other small tribes.

#### **4.2.3 Highest attained level of education**

The study sought to establish the highest academic level of the participants. The findings are as shown below in figure.

From the study findings, majority of the participants' highest level of education was secondary school. Other participants had university education qualification; this equalled those with tertiary college qualification. The remaining participants had post graduate degree and primary school level of education. The study concludes that most respondents had attained basic education level and thus were well informed to make informed decisions.

### **4.3 Participants' place of residence**

Majority of the participants in this study resided in Maseno; Rural, Emabungo, Butere, and Emuhaya villages, which are within the Karateng' locality.

### **4.4 Knowledge of VMMC and its impact on HIV and AIDS**

#### **4.4.1 How the participants learnt about VMMC**

This study found that the participants had learnt about VMMC through various sources.

Below are some of the responses from the focus group discussions.

Q: How did you learn about VMMC campaign?

P3: My first time ever to hear about it was on radio, then later on I was in a group of friends who were talking about it.

P2: I heard from friends and later on saw a poster about the campaign which had been placed on a wall at Maseno University.

P1: I was attending a funeral, when the *mji kumi* [village elder] made an announcement about a campaign to circumcise men, which he said was meant to control the spread of AIDS.

P4: I was watching news, then during the commercial break, there was an advertisement about male circumcision, which said that AIDS can be controlled through male circumcision, after a few days, I again heard an advertisement, this time on radio saying the same thing.

P5: I had taken my daughter to hospital for medication, and then after the nurse had examined her, she decided to engage me in a discussion about an exercise the hospital was conducting to circumcise male adults, which

she said, was part of government efforts to control the spread of HIV and AIDS.

From the findings, majority of the participants learned about VMMC through the radio, others said they learned about VMMC through their peers; others through television, while others said they learned about it through the county administration (chiefs, sub chiefs and village elders). This shows that radio remains the most popular mode of communication that is aiding the VMMC initiative, which was rolled out to enhance uptake of the exercise that is expected to lower HIV and AIDS prevalence, especially among the Luo community.

In its report that was compiled after three years, IRDO says that adult respondents under its study justified their willingness to access services upon learning of their status during a physical encounter with other peers who had undergone VMMC and felt challenged [IRDO, 2011]. Hence, the need to vary various channels of communication aimed at targeting different segments of the population. Although the participants said they heard about VMMC using various channels, majority of them counterchecked with their peers prior to going for the services.

#### **4.4.2 Whether participants knew their HIV status prior to going for VMMC**

During the focus group discussions, majority of the participants said that they knew their HIV status prior to going for VMMC, while with another smaller



population said it did not have prior knowledge of HIV status at the time of going for VMMC.

Q: Did you know your HIV status prior to going for VMMC?

P1: Yes, at one point, my girlfriend insisted that we go for testing before we could have sex, and this forced me to access the services

P3: Yes, there was a time when I contracted STD [sexually transmitted disease] and then I went for medication. After completing my dose, the doctor in charge advised me to get tested so that we could take the appropriate measures just in case I tested positive.

P2: No, even though I have not been very careless, the thought of going for testing freaked me, because I am not a virgin either, and I was not sure what the outcome would be; I always feared, because *naweza kuwa na mdudu na sijui* [I may be HIV positive and yet I don't know].

P4: Yes, there was a time when *me na maboys wangu* [my male friends] were walking in Kisumu town, then we happened to come across a VCT [voluntary counselling and testing centre] just decided to go for the test, *kimamba* [in a bold move].

P5: I have never gone for testing, because it was no big deal for me, because for me, although I have gone through the normal trials like other schoolmates, sex was always a no-go zone while still in school, and so I did not see the need to go for the test as I have tried to chill [to wait before engaging in sex].

P6: I went for testing, because I reckoned that although AIDS has no cure, there are ways of staying healthy by taking ARVs [anti retroviral drugs]; a lot has been said about AIDS, and the more one is knowledgeable about the disease, the better, as it is possible to continue living healthy even with the virus.

The study shows that majority of the participants had prior knowledge of their HIV and AIDS status before going for VMMC, while with a smaller group saying it had no prior knowledge of its status before going for the exercise. It further shows that those going for VMMC had first known their HIV status and were using their knowledge to sensitise the community on the need to go for VMMC even before knowing their status.

The huge population of participants who went for testing prior to undertaking in the VMMC campaign is in line with the Nola Pender's Health Promotion Model, which says that health promoting behaviours should result in improved health, enhanced functional ability and better quality of life at all stages of development. HPM further states that the final behavioural demand is influenced by the immediate competing demand and preferences, which can derail an intended health promoting action [Pender, 1996].

#### **4.4.3 Whether participants went for testing after VMMC**

The study sought to find out whether the participants went for HIV testing after VMMC. The participants' responses are as discussed below;

During the focus group discussions, most participants said they went for HIV testing after taking part in the VMMC campaign.

Q: Did you go for HIV testing after taking part in the VMMC campaign?

P6: Yes, after circumcision I felt like I needed to reaffirm my knowledge about my HIV status, because I wanted to start living a new life, hence knowing my status was very important, as it was aimed at ensuring that I take full control of my life.

P3: Yes, circumcision was painful but reassuring, and because my intention for going for the cut was to ensure that I control HIV, I thought it nice to go for testing once and for all.

