**FACTORS AFFECTING THE UPTAKE OF VOLUNTARY MEDICAL MALE CIRCUMCISION AMONG YOUTHS AGED 19-32 YEARS IN KISUMU NORTH**

**BY**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT FOR THE AWARD OF DIPLOMA IN COMMUNITY HEALTH AND DEVELOPMENT**

# Declaration

This research project is my original work and has not been presented to any university for the award of any diploma or any other award

Signature……………………………………………..Date……………………………………..

WENDY ATIENO OLUOKO

H121/0775/2016

The project has been submitted for review under my approval as the university supervisor

Signature…………………………………………Date………………………………..

DR.ERICK OGOLA

# 

# DEDICATION

I dedicate this work to my parents and siblings, for their love and support during the period of study.

``````

# Acknowledgement

I am thankful to the almighty God for enabling me to accomplish this work, may all the glory, honour and blessing be unto him.

My special thanks go to my supervisor Dr. Erick Ogola for his support, advice and overall supervision.

Special mention goes to madam Veronica Knight for her assistance and guidance during the course of designing and selecting secondary data. Her pieces of advice and guidance enabled me to remain on course even though the work was so taxing.

To my parents, siblings. I owe you a lot due to you full support and utmost support and endurance to me during the crucial moment in my study pursuit.

To you all God bless you

Contents

[Declaration 2](#_Toc509234678)

[DEDICATION 3](#_Toc509234679)

[Acknowledgement 4](#_Toc509234680)

[LIST OF ACRONYMS 7](#_Toc509234681)

[ABSTRACT 8](#_Toc509234682)

[1.0. CHAPTER 1: INTRODUCTION 9](#_Toc509234683)

[**1.1. Background** 9](#_Toc509234684)

[**1.2. Problem of the statement** 10](#_Toc509234685)

[**1.3. General objectives** 10](#_Toc509234686)

[**1.4 Specific objectives** 10](#_Toc509234687)

[**1.5 Research questions** 10](#_Toc509234688)

[**1.6. Significance of study** 10](#_Toc509234689)

[**1.7 Justification of the study** 10](#_Toc509234690)

[2.0 CHAPTER 2: LITERATURE REVIEW 11](#_Toc509234691)

[**2.1 Background of male circumcision** 11](#_Toc509234692)

[**2.2. People’s perception and attitude of VMMC on the spread of HIV** 12](#_Toc509234693)

[**2.3 Perception on adverse effects of circumcision** 14](#_Toc509234694)

[**2.4 Cultural factors affecting uptake of VMMC** 14](#_Toc509234695)

[**2.5 Cultural influence** 15](#_Toc509234696)

[**2.6 Fear of pain and bleeding** 15](#_Toc509234697)

[**2.7 Lack of secrecy and female providers** 15](#_Toc509234698)

[**2.8 Socio-economic status** 16](#_Toc509234699)

[**2.9 Level of education.** 16](#_Toc509234700)

[**2.9.0 Knowledge that circumcision helps prevent HIV burden in the community.** 16](#_Toc509234701)

[**2.9.1 Perceived health and sexual benefits beyond HIV** 17](#_Toc509234702)

[**2.9.2 The direct and indirect benefits of VMMC** 17](#_Toc509234703)

[3.1 CHAPTER 3: RESEARCH METHODOLOGY 18](#_Toc509234704)

[**3.2. Study area** 18](#_Toc509234705)

[**3.3. Research design** 18](#_Toc509234706)

[**3.4. Study population** 18](#_Toc509234707)

[**3.5. Sampling procedure** 19](#_Toc509234708)

[**3.6 Data collection instrument** 19](#_Toc509234709)

[**3.7 DATA COLLECTION PROCEDURE** 20](#_Toc509234710)

[**3.8 ETHICAL CONSIDERATIONS** 20](#_Toc509234711)

[**3.9 DATA ANALYSIS PROCEDURE** 21](#_Toc509234712)

[4.0 CHAPTER 4: DATA COLLECTION AND INTERPRETATION 21](#_Toc509234713)

[4.1 socio-demographic characteristics 21](#_Toc509234714)

[4.1.1. Spouses level of education verses circumcision 23](#_Toc509234715)

[4.1.2 Extent of VMMC 23](#_Toc509234716)

[4.1.3. Age at circumcision 24](#_Toc509234717)

[4.1.4. Religion verses circumcision status 24](#_Toc509234718)

[4.1.5. Marital status verses circumcision 25](#_Toc509234719)

[4.2. Economic factors 26](#_Toc509234720)

[4.2.1. The type of employment verses circumcision 26](#_Toc509234721)

[4.2.2. Monthly income verses circumcision status 27](#_Toc509234722)

[**4.1.3. The influence of fathers on their son’s circumcision** 28](#_Toc509234723)

[4.2.0 INTERPRETATION OF RESULTS 31](#_Toc509234724)

[4.2.1. Reasons why many men have hesitated to circumcise 31](#_Toc509234725)

[4.2.2. Knowledge on the process of circumcision 33](#_Toc509234726)

[4.2.3 Reasons for/against HTS during VMMC 34](#_Toc509234727)

[CHAPTER 5: CONCLUSION AND RECOMMENDATION 37](#_Toc509234728)

[5.1 CONCLUSION 37](#_Toc509234729)

[5.2 RECOMMENDATION 37](#_Toc509234730)

LIST OF ACRONYMS

WHO World Health Organization

UNAIDS Joint United Nation Programme on AIDS

VMMC Voluntary Medical Male Circumcision

