

THE INFLUENCE OF VOLUNTARY MEDICAL MALE
CIRCUMCISION ON HIV RELATED RISK BEHAVIOURS AND
PERCEPTIONS AMONG YOUNG WOMEN (18-24YRS) IN
MANYATTA "A" SUB-LOCATION, KISUMU CITY, KENYA

BY

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A RESEARCH REPORT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF
ARTS IN SOCIAL DEVELOPMENT AND MANAGEMENT

SCHOOL OF ARTS AND SOCIAL SCIENCES

MASENO UNIVERSITY

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ABSTRACT

Voluntary Medical Male Circumcision (VMMC) reduces risk of HIV acquisition in heterosexual relationships. Kenya adopted VMMC as an HIV prevention strategy in 2008 and has been making significant progress towards achievement of its circumcision targets. In Kenya, Nyanza region with the highest HIV prevalence and lowest male circumcision prevalence has been the focus of VMMC activities. The focus of research around VMMC and VMMC associated activities such as HIV education and counseling about the partial protection of VMMC have only targeted men. It remains largely unclear if VMMC has any influence on HIV related risk behaviours and perceptions amongst women and in particular young women (18-24yrs) from the informal settlements who, due to various factors, are susceptible to risky sexual behaviours. The purpose of this study was to explore the influence of VMMC on HIV related risk behaviours and perceptions among young women aged 18-24yrs in Manyatta "A" sub-Location, Kisumu City. The specific objectives were to, determine the level of awareness of VMMC as an HIV prevention strategy among young women (18-24 yrs) in Manyatta "A" sub-Location; establish behaviours and perceptions that reduce HIV prevalence among young women aged 18-24yrs women in Manyatta 'A' sub-Location; and, find out the extent of involvement in VMMC activities in Manyatta 'A' sub-Location. The study employed a cross sectional descriptive study design. The study targeted young women (18-24 yrs) living in Manyatta "A" sub-Location, Kisumu East constituency, Kisumu City. Snowball technique was used to sample 384 respondents. Both quantitative and qualitative data were collected using household questionnaires, focus group discussions and key informant interviews. Descriptive statistics were used to analyze data quantitatively in the form of percentages and frequencies while qualitative data was coded and analyzed along the key thematic issues informed by the study objectives. The findings indicated 72.7% did not have the factual knowledge on the importance of VMMC to women. On behaviours that reduce HIV on women, 70.4% of respondents indicated that condom use even with circumcised men was a strategy that reduces HIV infection risk. 63.9% of respondents indicated that continued involvement in other prevention programs could reduce HIV infection in women in view of partial protection of VMMC. On the extent of women involvement in VMMC as HIV prevention strategy 52.3% of respondents indicated that they attend counseling sessions with their partners to help them deal with fear and masculine pride. The study concludes that there is enough awareness about VMMC. The message content of VMMC however is not detailed and therefore targeted audience does not have factual information about VMMC. Condom use and involvement in other prevention programs such as sexually transmitted infection screening and treatment for both men and women were behaviours identified by the respondents as reducing HIV infection risk. The study recommended that government and other stakeholders should formulate a policy that would ensure that factual information of VMMC reaches the targeted audience through electronic media such as radio and television which was preferred by the respondents.

CHAPTER ONE

INTRODUCTION

This chapter highlights the background of the study, statement of the problem, the objectives of the study, the research questions, and justification of the study. It also highlights the scope and limitations of the study. All the thematic areas highlighted in this chapter relate to influence of Voluntary Medical Male Circumcision (VMMC) on HIV related risks behaviours and perceptions among young women.

1.1 Background to the Study

Male circumcision is the full or partial removal of the foreskin on a male penis. Male circumcision has always been contested terrain, with opinions differing sharply as to its aesthetics, social and other benefits (Aggleton, 2007). The practice of male circumcision in itself is an age-old custom that is practiced globally for cultural and religious reasons. In sub-Saharan Africa, an estimated 62% males are circumcised, either at birth or at early adolescence. The association between male circumcision and HIV was informed by observational studies from as early as 1986 (Alcena, 1986) which seemed to indicate that HIV/AIDS prevalence was low in communities that practice male circumcision.

Following up on the observational studies, three male circumcision randomized controlled trials were conducted in South Africa, Kenya and Uganda. Findings from the 3 studies were consistent; that medical male circumcision (MMC) is safe and reduce the risk of HIV acquisition in heterosexual men by approximately 60% (Bailey, 2007). Based on these findings, the World Health Organization (WHO) recommended that male circumcision be adopted as one of the evidence-based strategies for HIV prevention (WHO/UNAIDS, 2007) for countries (and region within countries) with high HIV/AIDS prevalence and low male circumcision prevalence and where the primary mode of transmission is heterosexual. Several sub-Saharan Africa countries such as Kenya, South Africa, Tanzania, Zimbabwe and Zambia are at different stages of rolling out provision of safe Voluntary Medical Male

Circumcision as an HIV prevention strategy. VMMC is provided as part of a comprehensive HIV prevention package that is defined by WHO to include; screening and treatment of sexually transmitted infections (STIs), promotion of sexual partner reduction, correct and consistent male and female condom use, HIV testing and counseling, and active referral of HIV-positive clients to care and treatment (WHO, 2007).

The scale up of VMMC was accompanied by a number of operation and implementation research studies to respond to emerging issues and to inform roll-out of such activities in different contexts. The concepts of risk compensation and behavioral inhibition were some of the priority implementation areas for researchers, HIV/AIDS advocates, anthropologist and social scientists. Concern was raised regarding the possibility of risk compensation and behavioral inhibitions among men who received circumcision where men feeling safer would increase the number of sexual partners or engage in more HIV risk behaviours such as unprotected sex in the belief that they were completely protected from HIV acquisition (Reiss, 2010).

Initial research around the three randomized controlled trials thereafter showed that both circumcised and uncircumcised men reduced their risk behaviours during the course of study follow-ups (Eaton, 2011) with uncircumcised men having a higher decrease. Additionally, follow-up research operations studies have not provided evidence of risk compensation. This absence of risk compensation was attributed to persistent risk reduction counseling. However, none of these research studies was done among women and the concept of risk compensation has therefore largely remained unclear for women including young women who are sexually active and whose partners have undergone circumcision. While it is expected that women will benefit in the long term if HIV prevalence among men is reduced (Gostin & Hankins, 2008), evidence of the direct impact of MMC to women has been inconsistent. The absence of knowledge on the influence of VMMC on women's HIV related risk behaviours and perceptions and in view of conflicting evidence, the introduction and roll-out of MMC for HIV prevention also has the potential to impact negatively on women, especially in the context of community and/or individual beliefs that male circumcision is

completely protective against HIV, and eliminates the need for other risk reduction strategies. Consequently, the overall noble aim of VMMC may be watered down or be counterproductive without evidence based interventions directly targeting risk compensation amongst young women and in settings where such women are most vulnerable to HIV/AIDS.

Kenya's Ministry of Health endorsed the position taken by WHO through a policy document – the National Guidance on Medical Male Circumcision (NACC, 2008) in 2008. The National Medical Male Circumcision Taskforce was formed to spearhead the planned rollout of MMC as part of a comprehensive package In the current Kenya National AIDS Strategic Plan III (KNASP-III) 2009/10-2012/13 (National Aids Control Council, 2009), VMMC has been included and given a goal of getting 80% of currently uncircumcised men circumcised by 2013, to raise the national prevalence of male circumcision from the current 85% to 94% (National Aids Control Council, 2009,. By the end of September 2010, slightly over 150,000 circumcisions had been performed in Kenya for HIV prevention (out of an estimated national target of 860,000 men. Over 95% had been circumcised in Nyanza Region (Nyanza Provincial MC Taskforce Monthly Report, 2011).

Nyanza region in Kenya was given priority in VMMC rollout as the region with the highest HIV prevalence and lowest male circumcision prevalence. HIV prevalence in the districts occupied by the Luo people - the dominant ethnic community in the region and third nationally – was 20.2% in 2008/09 (17.1% in men and 22.8% in women). The Kenya Modes of Transmission study (2008) provides that sub-populations and risk behaviours accounting for more than 80% of HIV prevalence in Nyanza region are the fishing community (20%), casual heterosexual sex (20%), partners of casual heterosexual sex (17%), steady sexual partners (11%) and men who have sex with men (6%). The region's epidemic is made worse by the absence of male circumcision, the practice of widow inheritance, polygamy and other forms of concurrent relationships (Obure, 2011).