P2: No, I did not see the need for testing because since the last I tested I had not engaged in careless sexual activities; hence I did not see the need for testing.

P4: Yes, the courage to go for testing was informed by my agreeing to get circumcised. It would have been useless for me to go for circumcision in the name of preventing the spread of HIV, and then fail to go for testing. I was keen on taking charge of my life after the cut.

P1: No; my reason for circumcision was influenced by desire to be different and not necessarily to control HIV, so I did not feel the need to go for testing, because it was not a factor from my initial decision.

P6: Yes, after circumcision there is nothing else for one to be afraid of, because for me *kama mjaka* [as a Luo], this is a foreign practice, but since I have seen so many of my friends and relatives die kwa sababu ya mdudu

[because of AIDS], *nilijiambia nitafanya kitu chochote kile nitaweza ili kuhakikisha sijaingia box pia* [I told myself I will do anything possible to ensure that I also do not fall into the trap of contracting the disease].

P8: Yes, I felt the need to be sure of my status after taking the bold step, as the first person in our family.

P8: No, I still haven't gained the courage to go for testing kwa sababu chochote chaweza kutokea [because anything can happen].

P7: Yes, nowadays it is easy to go for counselling and testing, I do it as a routine, but normally away from home ndio nihepe watu wa mdomo [to avoid rumour mongers].

Majority of the participants said they went for testing after VMMC, while a smaller representative of the participants did not go for testing after VMMC. Those who went for VMMC cited the bold move they had undertaken to go for it as a motivation for their action to know their status and the need to start living a new life where they were sure.

One participant said:

*HIV and AIDS is no longer the death sentence like it used to be so many years ago. Many people including senior government workers are living with this disease, and we know it, but they have accepted their status and are taking the necessary drugs. We have also decided to ensure that nobody continues to hide while battling this disease, as they can be helped if they come out and declare their status; that is why many of our generation are going the extra mile to ensure that we take control of our lives.*

This is in line with Pender's [1996] HPM that says positive affect toward a behaviour results in greater perceived self-efficacy, which can in turn, result in increased positive affect. She emphasises that when positive emotions or affect are associated with behaviour, the probability of commitment and action is increased. HPM states that persons are more likely to commit to and engage in health-promoting behaviours when significant others model the behaviour, expect the behaviour to occur, and provide assistance and support to enable the behaviour, with families, peers, and healthcare providers serving as important sources of interpersonal influence, which can increase or decrease commitment to and engagement in health-promoting behaviour.

#### **4.4.4 Whether VMMC has changed sexual behaviour**

From the focus group discussions majority of the participants said that their sexual behaviours had changed since they took part in VMMC.

Q: Have you changed your sexual behaviour since you took part in VMMC?

P1: Yes, very much, I now know the importance of using protective gears as I go out with more than one female partner. Part of the information that I got during the [VMMC] exercise is that being circumcised does not fully protect an individual from contracting AIDS.

P3: Yes, the most effective ways of protecting myself still remain the traditional A, B, Cs [Abstinence, Being faithful and Condom use]; other than that, nothing else has changed.

- P1: Yes, from the available material and the biology I learned in school, the risk is still very high despite being circumcised, hence the need for me to ensure total compliance to all forms of protection.
- P4: Not really, there is nothing new that I need to change, as everything is the same; other tribes that traditionally circumcise their males also contract AIDS, it is not about circumcision alone, but a range of protective measures that include stopping traditional practices that expose us to greater risk.
- P2: Yes, now that I know my status, *CD sasa ni lazima* [now condom use is a must]. I realise that I am as vulnerable as anyone else who is circumcised, and that the [VMMC] exercise was only part of the solution.
- P7: Yes, I would not like to die young, and so I am willing to go the extra mile just to ensure that I take into consideration all that others failed to undertake due to lack of knowledge. We are lucky to be living in the days when AIDS has really been demystified to the extent that everyone is talking about it.
- P8: No, my decision for the VMMC was to fit in with my boys, so that I am not the odd one out, but it doesn't mean that I have always been careless, I try to do the right thing whenever I can.

The findings indicated that majority of the participants had changed their sexual behaviour as a result of VMMC, while a smaller group of the participants said they had not changed their sexual behaviour after undergoing VMMC. This shows that VMMC led

to a change in sexual behaviours of majority of the targeted community. Most participants said that due to VMMC they had resorted to abstaining from sex, others indicated that they had transitioned to adulthood.

These changes are in line with Lefebvre's [1999] theory that uses marketing to improve social conditions which are said to change when behaviours, environments and policies change. It singles out marketing, education, and the law as the three strategic tools needed for the management of behaviours related to public health and social issues. It is designed for large-scale change efforts to achieve goals related to organisational practices, social norms, and physical environments. Stressing on Segmentation and Competition, Lefebvre says that the core of social marketing lies in the people targeted for services. The tenet is described as the first critical marketing decision. It groups people with similar characteristics, interests, values, or behaviours together, with the intention of acquiring varied results.

According to one key informant;

*We have recorded a significant percentage of the young male population that has been coming for this service, mostly because of what can be explained as the need and desire to be different from the norm and also the increased knowledge on HIV and AIDS has made it possible for most youthful population to access these services, as they want to do all they can to remain safe and avoid contracting the deadly disease.*

#### **4.4.5 Whether VMMC reduces the risk of contracting HIV and AIDS**

Asked if VMMC reduces the risk of contracting HIV and AIDS, most of the participants

agreed that the intervention was important in curbing the spread of HIV and AIDS.