MMC Medical Male Circumcision

MC Male Circumcision

SSA Sub-Saharan Africa

VMC Voluntary Male Circumcision

NACC National AIDS control Council

CDC Centre for Disease Control

CHW Community Health Worker

HPV Human Papilloma Virus

ART Antiviral Therapy

HPTN HIV Prevention Trial Nations

JPIEGO Johns Hopkins Program for international education on Gynaecology and

Obstetrics

# ABSTRACT

Randomized controlled trials have demonstrated that medical male circumcision offers up to 60% efficacy in the prevention of heterosexual HIV transmission. The Luo community of Kenya do not practise Traditional male circumcision and have been reporting the highest HIV prevalence rates in Kenya despite the concerted efforts to reach as many eligible male as possible, the response has been below expectation particularly adults. The study sought to determine cultural factors affecting the uptake of voluntary medical male circumcision (VMMC) and people’s perception of VMMC on the spread of HIV/AIDS among youths aged 19-32 years of Kisumu North of Luo Nyanza.

The study method was a cross-sectional study which targeted youths aged 19-32 years, health providers and the care givers who assisted the researcher on getting the information since some of the youths were not fully open up to give the appropriate answers. Caregivers and health providers were interviewed using open ended and closed ended questions. The study was done in Kisumu North in Luo Nyanza

# 1.0. CHAPTER 1: INTRODUCTION

## **1.1. Background**

Voluntary medical male circumcision VMMC mainly came up as a strategy to control the rapid spread of HIV and AIDS which had become a global pandemic .By 1997 an estimated 3.4 million people were already infected (WHO/UNAIDS/UNICEF/2011).There are interventions that had been put in place to control the spread of disease .in 2007 WHO and UNAIDS recommended that VMMC be applied alongside other HIV prevention strategies such as HIV testing and counselling ;provision and correct use of male and female condoms ;screening and testing for STIs and provision antiretral treatment for people living with HIV .The VMMC recommendation was based on three randomized trials undertaken from 2005 to 2007 ,and Rakai District ,Uganda (2007)which showed that medical male circumcision (MMC) lowers the risk of HIV transmission in heterosexual relationship by approximately 60% (Avert B el al,2005,Brailey Rc el al 2007,Gray R et al 2007 and Weiss HA.et-al 2010 WHO/UNAIDS 2011/UNAIDS 2012) The other reason was that in Africa trials voluntary male circumcision was found to effectively reduce new HIV infections because the transmission was mainly through heterosexual relationship unlike the American case and other western countries where HIV transmission was mainly through men having sex with men (MSM).however Buchbinder el al 2005 conducted a study among 3257MSM in sex US cities and his finding were that circumcised men were almost likely to transmit disease than circumcised men

## **1.2. Problem of the statement**

The prevalence uptake of VMMC in Kisumu is approximately 48.5% in Kisumu, (Avert B, taljaard D,lagarde E,et al,ANRS 1265trial.Plos med 2005;2 e298).despite the known medical benefits of circumcision in sub Saharan Africa (SSA).the uptake of VMMC is low among youths aged 19-32 years of age by 22% in sub Saharan Africa especially in Luo Nyanza who do not culturally practise male circumcision .however limited research studies have investigated the factors responsible for the low uptake of VMC

## **1.3. General objectives**

To investigate the factors responsible for the low uptake of VMMC

## **1.4 Specific objectives**

1. To determine the perception and attitude s of men towards VMMC

2. To investigate the cultural factors contributing to the uptake of VMMC

## **1.5 Research questions**

1. How is perception and attitudes of men towards VMMC?

2. How do cultural factors affect the uptake of VMMC?

## **1.6. Significance of study**

To inform on the factors hindering the uptake of VMMC which will assist in improving the uptake of the services?