Youth from Nyanza region are more affected by HIV than youth in other regions. According to the latest KDHS report (KDHS, 2008-9) HIV prevalence among youth aged 15-24 years in Nyanza region was 7.5% (11.4% women and 3.1% men) compared to 2.4% (4.5% in women

and 0.3% in men) in adjacent Western region and 2.9% (4.5 in women and 1.1% in men). Further, a study conducted in Kisumu, Kenya and Ndola, Zambia (Glyn, 2001) indicated that in Kisumu, 26% of individuals were HIV-positive. In both sites, HIV prevalence in women was six times that in men among sexually active 15-19 year olds, three times that in men among 20-24 year olds, and equal to that in men among 25-49 year olds. HIV prevalence was very high even among women who reported that they had one lifetime partner and few episodes of sexual intercourse.

In 2006, official statistics showed that the prevalence rate in Kisumu City, which is the major town in Nyanza region, was 15% or higher while the Kisumu District's prevalence rate was 11.1% (WHO, 2007). According to the Kisumu East District Development Plan, in 2008 the HIV prevalence rate in Kisumu City was still 15% more than double the national prevalence rate of 7.4% while the District rate remained roughly the same as in 2006, at 11.2% (GoK, 2009). Manyatta "A" is one of the largest slums in Kisumu. In Kisumu's slum areas, HIV/AIDS remains a major social challenge. In Manyatta sub-Location, orphans and widows stand as the living legacy of the effect that HIV/AIDS has had on the community (UN-HABITAT, 2006). Given the high HIV prevalence in Kisumu and amongst women in particular coupled with the susceptibility of slums areas to the devastating effects of HIV/AIDS, this study explored the influence of VMMC on HIV related risk behaviours and perceptions amongst young women (18-24yrs) in a Kisumu urban slum, Manyatta "A" sub-Location.

1.2 Statement of the Problem

The absence of knowledge on the influence of VMMC on women's HIV related behaviours and perception among young women has led to outcry among stakeholders in HIV mitigation, yet an empirical research can be conducted to separate fact from fiction (Gostin & Hankins, 2008). None of the research studies around the three trials examined risk compensation including the Kisumu trial. A recent study by Dupas (2011) has demonstrated that women alter partner choice in response to information on the prevalence of HIV. It could be that these responses to risk information can extend to circumcision as well. In the absence of proper counseling and full information about the HIV protective benefits of circumcision,

women may perceive that their potential male partner has a lower probability of being HIV positive, and thereby be more likely to engage in risky sexual behaviours with those who have undergone VMMC. This study therefore seeks to explore changes in risk taking behaviours and perceptions of risk among young women 18-24 years living in Manyatta “A” sub-Location, an area in Kisumu where male circumcision has been highly publicized as an HIV prevention strategy and yet women are not directly targeted for HIV education in relation to VMMC.

1.3 Objective of the study

The main objective of this study was to examine the influence of Voluntary Medical Male Circumcision (VMMC) on HIV related risks behavior and perceptions among young women (18-24 years) in Manyatta “A” sub-Location, Kisumu City, Kenya.

The study was guided by the following specific objectives:

- i. To determine the level of awareness of VMMC as an HIV prevention strategy among young women (18-24 yrs) in Manyatta “A” sub-Location.
- ii. To establish behaviours and perceptions that reduces HIV prevalence among young (18-24yrs) women in Manyatta “A” sub-Location.
- iii. To find out the extent of women (18-24yrs) involvement in VMMC activities in Manyatta “A” sub-Location.

1.4 Research Questions

The study’s expected outcomes were achieved through a concerted effort to finding solutions to the following set of research questions;

- 1) What is the level of awareness of VMMC as an HIV prevention strategy among young women (18-24yrs) in Manyatta “A” sub-Location?

- 2 What are the behaviours and perceptions that reduce HIV prevalence among young (18-24yrs) women in Manyatta “A” sub-Location?
- 3 To what extent do women (18-24yrs) involve themselves in VMMC activities in Manyatta “A” sub-Location?

1.5 Justification of the study

Research around male circumcision has only focused on men. Male circumcision associated activities including HIV education and counseling has also only focused on men leaving women as secondary beneficiaries. In Nyanza region, promotion of VMMC for HIV prevention has been intensive with multiple media strategies such as radio and print being employed to create demand for the service. Due to the publicity, it is inevitable that women too have received some information on VMMC for HIV prevention. It still remains largely unknown how women in the region have interpreted this information.

The choice of an urban slum area as the study location is for the reason that research has shown that women in slums face certain vulnerabilities that make them susceptible to HIV/AIDS acquisition. Research provides evidence suggesting that deteriorating economic and living conditions in urban areas have increased the likelihood that women, especially adolescent girls, will engage in behavior which will make them susceptible to HIV infection/AIDS (Zulu, 2002). Similar research has shown that low socioeconomic status and gender inequality explain the involvement of women in risky sexual behaviour, such as commercial sex work. Therefore, extreme conditions of poverty in urban slum communities may compel residents, especially adolescents, to engage in risky sexual behaviours as opposed to getting the perceived indirect benefits as a result of VMMC (Adebola, 2007). Thus, this study aimed at exploring ways in which VMMC has influenced HIV related risk behaviours and perceptions in women specifically from the slums and the findings thereof could be used to inform provision of VMMC in similar settings.

1.6 Scope and limitation of the study

This study will focus on the influence of voluntary medical male circumcision on risk behaviours and perceptions amongst young women (18-24 yrs). The study was limited to Manyatta “A” sub-Location, Kisumu East District of Kisumu City which is part of the larger Nyanza region where the focus of VMMC activities has been since its rollout in Kenya in 2008. The findings from this study are limited to the geographical area and age group and generalization can therefore not be made based on these findings.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focused on the literature review related to the influence of Voluntary Medical Male Circumcision on HIV related behaviours and perceptions among young women. In particular, literature was obtained on the following thematic areas: the level of awareness of VMMC as an HIV prevention strategy amongst women, behaviours that reduce HIV prevalence among women and the extent of women involvement in VMMC activities.

2.2 Level of Awareness of VMMC among young women

The level of knowledge that women have regarding VMMC as an HIV prevention strategy may influence their decisions about sexual activities that they engage in.

2.2.1 Voluntary Medical Male Circumcision (VMMC) defined

About one-third of the males worldwide are circumcised. The procedure is more prevalent in the Muslim world and Israel (where it is near-universal), the United States and parts of Southeast Asia and Africa; it is relatively rare in Europe, Latin America, parts of Southern Asia and Africa. Empirical studies have shown that voluntary medical male circumcision reduces the risks of men acquiring HIV infection by 60 percent (Dupas, 2004).

World health organization (2007) defines Voluntary Medical Male Circumcision as the surgical removal of the foreskin of the penis which is also one of the oldest surgical procedures. Bailey (2007) concurs that it is the surgical removal of the foreskin (prepuce) from human penis. In a typical procedure, the foreskin is opened and then separated from the glands after inspection. The circumcision device (if used) is placed, and then the foreskin is removed. Topical or locally injected anaesthesia may be used to reduce pain and physiological stress.

2.2.2 Communication Strategy

According to Baeten (2009) women are an important constituency who should be targeted by the communication strategy, which will support efforts to prevent the acquisition of HIV by men from women after VMMC. Communication about this protective effect must not encourage people to view women as “vectors” of the disease and therefore increase the blame and stigma directed at HIV-positive women.

Another concern for women is the potential for risk compensation, which would put circumcised men and their female partners at increased risk of HIV infection. There should be efforts to provide education to both men and women on gender equity and shared sexual decision making to increase the awareness of VMMC. Furthermore, efforts must be made to engage women in discussions about what having a circumcised partner may mean for their sexual lives (Westercamp & Bailey, 2007).

Dikson (2007) posits that the central messages of the communication campaign should focus on the health benefits of the procedure not only to men but also women: the reduction in risk of acquisition of HIV and some STIs; cultural neutrality: that male circumcision is not a marker of cultural identity, but a health intervention for HIV prevention; safety: the procedure is very safe when it is provided by appropriately trained and equipped health workers in aseptic conditions; comprehensive prevention: male circumcision is part of a package of other known means of preventing the acquisition of HIV and other STIs. This literature however is not exhaustive on what communication campaign should focus on.