Q: Does VMMC reduce the risk of contracting HIV and AIDS?

P9: I think for the most part it does, because I don't think that Luos are the most promiscuous people, but because they do not circumcise, they have been at greater risk than other tribes.

P5: I am convinced it does, as I hear that there is always some dirt that a man is left with, which hides under the skin after having sex, which does not always apply to those people who have cut the skin.

P7: Yes, I believe it is part of the overall preventive strategies that are aimed at ensuring that there is minimal risk of contracting HIV and AIDS.

P2: Yes, from experience when uncircumcised Men have sex multiple times continuously, they bruise their skin, which then becomes susceptible to passing viruses from the other partner.

P4: Not necessarily; AIDS affects anybody who engages in unprotected sex, whether circumcised or not. One only needs to be careful and use protection at all costs, not unless he is having sex with his spouse.

The study established that majority of participants believed that VMMC reduces the risk of contracting HIV and AIDS, with a smaller proportion saying that VMMC does not reduce the risk of contracting HIV and AIDS. The participants indicated that VMMC reduces the risk of contracting HIV up to 60 percent for circumcised men; others said that sharing of circumcision tools, as it is practised by a section of the Kenyan society, causes infection.



A participant said;

*I am ready and willing to do anything that is required of me so as to remain healthy and avoid the anguish of going through the pain of being contracted with the disease that has claimed most of my family members and loved ones.*

This message is in line with Pender's [1999] model which notes that each person has unique personal characteristics and experiences that affect subsequent actions, the set of variables for behavioural specific knowledge and affect have important motivational significance and that the variables can be modified through nursing actions. Pender notes that health promoting behaviour is the desired behavioural outcome and is the end point in the HPM.

The theory says that health promoting behaviours should result in improved health, enhanced functional ability and better quality of life at all stages of development. It further states that the final behavioural demand is influenced by the immediate competing demand and preferences, which can derail an intended health promoting action.

#### **4.5 Knowledge level of VMMC and its impact on the fight against HIV and AIDS**

Regarding the knowledge level of VMMC and its impact on the fight against HIV and AIDS, the participants gave varied responses about their perception of the exercise.

They included;

*Although this is a noble initiative, many people have not quite understood it, as they think it is a gateway to any form of sexual debut, thinking that they cannot contract AIDS simply because they have been circumcised.*

*If not well clarified, this exercise will only lead to a higher HIV and AIDS prevalence, as most people are not getting the complete message that it [VMMC] prevents one from contracting the disease up to 60 percent, with other factors also playing a key role in curbing this spread.*

*Most of us youth only went for VMMC because we wanted to fit into the group of others, I remember how difficult it was for me and my other Luo friends to bathe with other boys when we were in high school, because they always teased and made fun of us because by that time we were not circumcised.*

*There is need to incorporate other initiatives in this crucial campaign if it is to yield any meaning results. Men need to be discouraged from marrying multiple wives, and they should also stop this old practice of tero buru [wife inheritance].*

*Let everyone, whether circumcised or not, go for testing to know their status; this is the only way those who test negative will remember to take all necessary precautions and remain negative, while those who test positive will seek for help such as being put on the anti retroviral therapy programmes.*

*It is too early to establish if indeed there has been any significant change within our community since this initiative was rolled out. This is because we still record*

*more deaths as a result of HIV and AIDS compared to our neighbouring villages. But it is true that a good percentage has gone for VMMC; may later this may have a positive effect.*

The findings show that majority of the participants agreed strongly that VMMC has led to increased careless sexual behaviour amongst men who have been circumcised. Some of the participants said that the rate of HIV and AIDS infection within Karateng' village has drastically reduced since the start of VMMC campaign. A section of the participants said that VMMC is a critical intervention in the fight against HIV and AIDS. A section of them strongly disagreed that VMMC campaign only can completely prevent someone from contracting HIV and AIDS. They said that other interventions such as condom use, testing, being faithful to one partner and curbing some traditional practices such as wife inheritance and polygamy were critical interventions in curbing HIV and AIDS.

Some of the comments for the above findings included; that VMMC had created much awareness and its one way of preventing the spread of HIV and AIDS.

Thus, gaps in the VMMC exercise show that while 80 percent of the studies conducted to establish the impact of VMMC in the fight against HIV and AIDS, a success rate of prevention up to 60 percent, useful information of other interventions that must be employed to achieve and sustain prevention of the virus has not been highlighted [Bailey, 2010]. According to Auvert [2008], creating demand for VMMC among men aged 25 years and above has proven more difficult in some settings than attracting adolescents and younger men to VMMC services. The researcher says that in estimating future costs, it is essential to take into account the additional costs of strategies tailored to reach this

“harder to reach” segment of the population. Targeting educational institutions that allow programmes to reach adolescents and young men who have proven most receptive to VMMC has not been fully utilised.

#### **4.6 Communications on VMMC and personal preferences**

On communication about VMMC and participants’ preferences for various information channels, there were varied responses.