## **1.7 Justification of the study**

This study seeks to identify and understand the specific factors that affect the willingness of youths who are 19-32 years and to embrace VMMC .since this target group is the sexually active age and forms a bigger target group for VMMC ,as an increase of the number taking the service are, will result in a reduction of new HIV infections .The study will bring more insight into the barriers that hinder uptake of the service among men 19 -32years in Kisumu North ,Nyanza region .Thus there is a need to explore the barriers to uptake among this age group has informed the decision to undertake the research ,study findings will help policy makers put in place more measures that will enhance service uptake .it also plays an important role in informing Non-governmental organization and Public health facilities providing VMMC services now on how to improve and expand the VMMC services to make them more accessible to the youths who form a big bulk of the target group .this is because despite the effort that are already in place and besides cost effectiveness and analysis that have been done ,their uptake is low and the national targets and benefits out of VMMC may not be realized as projected by 2015(UNAIDS,2007)

# 2.0 CHAPTER 2: LITERATURE REVIEW

This is a discussion of literature on VMMC as a strategy for the prevention of HIV transmission.

## **2.1 Background of male circumcision**

Different countries have registered low uptake of VMMC services among the target population some regions have registered much lower uptake levels than others especially among youths aged 19-32 years old.

In 2007 it was estimated that that 33.2 million people were living with human immunodeficiency virus (HIV) and that there were 2.5 million new infections during the year. Discovering ways to prevent the transmission of HIV is of primary concern to healthcare authorities worldwide (UNAIDS 2007).

UNAIDS Kenya country page, www.unaids.org/en/geographical+area/by+country Kenya asp downloaded on March 22, 2012 providers that Kenya has more than one million people estimated to be living with HIV/AIDS (1.2 million as of end of 2003). Kenya’s HIV/AIDS prevalence rate (the percent of people living with the disease) is just below that of the Sub-Saharan –African region overall (6.7compared to 7.5)

Recent data indicates that the country’s HIV prevalence rate may be on the decline in some areas (ef UNAIDS, African fact sheet’ ’March 2005).However, the HIV epidemic poses significant challenges to the low income country. The government of Kenya first established a national AIDS control (NACC) in 1999 and has a national strategic framework for 2005-2010.

Between 1983 and 1985 26 cases of AIDS were reported in Kenya .sex workers were the first group affected .a study from 1985 reported that an HIV prevalence of 59% among youths. Towards the end of 1986 there was an average of four new cases of AIDS cases being reported to the World Health Organization (WHO).each month .this total 286 cases by beginning of 1987 38 of which had been fatal

By 1987 HIV appeared to be spreading more rapidly among the population –an estimated 1%to2% of youths were infected with the virus

However with high HIV infection prevalence in the priority nations VMMC has simply saved many lives over the years. And of course in combinations with the other preventive package.

## **2.2. People’s perception and attitude of VMMC on the spread of HIV**

**A case of the Luo community**

Male circumcision is the surgical removal of part of the foreskin of the male reproductive organ (penis). It has been practised by mankind from early days and it is not clear when and how it started. The early Egyptian mummies (2300BC) bear the marks of circumcision, and wall painting in Egypt show that it was customary several thousand years still. Many reasons for this practise have been ranging from obeying the law of God to promoting public health (Bhimji 2000). Male circumcision has been believed to be treatment for a number of health problems/disorders. According to winkle (2000) ,the American medical establishment has promoted male circumcision as a preventive measure for an astonishing array of pathologies ,ranging from masturbatory insanity ,moral laxity ,aesthetic and hygiene to headache tuberculosis ,rheumatism ,hydrocephalus ,epilepsy ,paralysis , near-sightedness ,rectal prolapse urinary tract infection and cancer of the penis, cancer of the cervix ,syphilis and AIDS. On medical grounds, male circumcision can be recommended if one has injury or anomalies of the foreskin and if one continuous to suffer from infections.

The age to circumcise varies across societies and across individuals within societies. In most developed countries and in communities like Islam and some minority Christian sector, circumcision is normally done within days or weeks after birth while in many African tribal groups men are circumcise usually in late child hood or early adolescence. In some parts of Africa and in the world, male circumcision is observed as a rite of passage into manhood. Adolescent boys undergo an initiation ceremony where they are circumcised and taught the basic of married life. Up until this stage, they will not be expected to be sexual active hence the need to initiate them.