Advocacy is an integral part of awareness creation. Advocacy therefore needs a special and continuing focus given the connotations and passions that VMMC raises in the society. Efforts in advocacy should aim to cultivate positive attitudes towards the roll-out of VMMC services, which will translate into greater commitment to ensuring that the process achieves its objectives. This advocacy should target various actors, including political and cultural leaders, health managers, key community gatekeepers and health workers (Hallet, 2011).

Matovu (2007) concurs that advocacy is critical that health workers, who are usually trusted sources of health information, are empowered with the correct knowledge and with

supportive attitudes toward male circumcision so that they can become advocates for the initiative of awareness creation. Health workers' negative attitudes toward new services as additional work (with no change in remuneration) must be addressed as part of any advocacy programme. Advocacy is also required to ensure that resources are not diverted from the other aspects of primary health care and HIV prevention to male circumcision. While advocacy may be important strategy for awareness creation among women, it may not be the best especially in urban slums.

Several organizations and agencies continue to provide information about VMMC through several channels including print media and radio. It is not clear, however, whether men and women understand messages about partial protection and the need to practice other HIV-protective behaviours after VMMC, since few studies have investigated this topic. One study conducted with men in Kenya found that participants understood that VMMC provided partial protection against HIV and other HIV protective measures were needed after VMMC, but few were able to accurately state the percentage reduction in HIV risk (Hallett, 2011). Interestingly, the channels of communicating messages as advocated by this literature cannot reach all the young women particularly those in the slums, and hence reduce awareness levels.

2.2.3 Knowledge of VMMC among women

While studies indicate relatively high levels of perceived knowledge about VMMC for HIV prevention, other studies also indicate that a significant number of women at a community level have never heard about it. This is of concern considering the fact that VMMC programmes are currently being rolled-out in many countries Africa (Auvert, 2005), Kenya included.

A study conducted by Creig (2008) in South Africa to determine knowledge levels among women, the data suggested that 'hearing' about VMMC for HIV prevention does not necessarily translate into having 'factual knowledge' about VMMC, such as the fact that VMMC is only partially protecting against HIV risk, the need for condom use after VMMC, and the need to abstain from sex during the period of wound healing. Thus, the data arguably confirmed the need for education and raising awareness about VMMC for HIV prevention

prior to the roll-out of VMMC programmes, as well as highlight the shortcomings of current information and messaging about the benefits of VMMC for HIV prevention.

The socio-cultural tensions around male circumcision and the exclusion of women from gaining access to information came through clearly in the data of another study conducted by Berer (2009). As traditional male circumcision was a ‘sacred’ and ‘secret’ male institution, women who wanted to access health and HIV information related to male circumcision practices faced many barriers, including the control of women’s information seeking behavior. Thus, for women to access, and act upon, information related to VMMC and HIV, the information must be specifically tailored for women, taking into account the socio-cultural context and the realities of women in both traditional and non-traditional male circumcising communities (Obure, 2011). These studies however fail to mention the age category of women and their economic status.

2.2.4 Perceived benefits of VMMC to Women

Women are an important audience for VMMC communication messages so that they know that VMMC provides only partial protection against HIV. They may also be able to influence their male partners to get circumcised and practice other HIV protective measures after VMMC more so if they have knowledge on the same (Auvert, 2005).

Voluntary Medical Male Circumcision provides partial HIV protection to men, reducing HIV acquisition by approximately 60 percent. Evidence is still emerging regarding the amount of HIV protection that VMMC provides to female partners. Early evidence did not show a direct protective effect of male circumcision on women’s HIV status. However, observational studies show that female partners of circumcised men have lower HIV incidence than female partners of uncircumcised men (Bailey et al., 2007).

Additionally, new mathematical models suggest that male circumcision may confer a 46 percent reduction in the rate of HIV transmission from men to their female partners, and that the benefits to women from VMMC may be larger and more important than originally anticipated, the more reason it must be intensified among women for them to enjoy full benefits of VMMC (Gray, 2007). This literature however fails to exhaust the benefits that

women can get from VMMC particularly if there is proper awareness. Wawer (2009) asserts that men must use other HIV protective measures with their female partners after VMMC to fully realize population-level benefits of VMMC on the HIV epidemic. Communication messages about partial protection and the need to use other HIV protection methods are stressed in VMMC community education events and pre-procedure counseling as part of VMMC scale up in Nyanza region, Kenya.

According to Matovu (2007), men are the main focus of VMMC education and information; however, female partners are also an important audience for two main reasons. First, understanding partial HIV protection from VMMC is essential so that women can make informed decisions about protecting themselves after a partner undergoes VMMC. While many women are hindered by gender inequalities and power differentials that limit their ability to negotiate safer sex, some women may be able to sway their sexual partners to practice other HIV protective measures after VMMC. Secondly, female partners influence men's decision to undergo medical circumcision and focusing on them as a specific communication audience could help increase VMMC uptake which has been slower than anticipated in most priority countries (WHO, 2007).

In the study, 5,000 uncircumcised HIV-negative men enrolled, together with their HIV-negative female partners. Then researchers randomly assigned men to be circumcised, either immediately or at the end of two years. Everyone was tested for infections at the beginning, middle and end of the study. Circumcised males had lower rates of HPV infection, likely because the procedure makes carrying the disease more difficult. And, as suspected, so did their female partners (Wawer, 2009). This study only concentrated on Human papillomavirus (HPV) leaving out other that could be reduced significantly as a result VMMC.

2.3 Behaviours that Reduce HIV Prevalence among Women

HIV testing is the first critical step to ending the HIV epidemic and the United States Centers for Disease Control (CDC) recommends that all Americans aged 13-64yrs get tested at least once for HIV as a routine part of medical care, and that gay and bisexual men and others at high risk get tested at least once a year. HIV testing is the only way to identify the nearly one

in five Americans currently living with HIV who do not know they are infected and may be unknowingly transmitting the virus to others. Knowledge of HIV status is empowering. When people test negative, they are in a better position to assess – and can modify – their risk behaviours to help them stay un-infected (Gray, 2007).

When people learn they are infected or likely to be infected, research shows that they take steps to protect their own health and prevent HIV transmission to others. In addition, linkage to care following a positive test helps ensure people living with HIV receive life-saving medical care and treatment, and helps reduce their risk of transmitting HIV. Antiretroviral medications used to treat HIV can also be used in preventing mother-to-child transmission. Administering antiretroviral medications to HIV-infected pregnant women and their newborns significantly reduces the risk of HIV transmission to infants during pregnancy, labor and delivery, and breastfeeding (Siegfried, 2009).

When used consistently and correctly, latex condoms are highly effective in preventing sexual transmission of HIV – but for these prevention tools to work, they need to be available and accessible to people who are living with or at risk for HIV. Research has shown that increasing the availability of condoms is associated with significant reductions in HIV risk (Siegfried, 2009). The use of condoms is especially needed in the slum areas where women are more vulnerable. Individual and small-group behavior-change programs delivered by health care providers, peers, and others have been shown to significantly reduce risk behaviours among people who have been diagnosed with HIV to help ensure they do not transmit the virus to others. In addition, partner services can reduce the spread of HIV by confidentially identifying and notifying partners who may have been unknowingly exposed to HIV, providing them with HIV testing and linking them to prevention and care services (Baeten, 2009).

According to Reiss (2010), other behaviours that reduce prevalence of HIV includes going for substance abuse treatment and increasing the availability of sterile syringes, going for sexually transmitted infection screening and treatment-which lowers an individual risk of infection by lowering HIV viral load. This literature however does not exhaust behavioral intervention for mitigating HIV prevalence among women.

2.4 Extent of Women's Involvement in VMMC

Women could get involved in VMMC activities through various ways and to certain degrees to increase their level of awareness about VMMC as an HIV prevention strategy.

2.4.1 Involvement through Counseling

Counseling is a process that helps people understand the problems that may affect them. It normally happens in a private setting, one-on-one, but can also happen for couples and for small groups. For VMMC, increasingly, group education is being used to give general information, before individual counseling on issues specific to them. Counseling can help guide people through a process for making good pre and post VMMC decisions, including whether male circumcision is right for them, and how to avoid complications after circumcision (Desgress-Dulou, 2009).