Some of the participants said;

*I felt that the information that was given to me by the health workers was adequate to enable me make the right decision. I felt like I could rely on them to educate me on what I was getting myself into.*

*I relied on the knowledge that was imparted to me by my biology teacher, coupled with the materials that were availed at the VMMC centre to enable me strengthen my decision to go for the cut.*

*This is something I had always wanted to do, but there had been no appropriate chance for me, because it is a new practice in my family, so there was no way I could even share that desire with anyone because nobody cared about it; it was non-issue until the campaign was rolled out.*

*Although my first time to hear about VMMC was through an advertisement on television, the information was very scanty and could not help me make a decision. I had to seek for more information from the hospital, because I always wanted to stay safe.*

*While the village elder was persuasive enough in urging our community members to go for this exercise, he also did not have facts at his finger tips to inform us how important this campaign was in curbing HIV and AIDS.*

*After years of mockery from our neighbours [circumcising community], I felt like it was about time that I went for the cut to end the stigma.*

*My friends and I influenced one another and encouraged each other to go for the cut; although this was only due to peer pressure and the fun of it, as there were no major campaigns or materials that could help us make the decision, hence HIV and AIDS did not feature as the primary motivation for our choice to go for circumcision.*

The research found out that majority of the respondents strongly agreed that; there were varied VMMC materials to enable different people to choose their preferred mode of knowledge acquisition. A section of them felt that VMMC knowledge and its impact on HIV and AIDS was adequately communicated. They said that other appropriate interventions that compliment VMMC must be incorporated into the campaign to make it more effective. Majority of the participants did not agree with the manner in which VMMC messaging was packaged. They said that some of the gaps that affect effective rolling out of HIV and AIDS were not well spelled out. Majority of them indicated that VMMC campaign should be an ongoing exercise.

This is in line with Lefebvre's [1999] theory that uses marketing to improve social conditions which are said to change when behaviours, environments and policies change.

It singles out marketing, education, and the law as the three strategic tools needed for the management of behaviours related to public health and social issues. It is designed for large-scale change efforts to achieve goals related to organisational practices, social norms, and physical environments. Stressing on Segmentation and Competition, Lefebvre says that the core of social marketing lies in the people targeted for services. The tenet is described as the first critical marketing decision. It groups people with similar characteristics, interests, values, or behaviours together, with the intention of acquiring varied results. It helps in identifying common characteristics for all groups for messages and products, and the benefits accrued from unique messages, products, and services. This is critical in addressing specific issues such as VMMC, which predominantly affects a section of the society that has a large percentage of its population that does not traditionally practice it.

#### **4.7 Personal stand on VMMC**

On personal stand on VMMC, participants gave their responses that ranged from the need for women involvement, reaching out to other men, as well as the need for media to play a more active role to ensure increased awareness.

They included;

*For this exercise to yield positive results there is need to include everyone and get their input, as HIV and AIDS affects all of us in the society.*

*There is need for media to go beyond advertising and help demystify some myths so as to enable people to participate in this activity knowing very well the extent to which it protects them.*

*Knowledge is power; and the more people are informed the better for them to make decisions that can help them live healthy and productive lives.*

*It is important to involve women in such campaigns because they are part of the society and they play a key role in the end decisions that affect the larger society.*

*There is need to clarify all issues by using experts instead of leaving the knowledge and education part to the village elders who may also not be well informed.*

*Although I don't fully believe that we should take in everything that is brought to us by the foreign countries, let us also seek to preserve our cultural heritage by making informed decisions.*

The findings revealed that majority of the participants agreed strongly that VMMC campaign should be rolled out amongst all men to reduce HIV and AIDS prevalence. They said that there is need for enhanced women involvement in VMMC campaign to increase its success rate. They also said that the current level of information on VMMC should be enhanced to ensure an effective campaign. However majority of the participants and key informants strongly disagreed that VMMC is a foreign ideology that goes against traditional cultural beliefs and practices, which should be abolished. They further said that VMMC helps in many ways to both men and women in reducing chances of contracting HIV and AIDS.

This is in line with the Health Promotion Model, which anticipates positive outcomes that will occur from health behaviour through the intended actions. It anticipates imagined or real blocks and personal costs of understanding a given behaviour as a major perceived barrier to action [Pender 1996].

Lefebvre [1999] used Social Marketing theory to explain how positive change can be achieved through the choice of appropriate public health indicators and practices, aimed at providing solutions to the health problems facing the world. The study used the theory to show how VMMC campaigns, as social marketing for social change tools are being applied in regions that have high HIV and AIDS prevalence in a bid to lower transmission of the disease and promote good health of the target population.

#### **4.8 Decision for the choice of VMMC**

On the reasons that informed the decision to undergo VMMC, there were varied reasons from the participants, which ranged from being coerced by local leaders, spouses insisting that the participants undertake the cut, peer influence, the desire to lower the risk of HIV and AIDS, hygiene and the aspiration to increase sexual pleasure.