Counseling for HIV prevention is important because clients are often coping with emotions, expectations about the benefits and challenges of male circumcision - that may be hard to talk about. Especially around circumcision, there are mixed issues of pain, fear, excitement, masculine pride, shame, and embarrassment. Counseling can help people manage these emotions and expectations especially a man and his partner on a VMMC program. In many countries, those promoting VMMC encourage men to come to the clinic with their partners. This effort promotes healthy discussion about HIV and sexual risk. It also offers an opportunity for the man and woman to get HIV tested together, and to access a counselor to help them make good decisions about their sexual health together (Mwandi, 2011).

The man's sexual partner plays an important role in the VMMC process. She may help him decide to go for VMMC in the first place. Ideally, she will accompany him to the clinic, to offer him her support. She may have to help him heal, for example by taking over any heavy manual labor in the first few days after the surgery. The couple will have to support each other in the six-week healing period by not having sex since it can be risky because the wound is not completely healed (although it may look like it has on the outside). Later, the female partner will have to support the man in continuing to use safe HIV prevention behaviours, because VMMC alone does not give full protection against HIV acquisition

(Guest, 2008). Counseling may not help men who do not disclose their circumcision status to their partners.

2.4.2 VMMC Support for Male Partner

According to UNAIDS (2012), women account for half of all people living with HIV worldwide, and nearly 60% of HIV infections in sub-Saharan Africa. Women living with HIV are often more vulnerable to violence and stigma from their partners, families, communities and states. While the research shows that VMMC is a viable strategy for the prevention of heterosexual transmission in men, male circumcision does not provide complete protection against HIV infection for women or for men. Circumcised men can still become infected with the virus and, if HIV-positive, can infect their sexual partners. Consistent condom use remains the most effective tool for HIV prevention thus the need for women involvement in VMMC.

Studies have demonstrated that women across countries and cultures are generally very supportive of VMMC. Two studies (Herman-Roloff, 2011) and a report (Plotkin, 2012) on women's perspectives regarding VMMC show that women have expressed interest in being involved in VMMC. As VMMC is considered primarily a man's issue, involving women in VMMC programs can be a challenge. However, studies have shown that women play a large role in men's decision to be circumcised. In a few areas, the introduction of VMMC has been met with some objections from women. A study conducted in Papua New Guinea (Kelly, 2012) reported that majority of women objected to the introduction of male circumcision for three main reasons: circumcision would result in sexual risk compensation; circumcision goes against Christian faith; and circumcision is a new practice that is culturally inappropriate.

2.5 Conceptual model

A conceptual framework can be defined as a set of coherent ideas or concepts organized in a manner that makes them easy to communicate to others. It is a set of assumptions, values and definitions and how they influence each other and our thinking. A framework can help the researcher to explain why a project is conducted in a particular way. It can also help us to

understand and use the ideas of others who have done similar things. A conceptual model was used in this study. The model shows the inter-relationships that exist between various variables that influence HIV/AIDS prevalence. HIV prevalence is influenced by among others sexual risk behaviours that men and women engage in which are in turn influenced by people's knowledge of such behaviours as risky and their awareness of available HIV prevention interventions including VMMC and HIV counseling and testing for both men and their access to such interventions. The conceptual framework is illustrated below:

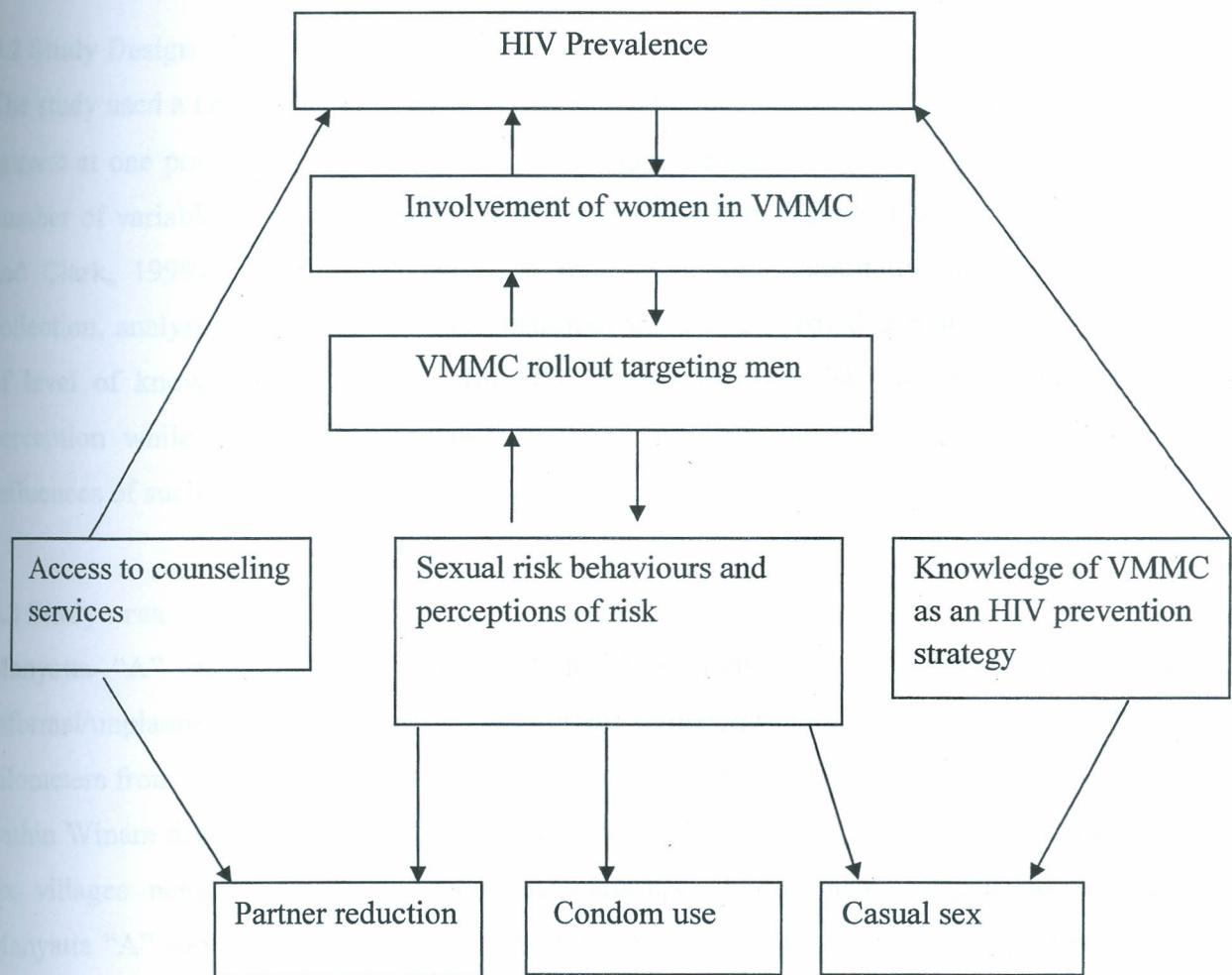


Figure 2.1: Conceptual model

Source: Researcher

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter consists of; research design, study area, study population, sampling techniques and sample size, data collection methods and instruments, validity and reliability of instruments, data analysis method as well as ethical consideration.

3.2 Study Design

The study used a cross-sectional research design where data was collected for all variables of interest at one point in time. Cross-sectional designs are useful for describing samples on a number of variables. Such designs are also less expensive and simpler to implement (Adler and Clark, 1999). The study combined qualitative and quantitative methods in data collection, analysis and interpretation. Quantitative methods provided numeric descriptions of level of knowledge on VMMC for HIV prevention and risk taking behaviours and perception while qualitative methods was used to obtain in-depth explanations of the influences of such behaviours.

3.3 Study area

Manyatta “A” sub-location was selected for this study. This is one of the seven informal/unplanned densely populated peri-urban settlements in Kisumu City. Located five kilometers from the Kisumu central business district off the Kisumu-Nairobi road, the area is within Winam division, Kisumu East Constituency. Manyatta “A” sub-Location consists of six villages namely; Kondele, Metameta, Flamingo, Konambuta, Magadi and Gonda. Manyatta “A” sub-location has a total of 48,004 inhabitants of which 23, 503 are males and 24, 501 are female and has a total of 12,525 households over an area of 24 kms² and a density of 20,334 people/km² (KNBS, 2009).

Being an informal settlement, one of the common characteristics of the area and that reflects the socio-economic status of most inhabitant, is the poorly constructed housing structures. Housings consist of mostly rented rooms within an area of 10-20 m². These individuals live in congested and less affluent conditions, with considerable lack of the basic necessities of life, such as clean piped-water and proper housing conditions (World Vision, 2008). There is also a high degree of insecurity made worse by the absence of adequate street lighting and this coupled with the overall poor living conditions in the settlements make women especially vulnerable to risks such as sexual violence. Research provides evidence suggesting that deteriorating economic and living conditions in urban areas have increased the likelihood that women, especially adolescent girls, engaged in behaviours which made them susceptible to HIV infection/AIDS (Zulu, 2002).

3.4 Study Population

The target population of the study comprised of the entire households in Manyatta “A” sub-Location which has an estimated study population of 12,525 households. This population was justified because of their vulnerability to HIV.

3.5 Sampling Techniques and Sample Size

Snowball technique was used to sample households with young women (18-24yrs) from the overall population. Snowball sampling technique was justified because the area of study was difficult to navigate with the first responded being randomly selected. The study sample was drawn from the entire population of 12,525. According to Mugenda and Mugenda (2003) if the population is more than 10,000, then the desired sample was 384. For this study, the sample size was 384. The unit of analysis was the household while the sampling unit was the six villages that make up Manyatta “A” sub-Location.

3.6 Data collection methods and instruments

Data collection approach included primary and secondary. Data collection methods included; household questionnaire, focus group discussions, and key informant interviews.

3.6.1 Primary Data

These are data that provide information about actual behavior. Primary data was obtained from respondents by administering questionnaires and interview guides and from the focus group discussions.

3.6.2 Secondary Data

Secondary data was obtained from already published information. The sources included books, magazines, journals, abstracts and internet.

3.6.3 Household Questionnaire

An interviewer administered questionnaire was used to gather data from young women (18-24 years) in Manyatta “A” sub-Location. The questionnaire was used to collect information on the respondent’s socio-demographic characteristics, knowledge of VMMC for HIV prevention, sexual risk behaviours and perceptions of risk since the rollout of VMMC and their views on women involvement in VMMC.

3.6.4 Focus group discussions

A focus group discussion (FGD) is a special type of group in terms of its purpose, size, and composition and is usually composed of 6-12 individuals who share certain characteristics.

In total, six focus group discussions (FGD) were held consisting of 8-12 participants. Three FGDs was with young women 18-20 years and three with 21-24 years. Selection of participants for FGDs was convenient. Besides questionnaire administration, research assistants also informed the participant of the FGD session and the particular date, time and venue and those interested were invited to attend until the group size and composition was attained. Discussions focused on participant’s knowledge of VMMC as an HIV prevention strategy, their level of involvement in decision making around circumcision of their male partners and any changes in sexual behaviours that may have occurred amongst both men and women since the rollout of VMMC. FGDs were taped and transcribed. In addition, notes were taken to capture non-verbal observations and to act as backup in case of

failure/malfunction of the tape. Consent was obtained to audio-tape the sessions and those not willing to be taped were ineligible to participate in the group discussions or interviews. Two research assistants oversaw each FGD – one as a moderator and another as a note-taker.

3.6.5 Key Informant interviews

Key informant interviews (KIIs) are interviews conducted with key individuals within the community, schools, et cetera. KIIs provide detailed, qualitative information about impressions, experiences and opinions. A total of 2 KIIs were conducted, 1 with health a provider from a facility providing VMMC services, 1 with a health provider from a facility offering HIV testing and counseling to the general population to get their views on HIV related risk behaviours and perceptions among young women (18-24yrs) in Manyatta “A” sub-Location, Kisumu City.

3.7 Validity and Reliability of Instruments

3.7.1 Validity of Instruments

The research instruments were presented to expert for consensual judgment, in this scenario, the research questionnaires were presented to the research supervisor and any correction arising addressed.

3.7.2 Reliability of Instruments

The study instruments were tested for reliability using test-retest technique. This technique involved administering the same questionnaires twice to the same group of subjects but after an interval of two weeks and the results compared and correlated to give a measure of reliability.

3.8 Data Analysis

Quantitative and qualitative methods were employed in data analysis. Descriptive statistics was used to analyze quantitative data in the form of percentages and frequencies and presented in tables. Data obtained was also discussed and was the basis upon which conclusions were drawn and recommendations made. Qualitative data were transcribed,

coded and analyzed thematically along the lines of the study objectives and questions and was presented in the form of narratives.

3.9 Ethical considerations

The household questionnaires and the FGD guides contained some personal questions, such as discussing sexual activities of the participants. The structured questionnaires were administered individually and in private. It was explained clearly to the participant beforehand that responses given by an individual would not be shared with any other persons except those directly involved in the study. All respondents were assured of confidentiality, that their names would not be written on the questions or reports, and that they were free not answer any question and to withdraw from the study at any time.

Quantitative

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CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents results, discussions and findings of the study. It particularly addresses the response rate, level of awareness of VMMC as an HIV prevention strategy, behaviours that reduce HIV prevalence among women and the extent of women involvement in VMMC activities.

Response Rate

This section presents response rate of respondents that were sampled during the study period. Quantitative primary data was obtained through issuance of copies of the questionnaire to the respondents who were in the age category of 18-24 years. This data was gathered by research assistants who administered copies of the questionnaire to the study respondents. The response rate was as shown in table 4.1

Table 4.1: Response rate

| Category | Response | Percentage (%) |
|-----------------------------------|------------|----------------|
| Respondents who did respond | 344 | 90 |
| Respondents who failed to respond | 40 | 10 |
| TOTAL | 384 | 100 |

Source: Field data

Analysis of respondents return rate as depicted in the study reveal that out of 384 respondents sampled, 90% responded to the study questions. This implies that majority of the respondents sampled responded to the questionnaires as required. This percentage was enough to continue the study since according to Necamaya (1996) response return rate of more than 75% is enough for the study to continue.

4.2 Demographic Distribution of respondents

The demographic characteristics of the respondents helps the study to determine the quality of responses from the respondents to enable the study achieve its objectives. The respondents' demographic characteristics were assessed based on age, religion, employment, monthly income, marital status and number of children.

4.2.1 Distribution of Respondents by Age

In a bid to ascertain quality of responses yet again from the respondents, the researcher sought to find out the age distribution of respondents and the results were as shown in Table 4.2

Table 4.2: Age of respondents

| Category | Response | Percentage (%) |
|-----------------|-----------------|-----------------------|
| 18-20 years | 170 | 49.9 |
| 21-24 years | 174 | 50.6 |
| TOTAL | 344 | 100 |

Source: Field data

The study revealed that 50.6% of respondents were in the age category of 21-24 years whilst 49.9% of respondents were in the age category of 18-20 years old. The findings indicate that all the respondents had attained maturity age. This therefore concludes that all the respondents were in a position to respond to the questions willingly and hence their responses could be relied upon for good quality responses which enabled drawing of conclusions.

4.3.2 Distribution of Respondents by Level of Education

Further to the ascertainment of quality of data from respondents, the study sought to determine the education level of respondents. Since formally educated respondents provide

quality and informed responses which can be relied upon. The findings are presented in Table 4.3.

Table 4.3: Level of education of respondents

| Level of education | Frequency | Percentage (%) |
|--------------------|------------|----------------|
| Primary | 86 | 25 |
| Secondary | 154 | 44.8 |
| Tertiary | 84 | 24.4 |
| University | 20 | 5.8 |
| Total | 344 | 100 |

Source: Field data

From Table 4.3, 44.8% of respondents indicated that they had secondary education, while 25% of respondents indicated that they had primary level of education. Only 5.8% of respondents had university level of education with 24.4% of respondents indicating that they had tertiary level of education. These findings indicate that majority of respondents had secondary education or more. This then concludes that majority of respondents could read and understand the questions in the questionnaire. The study conforms to the study of Dickson (2011) who established that respondents who had gone through elementary school successfully could read, write and comprehend questions in the questionnaire. The responses from the respondents could therefore be relied upon in drawing the conclusion on the study.

4.3.3 Average monthly income for household of respondents

Income levels of respondents' households affect lifestyle. To get a complete picture of the respondents, the researcher sought to find out the average monthly income of the respondents. The results were put in a tabular form as shown in Table 4.4.