Some of the sampled participants said;

*The mji kumi knew me and regarded me very highly as a responsible and law abiding youth who could be relied on to give direction to my peers, so he*



*approached me and insisted that I go for VMMC, saying that if I do he was sure that a good number of my friends will also follow suit.*

*My wife is from the neighbouring, circumcising community; so she took advantage of the campaign and insisted that I should go for it.*

*My boys and I had already shown a huge interest in this campaign, as we wanted to end the mockery, so when the opportunity came, we took advantage, especially given that we did not have to incur any expenses.*

*There have been all these myths about circumcised men having a superior sexual advantage and satisfaction, with women approving the same, so I thought it was worth going for the cut as well.*

*Circumcision goes beyond preventing the spread of HIV and AIDS, as it contributes greatly to one's overall hygiene.*

*It is good to support government initiatives that are aimed at controlling the spread of diseases that have continued to destabilise families, leading to increased poverty rates.*

From the findings, majority of the targeted respondents said that they were forced by local leaders to go for the service. Others said they were coerced into going for the campaign by their spouse/lover, who insisted that they go for it. Other reasons for participating in the VMMC campaign included; it was the trend [influenced by peers/friends]. The participants further disagreed that the choice of VMMC was for hygiene purpose, with only a small group citing it as a reason for the circumcision. They also said that the knowledge provided for the goals of VMMC changed their stand and

attitude. It was also recommended that VMMC should be encouraged in communities where VMMC is low and further to the exercise, proper condom use needs to be encouraged.

This is in line with government intention, where in a bid to achieve desired results, while rolling out VMMC the Ministry of Health used Kenya's Prime Minister, Honourable Raila Odinga who launched the campaign for HIV prevention programme in 2008 following intense public consultations among various stakeholders, including youths, religious leaders, women's groups, professionals, and the Luo Council of Elders [CDC, 2012].

The Social Marketing theory seeks to give an insight into what makes the behaviours of the consumers, in this case the target audience and the services being offered, [VMMC] attractive, relevant, and compelling. It aims at creating a reassurance that the ideas and tactics identified are appealing, fit into their lives, meet relevant needs, and solve problems from the people's point of view [controlling the spread of HIV and AIDS]. The theory seeks to highlight the traditional marketing four P's; Product, Price, Place and Promotion. They highlight targeted behaviours, location, services being offered, accessibility and opportunities, actual and perceived benefits including incentives and costs of behaviour change. It further underscores the communication strategy to be used, where it is believed that for a campaign to achieve its intended goal the solution lies with the mass media campaign adopted [Lefebvre, 1999].

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 Introduction**

This chapter presents summary, conclusion and recommendations on the assessment of the impact of voluntary medical male circumcision campaign on curbing the spread of HIV and AIDS:

#### **5.1 Summary of the study**

The researcher used case study design where the research structure included intensive and in-depth investigation on an issue at hand, using a relatively small sample. The study targeted the Luo community that resides in Karateng' Location, due to its traditional cultural practice of not circumcising males. The participants were randomly selected from Karateng' Location and its environs. The researcher used purposive sampling, targeting the opinion leaders, doctors and nurses, as they have been selected to spearhead VMMC campaign. The study was conducted by the researcher using prepared interview schedules and guides for data collection. The tools were personally administered to intended participants by the researcher, and were then analysed, each according to the opinion of the participants. The responses were counted, the frequencies calculated, and percentages and mean scores obtained.

## **5.2 Summary of the findings**

The study showed that majority of the participants were males while a small proportion of the participants were females. Most of the participants were young people aged 18-23 years, with the other age groups also having taken part in the study, with the representation of those aged 30-35 years, 24-29 years and another group comprised of participants aged over 42 years old, and a smaller group saying they were in the 36-41 years age bracket. This showed that majority of study participants in Karateng' village of Kisumu County fell within the age bracket of below 23 years.

The findings further showed that majority of the participants were from the Luo ethnic community, followed by those who said they were from the Luhya community, while a smaller portion of the participants said they were from other tribes. Majority of the participants' level of education was secondary school. There were participants who said that their level of education was university qualification, a section of the sample was drawn from tertiary institutions, while post graduate and primary school education levels were also represented in the study.

According to findings majority of the participants learned about VMMC through the radio, another group said it learned about the campaign through peers and television, while another set of the participants said it was informed by county administration (chiefs, sub chiefs and village elders).

Majority of the participants said they had prior knowledge of their HIV and AIDS status before going for VMMC, with a smaller group saying it had no prior knowledge of its HIV status before going for VMMC.

According to the findings, majority of the participants sought to know their HIV status after going through VMMC, with a smaller group saying it did not go for testing after VMMC.

The study findings showed that majority of the participants said they had changed their sexual behaviour as result of VMMC with a smaller group saying it had not changed its sexual behaviour after undergoing VMMC. This showed that VMMC has led to change in sexual behaviour in the Luo community.

Majority of the participants believed that VMMC reduces the risk of contracting HIV and AIDS while a minimal group saying it did not agree that VMMC can reduce the risk of contracting HIV and AIDS. The participants indicated that VMMC reduced the risk of contracting HIV and AIDS by up to 60 percent for circumcised men.

The key informant interviews, who included clinical officers, nurses and laboratory technicians, who supplemented the researcher's field experience, indicated that it was not a prerequisite requirement for individuals to have gone for HIV testing prior to accessing VMMC. The informants agreed that VMMC could have an immediate impact on HIV transmission; they said that they make follow-ups on the individuals who go for VMMC to ascertain their behaviour change. They said that given the health and economic benefits of investing in VMMC, the campaign should continue to be a central component of the national HIV prevention strategy in Kisumu County.

Majority of the respondents agreed strongly that VMMC has led to increased careless sexual behaviour amongst men who have been circumcised. They also said that since the start of VMMC campaign, the rate of HIV and AIDS infection within Karateng' village

has drastically reduced. Others said that VMMC is a critical intervention in the fight against HIV and AIDS. Some of the participants strongly disagreed that VMMC campaign only can completely prevent someone from contracting HIV and AIDS, and said that the campaign was only part of the solution.