Table 4.4: Average monthly income for households of respondents

| Average income (Ksh) | Frequency | Percentage (%) |
|----------------------|------------|----------------|
| Less than 2000 | 50 | 14.5 |
| 2001-5000 | 100 | 29.1 |
| 5000-10000 | 120 | 34.9 |
| 10001-20000 | 34 | 9.9 |
| 20001-40000 | 30 | 8.7 |
| Above 40000 | 10 | 2.9 |
| Total | 344 | 100 |

Source: Field data

Results from the study as depicted in Table 4.4 indicate that majority of respondents at 34.9% came from households where average monthly income is between ksh5000-10000, this was followed closely by 29.1% of respondents who had average income of between ksh2001- 5000 while 14.5% of respondents had average income of less than 2000. Only 2.9% of respondents had average income of above ksh40000 with 8.7% of respondents indicating that they had average income of between ksh20001- 40000 while 9.9% of respondents had an average income of ksh10001-20000. The findings indicate that majority of respondents came from households with low income rate. Given that income levels affect lifestyle, the respondents could therefore be relied upon for quality responses. The finding from the study is supported by WHO, (2007) who found out that lifestyle affected the behavior of women on VMMC.

4.3.4 Sexuality of respondents

Sexuality of respondents can best be determined by whether they have sexual partners and children. To do this, the researcher sought to establish the marital status and number of children that the respondents had if any. The results of this finding was as shown in Table 4.5

Table 4.5: Sexuality of respondents

| Variables | Frequency | Percentage (%) |
|---|------------|----------------|
| Marital status | | |
| Single | 20 | 5.8 |
| Married living with spouse | 60 | 17.4 |
| Married not living with spouse | 54 | 15.7 |
| Not married, has live-in partner | 90 | 26.2 |
| Not married, no live-in partner but has regular partner | 120 | 34.9 |
| TOTAL | 344 | 100 |
| No of children | | |
| No child | 64 | 18.6 |
| One child | 130 | 37.8 |
| Two children | 90 | 26.2 |
| More than two children | 60 | 17.4 |
| TOTAL | 344 | 100 |

Source: Field data

Analysis of findings as shown in Table 4.5 reveals that 34.9% of respondents were not married, did not have any live in partner but had a regular partner. This was followed by 26.2% of respondents who indicated that they were not married but had a live-in partner. Only 5.8% of respondents indicated that they were single while 15.7% of respondents indicated that they were married but were not living with their spouses. The respondents who indicated that they were married and were living with spouses stood at 17.4%. On the number of children of respondents, 37.8% of respondents indicated that they had one child while 26.2% of respondents indicated that they had two children. Only 17.4% of respondents indicated that they had more than two children with 18.6% of respondents indicating that they had no child.

The findings indicate that majority of respondents indicate that majority of respondents have regular sexual partners. It concludes therefore that majority of respondents fell under high risk of HIV infection category and therefore their responses could be relied upon in drawing conclusion on the influence of VMMC on HIV risk related behaviours and perceptions among young women. The Finding is in consonance with the finding of Westercamp and Bailey (2007) who established that the young women who got infected with HIV were sexually active.

4.3.5 Religion of Respondents

The researcher was also interested in ascertaining the religion of respondents within the area of study. Religion is known to have principles that followers are obeisant to and follow to the letter. Such doctrines therefore have the ability to influence the direction that women take with regards to voluntary medical male circumcision and HIV behaviours among women. The results were as shown in Table 4.6.

Table 4.6: Religion of respondents

| Religion | Frequency | Percentage (%) |
|-------------------------|-----------|----------------|
| Christian (Catholic) | 150 | 43.6 |
| Christian (Pentecostal) | 120 | 34.9 |
| Muslim | 74 | 21.5 |
| Total | 344 | 100 |

Source: Field data

According to results in Table 4.6, 43.6% of respondents were Christian (Catholic) while 34.9% of respondents were Christian (Pentecostal). The number of respondents who indicated that they were Muslims stood at 21.5%. This indicates that all the respondents professed a religion. It concludes that religion may have an influence on respondent's views on VMMC. This finding support the findings of Wawer (2009) who found out that religion influenced the views of VMMC and HIV behaviours.

4.4 Level of Awareness of VMMC as an HIV Prevention Strategy

While studies indicate relatively high levels of perceived knowledge about MMC for HIV prevention, other studies also indicate that a significant number of women at a community level have never heard about it. The researcher therefore sought to determine the level of awareness of VMMC as an HIV prevention strategy.

4.4.1 Information about VMMC as HIV prevention strategy

Information is crucial for awareness creation about VMMC as HIV prevention strategy. The researcher therefore wanted to find out whether respondents had heard about VMMC as an HIV prevention strategy and the source of such information. The results of the finding were as presented in Table 4.7.

Table 4.7: Information about VMMC as HIV prevention strategy

| Variables | Frequency | Percentage (%) |
|-------------------------------------|------------|----------------|
| Heard of VMMC | | |
| Yes | 344 | 100 |
| No | 0 | 0 |
| TOTAL | 344 | 100 |
| How Information was obtained | | |
| From electronic medium | 180 | 52.3 |
| From print media | 100 | 29.1 |
| From advocacy group | 64 | 18.6 |
| TOTAL | 344 | 100 |
| Source: Field data | | |

The analysis of findings reveals that all the respondents had heard about VMMC as HIV prevention strategy. On the source of information, 52.3% of respondents indicated that they heard the information from electronic media while 29.1% of respondents indicated that they heard the information from the print media. The respondents who indicated that they got the information from advocacy groups stood at 18.6%. It concludes that electronic medium is the medium through which VMMC communication messaging get to many people.

4.4.2 Preferred Source of VMMC information

The researcher also wanted to establish the preferred source of communication if the responds were to be given opportunity to choose. The results were as shown in Table 4.8

Table 4.8: Preferred source of VMMC information

| Source | Frequency | Percentage (%) |
|------------------|------------|----------------|
| Electronic media | 184 | 53.5 |
| Print media | 90 | 26.2 |
| Advocacy group | 70 | 20.3 |
| Total | 344 | 100 |

Source: Field data

From the study on preferred source of VMMC information as shown in Table 4.8, majority of respondents at 53.5% indicated that their preferred source of VMMC was electronic media while 26.2% of respondents indicated print media over the same with only 20.3% of respondents indicating that they preferred advocacy groups for VMMC information. The finding indicates that electronic media is the best means of communication messaging with regards to giving information on VMMC. Besides all respondents having heard about the information of VMMC as indicated by the findings, electronic media was the most preferred source of such messages. It concludes that electronic medium is the medium through which VMMC communication messaging get to many people. The findings conform to the finding of Creig (2008) who found out that radio reached the most respondents at ago.

4.4.3 Benefits of VMMC

Men are the main focus of VMMC education and information; however, female partners are also an important audience since they also benefit albeit indirectly. The researcher sought to establish the perceived importance of VMMC among female respondents. The results are presented in Table 4.9 as shown.

“VMMC reduces HIV infection in women because when a man has reduced chance of acquiring HIV, it means that his wife also has reduced chance of getting HIV” (FGD Participant).

“Women whose husbands are circumcised have lower rate of infecting their partners with the virus that causes cervical cancer” (FGD participant).

The findings therefore imply that few respondents had factual knowledge on the benefit of VMMC. According to the findings of WHO (2007) women whose partners were circumcised had lower risk of human papilloma virus (HPV) that causes genital warts and cervical cancer.

4.4.4 Knowledge of Respondents on VMMC as an HIV Prevention Strategy

VMMC only partially prevents against HIV infection. The researcher wanted to know from the respondents if that was the case and how exactly it happens. The researcher therefore asked the respondents in the questionnaire whether VMMC prevents against HIV and how exactly it does so. The results were as shown in Table 4.10.

Table 4.10: Knowledge of respondents on VMMC as an HIV prevention strategy

| Variables | Frequency | Percentage (%) |
|--|------------------|-----------------------|
| VMMC prevents HIV | | |
| Yes | 280 | 81.4 |
| No | 64 | 18.6 |
| TOTAL | 344 | 100 |
| How VMMC prevent HIV | | |
| VMMC prevent HIV by 60% | 94 | 27.3 |
| HIV only enters through the fore skin and after removal one becomes free from HIV | 60 | 17.4 |
| VMMC prevents HIV by 70% | 100 | 29.1 |
| Don't know | 90 | 26.2 |
| TOTAL | 344 | 100 |

Source: Field data

The findings reveal that 81.4% of respondents agreed that VMMC is a strategy for HIV prevention while 18.6% of respondents disagreed. Similarly 29.1% of respondents indicated that VMMC prevents against HIV acquisition by 70%, this was followed closely by respondents who noted that VMMC prevents HIV acquisition by 60% at 27.3%. Only 17.4% of respondents indicated that HIV enters through the foreskin and after removal one becomes free from HIV risk while 26.2% did not know. This finding reveal that majority of respondents were aware that VMMC prevents against HIV but did not know how or by what percentage. Creig (2008) also established that majority of respondents were aware that VMMC prevents HIV but did not know how. VMMC prevents HIV acquisition by 60% in heterosexual relationships (WHO, 2007).

4.5 Behaviours that Reduce HIV Prevalence among Women

Knowledge of HIV status is empowering. When people test negative, they are in a better position to modify their risk behaviours to help them stay uninfected. When people learn they are infected, they can take steps to protect their own health and prevent HIV transmission to other people. The researcher therefore sought to establish behaviours that reduce HIV prevalence among women.

4.5.1 Condom use and HIV Prevention

When used consistently and correctly, latex condoms are highly effective in preventing sexual transmission of HIV. For these tools for reducing prevalence to work they need to be available and accessible to people who are living with or at risk for HIV whether circumcised or not. The researcher sought to establish the opinion of respondents with regard to access to condoms and the results were as in Table 4.11.

Table 4.11: Condom use reduces HIV infection among women

| Statement for response | Frequency | Percentage (%) |
|------------------------|------------|----------------|
| Strongly agree | 140 | 40.7 |
| Agree | 80 | 23.3 |
| Disagree | 64 | 18.6 |
| Strongly disagree | 60 | 17.4 |
| Total | 344 | 100 |

Source: Field data

The study findings reveal that 40.7% of respondents strongly agreed that access to condoms reduces HIV prevalence among women while 23% of respondents agreed over the same. Only 17.4% of respondents strongly disagreed over the same. The respondents who disagreed stood at 18.6%. The findings indicate that majority of respondents believed that access to condoms reduce HIV prevalence among women. It concludes that access and consistent condom usage is a behavior that reduces HIV prevalence among women. Siegfried (2009) also established that increased availability of condoms was associated with significant reduction in HIV risk.

4.5.2 Women's Involvement in HIV Prevention Programs with their Partners

Individuals and small-group behavior change programs delivered by health care providers, peers and others have been shown to significantly reduce risk behaviours among people who have been diagnosed with HIV to help ensure they do not transmit the virus to others. The researcher sought to know the opinion of respondents with regards to prevention programs for women with HIV and their partners. The results were as shown in Table 4.12:

Table 4.12: Women's Involvement in HIV prevention programs with their partners reduces HIV prevalence

| Statement for response | Frequency | Percentage (%) |
|------------------------|------------|----------------|
| Strongly agree | 150 | 43.6 |
| Agree | 70 | 20.3 |
| Disagree | 64 | 18.6 |
| Strongly disagree | 60 | 17.4 |
| Total | 344 | 100 |

Source: Field data

According to Table 4.12, 43.6% of the respondents strongly agreed that involving in prevention programs for people with HIV and their partners reduce HIV prevalence while 20.3% of respondents agreed. Only 17.4% of respondents strongly disagreed with 18.6% of respondents in disagreement. The finding indicates that prevention programs for people with HIV and their partners reduce HIV prevalence. It concludes that prevention programs for people with HIV and their partners reduce HIV prevalence due to individuals and small-group behavior change programs delivered by health care providers, peers and others. This study conforms to the study done by Weiss (2009) who established that partner service reduced the spread of HIV through prevention and care services.

4.5.3 Treatment and screening of Sexually Transmitted Infections

Sexually transmitted infections (STIs) increase an individual's risk of acquiring and transmitting HIV. Besides STI treatment may reduce HIV viral load. The researcher therefore sought to find out the opinion of the respondents regarding the same and the results were as in Table 4.13.

Table 4.13: STI screening and treatment reduces HIV prevalence among women

| Statement for response | Frequency | Percentage (%) |
|------------------------|------------|----------------|
| Strongly agree | 140 | 40.7 |
| Agree | 80 | 23.3 |
| Disagree | 64 | 18.6 |
| Strongly disagree | 60 | 17.4 |
| Total | 344 | 100 |

Source: Field data

According to Table 4.13, the study findings reveal that 40.7% of respondents strongly agreed that going for STI screening and treatment reduce HIV prevalence among women while 23% of respondents agreed over the same. Only 17.4% of respondents strongly disagreed over the same. The respondents who disagreed stood at 18.6%. The findings indicate that going for STI screening and treatment among women reduce prevalence of HIV among women. This is due to viral load reduction due to STI treatment. The finding of Baeten (2009) conforms to this finding having established that STI screening and treatment reduced risk for HIV transmission.

4.5.4 Substance Abuse Treatment and Access to Sterile syringes

Effective substance abuse treatment that helps people stop injecting drugs eliminates the risk of HIV transmission through needle sharing and has also been shown to reduce risky sexual behaviours. The researcher wanted to know the opinions of the respondents on the matter. The results were as shown in Table 4.14

Table 4.14: Substance abuse treatment and access to sterile syringes reduces HIV transmission

| Statement for response | Frequency | Percentage (%) |
|------------------------|------------|----------------|
| Strongly agree | 120 | 34.9 |
| Agree | 120 | 34.9 |
| Disagree | 60 | 17.4 |
| Strongly disagree | 44 | 12.8 |
| Total | 344 | 100 |

Source: Field data

The results in Table 14 reveal that 34.9% of respondents strongly agreed that going for substance abuse treatment and access to sterile syringes reduce HIV prevalence among women with another 34.9% of respondents indicating that they agreed. Only 12.8% of respondents indicated that they strongly disagreed while 17.4% of respondents disagreed. The finding indicates that substance abuse treatment and access to sterile syringes reduce HIV prevalence among women. This is due to sharing of sterile syringes reduces chances of HIV transmission through blood. The study supports the finding of Riess (2010) who found out that increasing the availability of sterile syringes was associated with significant reduction in HIV risk.

4.5.5 Access to Anti-retroviral drugs

Treating people with HIV lowers the viral load in their body and can dramatically reduce the risk of transmitting HIV to other people, underscoring the importance of HIV testing and medical care and treatment. In this regard, the researcher sought to determine the opinion of the sampled respondents over the same. The results were as presented in Table 4.15

Table 4.15: Access to anti-retroviral drugs reduces HIV prevalence in women

| Statement for response | Frequency | Percentage (%) |
|------------------------|------------|----------------|
| Strongly agree | 150 | 43.6 |
| Agree | 70 | 20.3 |
| Disagree | 64 | 18.6 |
| Strongly disagree | 60 | 17.4 |
| Total | 344 | 100 |

Source: Field data

The analysis reveals that 43.6% of the respondents strongly agreed that going for HIV medication reduces prevalence among women while 20.3% of respondents agreed. Only 17.4% of respondents strongly disagreed with 18.6% of respondents in disagreement. Previous studies indicate that HIV medication is an intervention that reduces HIV prevalence among women. This is due to reduced HIV viral load. This is further validated by the finding of Ehrhardt (2009) who established that people with HIV who began taking anti-HIV medications early (before their immune systems were significantly weakened) experienced a 96% reduction in their risk of transmitting HIV to their sexual partners.

4.6 Extent of Women's Involvement in VMMC for HIV prevention

The man's sexual partner plays an important role in the VMMC process. She may help him before, during and after VMMC to ensure that VMMC serves the purpose for which it is intended, that is reducing HIV infection. This section therefore presents results of the findings on the extent of women involvement in VMMC as HIV prevention strategy.