Majority of the respondents strongly agreed that there were varied VMMC materials to enable different people choose their preferred mode of knowledge acquisition, and cited the various channels that were available for people to access the information. Others said that VMMC knowledge and its impact on HIV and AIDS was adequately communicated and; that other appropriate interventions that compliment VMMC were singled out.

The participants agreed strongly that VMMC campaign should be rolled out amongst all men to reduce HIV and AIDS prevalence, they said that there is need for enhanced women involvement in VMMC campaign to increase its success rate, and; that the current level of information on VMMC should be enhanced to ensure an effective campaign. However, respondents strongly disagreed that VMMC is foreign ideology that goes against traditional cultural beliefs and practices, which should be abolished. They said that although some communities do not practice male circumcision, the practice is an age old exercise.

Majority of the targeted participants strongly agreed that they were forced by local leaders to go for the service; others said that they went for the exercise after being coerced by their spouse/lover, who they said insisted that they go for; others said that they went for it because it was the trend [influenced by peers/friends]. Majority of them

disagreed that the choice of VMMC was for hygiene purpose and that the knowledge provided for the goals of VMMC changed their stand and attitude towards VMMC.

### **5.3 Conclusions**

The study concluded that more males than females were involved in the study; an indicator that there is possibility of biasness in the feedback and that majority of respondents were from the Luo community.

The study concluded that most respondents had attained basic education level and thus were well informed to make informed decisions.

Radio is the main mode of communication aiding the VMMC programme, which is enhancing appropriate uptake of the services that are aimed at improving VMMC programme and helping to lower the HIV and AIDS prevalence among the Luo community.

That VMMC had changed sexual behaviour in majority of the Luo community. Most of the participants indicated that due to VMMC they had resorted to abstaining from sex. That VMMC has led to increased careless sexual behaviour amongst men who have been circumcised and that since the start of VMMC campaign, the rate of HIV and AIDS infection within Karateng' village has drastically reduced. That VMMC is a critical intervention in the fight against HIV and AIDS.

The current level of information on VMMC should be enhanced to ensure an effective campaign and that the choice of VMMC was not for hygiene purpose. That the knowledge provided for the goals of VMMC needs to be increased; and finally, given the

health and economic benefits of investing in VMMC, the campaign should continue to be a central component of the national HIV prevention strategy in Kisumu County.

#### **5.4 Recommendations**

- i. Perhaps the most crucial recommendation in this study is that the messaging in promoting circumcision as an HIV intervention needs to be increased and clarified, while being approached with caution.

First, 60 percent relative risk reduction is not accurate and people should not be told about this figure because it may be misleading to some of them. People have different levels of education and such figures may mean many different things to different people.

- ii. The study highly recommends that other than radio as a mode of communication aiding the VMMC programme and uptake of services, other forms of communication should be devised at local level to create more awareness, and further clarify that the practice partially reduces the possibility of transmitting HIV and AIDS, and that it should be applied with other interventions such as abstinence and condom use, while stressing on the need for enhanced HIV testing, while highlighting risky behaviours such sex with multiple partners without protection and wife inheritance .

- iii. Targeting older men to get circumcised has been a tough task. From data collected in this study it is clear that younger men are more willing to be circumcised. In order for the VMMC implementers and health planners to boost VMMC uptake, more



resources should be availed to circumcise younger men, while customising messages that will appeal to older men to get circumcised. Peer influence, constant campaigns, group behaviour and other factors seem to be more effective with school going males. However, this should be approached with caution and parental sensitisation must be enhanced to enhance their consent for the younger males.

- iv. Quantitative research has been the most dominant in medical male circumcision and the meaning of circumcision has been de-contextualised. Perceptions of Kenyans regarding circumcision are the back bone in the success of the intervention. The context is crucial in understanding phenomena and circumcision as an HIV intervention has taken a biomedical perspective without really considering the context. Circumcision as an HIV intervention is relatively new and more studies need to be carried out to better understand it because it is clear that there are plenty lacunae that need to be filled.
- v. The study also recommends that the government and the Ministry of Health should allocate adequate financial resources to ensure VMMC practice is implemented.
- vi. The study further recommends that more females be included in the future studies to get their input as to whether they prefer to have sex with circumcised or uncircumcised men. Their responses will make the studies more inclusive and representative.

### **5.5 Suggestions for further research**

Since this study was on the assessment of the impact of voluntary medical male circumcision campaign on curbing the spread of HIV and AIDS in Karateng' village Kisumu County, the study recommends that;

- i. Similar studies should be done in other villages within Luo community for comparison purposes and to allow for generalisation of findings on the adoption of voluntary medical male circumcision in curbing the spread of HIV and AIDS.
- ii. Findings from this study could help to frame questions asked in future studies, as well as provide a framework for interpreting data from larger studies

## REFERENCES

- Auvert B, Taljiaard 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. *PLoS Med.* 2005; 2(11):1112–1122.
- 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.
- Black JM, Hawks JH, Keene AM. *Medical surgical nursing.* 6<sup>th</sup>ed. Philadelphia: Elsevier Mosby; 2006.
- Government of Kenya, Ministry of Public Health and Sanitation National AIDS and STI Control Programme: Progress report on Kenya's voluntary medical male circumcision programme, 2008–2009: Summary. 2010. pp. 1–14.
- Government of Kenya, Ministry of Public Health and Sanitation. Voluntary Medical male circumcision (VMMC) communication guide for Nyanza Province. 2010.
- Gray RH, Kigozi G, Serwadda D, Makumbi F, Watya S, Nalugoda F, Kiwanuka N, Moulton LH, Chaudhary MA, Chen MZ, Sewankambo NK, Wabwire-Mangen F, Bacon MC, Williams CFM, Opendi P, Reynolds S, Laeyendecker O, Quinn TC, Wawer MJ. Male circumcision for HIV prevention in Rakai, Uganda: A randomised trial. *Lancet.* 2007; 369(9562):658–666.
- HSRC. South African national HIV prevalence, incidence, behaviour and communication Survey 2008: Turning the tide among teenagers?  
<http://www.nursing.umich.edu/faculty-staff/nola-j-pender>

- Joint United Nations Programme on HIV/AIDS (UNAIDS) AIDS scorecards: overview: UNAIDS report on the global AIDS epidemic 2010.
- Marriner TA, Raile AM. (2005) Nursing theorists and their work. 5<sup>th</sup>ed. Sakraida T. Nola J. Pender. The Health Promotion Model. St Louis: Mosby;
- Muthivhl E, Sodi T, Maunganidze L, Mudhovozi P. Knowledge, attitudes and perceptions of HIV and AIDS by rural South African secondary school learners. J Psychol Africa. 2011; 21:4.
- National AIDS Control Council. [http://www.nacc.or.ke/index.php?option=com\\_content&view=article&id=250:kenya-leads-in-voluntary-medical-male-circumcision&catid=107:news&Itemid=174](http://www.nacc.or.ke/index.php?option=com_content&view=article&id=250:kenya-leads-in-voluntary-medical-male-circumcision&catid=107:news&Itemid=174).
- Ndati N. Interpersonal communication and HIV/AIDS: Influencing behavioural responses to HIV amongst students in Nairobi, Nairobi Academic Press; 2013.
- Ndiwane AN. Community health, media, and policy in Sub-Saharan Africa: A primary prevention approach to the AIDS crisis. ABNFJ. 2000; 11(4):83–87. [[PubMed](#)]
- Palmgreen P, Noar SM, Zimmerman RS. In: Communication Perspectives on HIV/AIDS for the 21st Century. 1. Edgar T, Noar S, Freimuth VS, editor. Routledge, New York; 2007. Mass media campaigns as a tool for HIV prevention; pp. 221–252.
- Polit DF, Beck CT. (2007) Nursing research: Principles and methods. 7<sup>th</sup> ed. Philadelphia: Lippincott Williams & Wilkins.
- Potter PA, Perry AG. (2013) Fundamentals of nursing. 6<sup>th</sup>ed. St. Louis: Elsevier Mosby; 2006.
- Rebecca Hershow International Initiative for Impact Evaluation report;

- Rennie S, Muula AS, Westreich D. Male circumcision and HIV prevention: Ethical, medical and public health trade-offs in low-income countries. *J Med Ethics*. 2007; 33:357–361. doi: 10.1136/jme.2006.019901.
- Rothman AJ, Salvoey P. Shaping perceptions to motivate health behaviour: The role of message framing. *PsycholBull*. 1997; 121(1):3–19. [[PubMed](#)]
- Wang AL, Duke W, Schmid GP. Print media reporting of male circumcision for preventing HIV infection in sub-Saharan Africa. *B World Health Organ*. 2009; 87:8. doi: 10.2471/BLT.09.030109. [[PMC free article](#)] [[PubMed](#)] [[Cross Ref](#)]
- World Health Organization (WHO) Joint United Nations Programme on HIV/AIDS (UNAIDS) New data on male circumcision and HIV prevention: Policy and programme implications. 2007. pp. 3–10.

## APPENDIX I: INTERVIEW SCHEDULE

### An interview schedule for an assessment of the impact of Voluntary Medical Male

#### Circumcision

##### Section A –Background information

This section of the interview refers to background information. The researcher wishes to assure you that your response will remain anonymous. Your cooperation is appreciated.

1. Gender

Male

Female

2. Age:

[18-23]

[24-29]

[30-35]

[36-41]

[42 and above]

3. Ethnicity

Luo

Luhya

Other [specify] \_\_\_\_\_

4. Profession \_\_\_\_\_

5. Your highest educational qualification

Primary

- Secondary
- Tertiary college
- University
- Post-Graduate Degree

6. Residence \_\_\_\_\_

**Section B Knowledge on VMMC and its impact on HIV and AIDS**

7. How did you first learn about VMMC? Through

Radio

County administrator [chief, sub chief, village elder]

Television

Peers

Internet

Others [Specify] \_\_\_\_\_

8. Please give appropriate response to the questions below and state reason for your response where appropriate;

I. Did you know your HIV status prior to going for VMMC?

II. Have you gone for testing after VMMC?

III. Has VMMC changed your sexual behaviour?

Reason for your answer

IV. Does VMMC reduce the risk of contracting HIV and AIDS?

Reason for your answer

V. Would you recommend VMMC to other uncircumcised men?

Reason for your answer

9. Please state your knowledge level on VMMC and its impact to the fight against HIV and AIDS

I. VMMC campaign only can completely prevent someone from contracting HIV and AIDS



- II. VMMC is a critical intervention in the fight against HIV and AIDS
  
- III. Since the start of VMMC campaign, the rate of infection Within Karateng' village  
has drastically reduced
  