4.6.1 Women's Support to men

The researcher wanted to find out whether women would support their men with regards to VMMC, and if not, the reasons they will not want to be involved. The results are shown in Table 4.16

Table 4.16: Support for men during VMMC

| Variables | Frequency | Percentage |
|--|------------------|-------------------|
| Support for the man | | |
| Yes | 280 | 81.4 |
| No | 64 | 18.6 |
| TOTAL | 344 | 100 |
| Reasons for not supporting the man | | |
| Men will take risk thinking that they are safe | 33 | 51.6 |
| VMMC goes against Christian faith | 13 | 20.3 |
| VMMC is a new practice that is not appropriate | 11 | 17.2 |
| My culture does not allow VMMC | 7 | 10.9 |
| TOTAL | 64 | 100 |

Source: Field data

The analysis of findings as depicted in Table 4.16, reveal that 81.4% of respondents agreed that they would support their men for VMMC while 18.6% of respondents declined. On the other hand 51.6% of respondents indicated that the reason they do not support VMMC was sexual risk compensation. This was followed by 20.3% of respondents who indicated that VMMC goes against Christian faith. Only 10.9% of respondents indicated that culture did

not allow them while 17.2% of respondents indicated that VMMC was new practice that is not appropriate.

These findings indicate that the major reason women would not support their men for VMMC is because of risk compensation. Risk compensation is when a man takes greater risk in his behavior because he believes he is safe as a result of VMMC. This implies that women are willing to support men for VMMC but are fearful for risk compensation. This finding is supported by the findings of Herman-Roloff (2011) who found out that women were generally supportive of VMMC.

When asked about level of female partners support to men with regard to VMMC, one key informant had the following to say;

“...It seems that men are involving women in their decisions to get circumcised and women are taking an active role around circumcision of their partners” (KII participant).

4.6.2 Support men receive from women

The researcher sought to find out how women supported their men undergo VMMC. The respondents were therefore asked to indicate in the questionnaire exactly how they support men. The findings were presented in Table 4.17

Table 4.17: Support men receive from men before, during and after circumcision

| Way of support | Frequency | Percentage (%) |
|---|------------|----------------|
| Help my partner to decide to go for VMMC | 60 | 17.4 |
| Attend counseling sessions with my partner to help him deal with fear and masculine pride | 180 | 52.3 |
| Wait for him to heal before having sex | 70 | 20.3 |
| Assist him with manual labor | 34 | 10 |
| Total | 344 | 100 |

Source: Field data

According to Table 4.17, 52.3% of respondents indicated that they supported their partners by attending counseling sessions together to help them deal with fear and masculine pride while 17.4% of respondents indicated that they helped their partners make a decision to go for VMMC. Only 10% of respondents indicated that they support their partners by assisting them with manual labor. The respondents who indicated that they supported their partners by waiting for them to heal before having sex stood at 20.3%.

The finding indicate that is the popular way for women to assist their partners is through counseling, which counseling is a process that helps people understands the problems that may affect them. This finding is in agreement with the finding of Desgress-Du-lou (2009) who found out that counseling helped sexual partners in making good pre and post VMMC decisions, and how to avoid post circumcision complications.

4.6.3 Ways of Involving Women in VMMC

The researcher wanted to know the ways women would want their men to involve them. As such, the researcher asked the respondents to indicate the ways in which they would prefer their men to involve them and the results were as in Table 4.18.

Table 4.18: Ways of involving women in VMMC

| Way of involvement | Frequency | Percentage (%) |
|---|------------|----------------|
| Discuss and agree on VMMC as a couple | 175 | 50.9 |
| We should provide household income till healing is complete | 75 | 21.8 |
| We should take over the man's labor till healing | 60 | 17.4 |
| Assist him with manual labor | 34 | 9.9 |
| Total | 344 | 100 |

Source: Field data

The findings reveal that 50.9% of respondents wanted their partners to involve them by discussion and agreement on VMMC, while 21.8% of respondents wanted to be involved by letting them provide income till healing is complete. Only 10% of respondents indicated that they did not know with 17.4% of respondents indicating that they should take over the man's manual labor till healing is complete. The findings indicate that women want to be involved in VMMC. It concludes that discussion and agreement on VMMC with partners is the most suitable way of involving women on VMMC. The finding is in consonance with the finding of Hallett (2011) who established that discussion and agreement among couple was the most preferred way by which women wanted to be involved in VMMC. Further, the finding support the finding of Berer (2008) who established that manual labor was the less preferred way of involving women on VMMC since women were not able to perform manual labor as their men.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section presents consolidated summary of all findings, relevant conclusions, study recommendations and suggestion for further research.

5.2 Summary

5.2.1 Level of Awareness of VMMC as an HIV Prevention Strategy

With regards to the level of awareness, the study tested various parameters. On whether the respondents have heard about VMMC, 100% of respondents indicated that they have heard about VMMC while 52.3% of respondents indicated that they have heard about it from electronic media; other sources included advocacy groups and print media with majority of respondents stating that they would prefer electronic media as a source of VMMC information. On the importance of VMMC, 84.1% of respondents indicated that VMMC was important, and when asked about the specific benefits of VMMC, 34.1% of the respondents indicated that reduction of HIV infection in men was the major benefit. Other benefits identified were; helping to maintain penile hygiene, reduction of penile cancer and reduction of cervical cancer in women. On the knowledge of respondents on VMMC, 81.4% of respondents agreed that VMMC prevents HIV; in contrast, majority of respondents did not know the exact percentage of prevention. Respondents indicated that the prevention was up to 70%. Only a few respondents noted correctly that the percentage of prevention was 60%. Other respondents noted that HIV only enters the body through the foreskin and once it is removed one becomes free from HIV.

5.2.2 Behaviours that Reduce HIV Prevalence among Women

The researcher sought to establish the behaviours that reduce HIV prevalence among women. According to the findings, 70.4% of respondents indicated that condom use was a strategy that reduces HIV infection. 63.9% of respondents indicated that involvement in prevention

programs for women with HIV and their partners reduced HIV prevalence. On the same strength, 63.9% of respondents indicated that going for sexually transmitted infection screening and treatment was a behavior that reduces HIV prevalence among women. Further, 6.8% of respondents indicated that going for substance abuse treatment and access to sterile syringes was a behavior that reduced HIV prevalence among women. Finally, 63.9% of respondents also indicated that going for HIV medication specifically anti-virals was a behavior that reduce HIs prevalence among women

5.2.3 Extent of Women's Involvement in VMMC for HIV Prevention

With regards to the extent of women involvement in VMMC as HIV prevention strategy, a significant number of respondents (81.4%) indicated that they would support men's decisions on VMMC. When asked the reasons for not supporting men for VMMC, 51.6% of respondents indicated risk compensation. 20.3% of respondents indicated that VMMC goes against Christian faith, VMMC is a new practice that is not appropriate and that the culture does not allow VMMC. The researcher also sought to know how women supported their men for VMMC and 52.3% of respondents indicated that they attend counseling session with their partners to help them deal with fear and masculine pride. Other respondents indicated that they discussed with their partners the decision to go for VMMC, others pointed that they wait for their partners to heal before they can resume sex and others indicated that they assist their partners with manual labor. The researcher also asked the respondents to indicate how they would want to be involved in VMMC and 50.9% of respondents indicated that they would prefer to discuss and agree with their partners on VMMC. Other opined that they would provide household income till the healing is complete while others indicated that they would want to assist with manual labor and the man's work in general.

5.3 Conclusions

On the basis of findings of the study, the researcher concludes that there is enough awareness about VMMC and that electronic media is the most preferred means of communication messaging of VMMC. The message content of VMMC however is not detailed and therefore targeted audience does not have factual information about VMMC. Advocacy groups can

also be used for the awareness message to reach audience that would otherwise not be reached by electronic and print media. The study also concludes that condom use, involvement in prevention programs for women with HIV and their partners, going for sexually transmitted infection screening and treatment, going for substance abuse treatment and access to sterile syringes and going for HIV medication are the behaviours that reduce HIV prevalence among women. Finally the study concludes that women involve themselves in VMMC to a great extent especially by attending counseling sessions together with their partners. They however fear that men could engage in HIV risky behavior thinking that they are safe after VMMC.

5.4 Recommendations

From the findings, the study recommends that the Government should formulate a policy that would ensure that factual information of VMMC reach the targeted audience through electronic media, specifically radio, and also use advocacy groups to create more awareness. Women should continue with behaviours that reduce HIV prevalence even if their partners are circumcised. Women should also continue to involve themselves in VMMC to reduce HIV infection.

5.5 Suggestion for further study

Future researchers could investigate the impact of VMMC message delivery on women's involvement in VMMC which was not covered in this study.

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