- IV. VMMC has contributed to positive behaviour change among sexually active  
males
  
- V. VMMC has led to increased careless sexual behaviours amongst men who have  
been circumcised

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Section C communication on VMMC and personal preferences**

10. Please state your level of satisfaction on how VMMC information was conveyed

- I. VMMC knowledge and its impact on HIV and AIDS was adequately  
communicated

- II. The impact of VMMC on prevention of HIV and AIDS transmission was well explained
- III. The gaps in fighting HIV and AIDS using VMMC campaign was well spelled out
- IV. Other appropriate interventions that compliment VMMC were singled out
- V. There were varied VMMC materials to enable different people choose their preferred mode of knowledge acquisition

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. What answer best suits your personal stand on VMMC;

- i. VMMC campaign should be rolled out amongst all men to reduce
- ii. HIV and AIDS prevalence
- iii. The current level of information on VMMC should be
- iv. enhanced to ensure an effective campaign
- v. Media need to play a more active role in educating public on VMMC

- vi. There is need for enhanced women involvement in VMMC campaign
- vii. to increase its success rate
- viii. VMMC is a foreign ideology that goes against traditional cultural
- ix. beliefs and practices, which should be abolished

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. What reasons best describe your choice to go for VMMC;

I went for VMMC;

- i. To lower the high risk of contracting HIV and AIDS
- ii. For increased sexual pleasure
- iii. It was the trend [influenced by peers/friends]
- iv. For hygiene purpose
- v. I was forced by local leaders to go for the service
- vi. My spouse/lover insisted that I go for it

- vii. I already knew my status and thought this was the right decision to undertake
- viii. The knowledge provided for the goals of VMMC changed my stand and attitude

13. Any other comments

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## APPENDIX II: INTERVIEW GUIDE

### An interview guide for an assessment of the impact of Voluntary Medical Male

#### Circumcision

##### **Section A – Background information**

This section of the interview refers to background information. The researcher wishes to assure you that your response will remain anonymous. Your cooperation is appreciated.

##### 1. Gender

Male

Female

##### 2. Age:

[18-23]

[24-29]

[30-35]

[36-41]

[42 and above]

3. Profession \_\_\_\_\_

4. Highest educational qualification?

Primary

Secondary

Tertiary college

University

Post-Graduate Degree

5. Residence \_\_\_\_\_

**Section B Knowledge on VMMC and its impact on HIV and AIDS**

6. How did you first learn about VMMC? Through

Radio

County administrator [chief, sub chief, village elder]

Television

Peers

Internet

Others [Specify] \_\_\_\_\_

7. Please state your appropriate response to the questions below and give reason for your response where appropriate;

- I. Is it mandatory for people who access VMMC to go for HIV and AIDS testing?
- II. Have all the people who access VMMC been tested for HIV and AIDS?
- III. Has VMMC changed the sexual behaviour of target population?
- IV. Does VMMC reduce the risk of contracting HIV and AIDS?
- V. Do you make follow ups on people who go for VMMC to establish behaviour change?

After how long

VI. Would you recommend VMMC to other uncircumcised men as an intervention to preventing HIV and AIDS?

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Please state your knowledge level on VMMC and its impact to the fight against HIV and AIDS

VI. VMMC campaign only can completely prevent someone from contracting HIV and AIDS

VII. VMMC is a critical intervention in the fight against HIV and AIDS

VIII. Since the start of VMMC campaign, the rate of infection Within Karateng' village has drastically reduced

IX. VMMC has contributed to positive behaviour change among sexually active males



- X. VMMC has led to increased careless sexual behaviours amongst men who have been circumcised

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Section C communication on VMMC and personal preferences**

9. Please state your level of satisfaction on how VMMC information was conveyed

- VI. VMMC knowledge and its impact on HIV and AIDS has adequately been communicated
- VII. The impact of VMMC on prevention of HIV and AIDS transmission has been well explained
- VIII. The gaps in fighting HIV and AIDS using VMMC campaign has been well spelled out

IX. Other appropriate interventions that compliment VMMC have been clearly  
singled out

X. There are varied, adequate VMMC materials to enable different people choose  
their preferred mode of knowledge acquisition

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. State the answer that best suits your personal stand on VMMC;

- I. VMMC campaign should be rolled out amongst all men to reduce HIV and AIDS  
prevalence
- II. The current level of information on VMMC should be enhanced to ensure an  
effective campaign
- III. Media need to play a more active role in educating public on VMMC
- IV. There is need for enhanced women involvement in VMMC campaign to increase  
its success rate

V. VMMC is a foreign ideology that goes against traditional cultural beliefs and practices, which should be abolished

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Please give the reason that best describes the choice for VMMC;

- i. Helps in lowering the high risk of contracting HIV and AIDS increases sexual pleasure
  
- ii. Is the trend [influenced by peers/friends]
  
- iii. Is good for hygiene
  
- iv. Is performed to meet the demands of local leaders who advocate for it

- v. Is done to appease spouse/lover who insist on it
  
- vi. Population already knew HIV and AIDS status, which influenced the decision for the act
  
- vii. The knowledge provided for the goals of VMMC influence the stand and attitude towards the practice

12. Any other comment

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