According to WHO Bulletin, 84%out of 2006, around 20% globally and 35% in developing countries are circumcised for religious, cultural, medical and other reasons. In Africa the practise varies from country to country. Researchers have noted significant variation in HIV prevalence in certain Africa and Asian countries that seems to be associated with levels of male circumcision in the community (LA Porte and Aggleton, 1998; Leclerc madlala, 2004). In areas where circumcision is common, HIV prevalence tends to be lower, conversely, higher areas of HIV prevalence overlapped with region where male circumcision is not commonly practised (NIAD/NH 2006).

Countries in west Africa ,where male circumcision is common ,have HIV prevalence levels well below those of countries in eastern and southern Africa for example according to UNAIDS (2007)in 2005 ,Benin had a HIV prevalence of 1.8% while Cameroon had 5.4% in countries of southern and eastern Africa with the highest HIV prevalence ,male circumcision rates are generally under 20%.most countries in southern Africa have low levels of male circumcision and coincidentally have the highest burden of HIV/AIDS in the world

Male circumcision is conducted at varying cost from country and from institution to institution depending on where the procedure is conducted and who performs it and other various factors. According to Bailey et al (2005), data from Nyanza, Kenya suggest that circumcision can be done in medical facilities for about US$25 per procedure. In South Africa on the orange free study, each circumcision was conducted for about US$45(jewkes, 2006, Hang rove and mahatma, 2005). According to population service international (2008), in Zimbabwe the cost of male circumcision is between US$150 according to information gathered from some practitioners.

Striking is that, the acceptability of male circumcision is affected by socio-cultural backgrounds. Some cultures put a lot of emphasis on it, while others are silent about it. Jews are one of the tribes that have been practising male circumcision since long back and the procedure is acceptable among them.in their culture, practising male circumcision is regarded as obeying God. The basis of the practise is found in genesis (17 verses 11) where Abraham was instructed to circumcise every male new born from that day onwards and never to stop the practise as a covenant with God

In certain cultures genital cutting is an integral part of initiation practises from boyhood to socially recognized manhood .in many African societies initiation affirms age and gender as two major principles of social organization. Local understanding often links MC with improved hygiene and a lower risk of HIV and STIs and this has culminated in a growing preference for VMMC in many African countries. VMMC is unique in that it targets men exclusively to reduce the risk of sexually transmitted HIV. Successfully VMMC programs will use existing cultural platforms and leverage the support of relevant tradition authorities to promote male norms that encourage sexual health and risk reduction.

In response to research findings, the government of Kenya developed a national strategy to scale up VMMC through a phased approach. Between 2009 and 2013, Kenya aimed at to deliver the comprehensive package of VMMC services to 860000 boys and men aged (19-32) years (NASCOP, 2010a). By mid-2010, Nairobi province and begun performing male circumcision, and preparatory efforts were underway in western province. According to Kenya demographic and health survey (2003), the coastal province (at 97.2%) and North Eastern province ranked lowest at 17% and Kisii communities rates at 99%

In Nyanza province therefore the where male circumcision are substantially lower than the national average, Kenya performed more than 230000 VMMC procedure from 2008 to December 2010,that is more than 60% of previously uncircumcised adult males (NACC and NASCOP2012). Delivery of this program also offers an opportunity to deliver and reinforce sexual reduction risks reduction messages ,screen and treat for STIs, provide free condoms as well as offer male sexual and reproductive health services (NASCOP,2010a). All this is towards achieving the national and global HIV goal of ensuring universal access to HIV prevention and treatment, care and support as well as national goal of a healthy vibrant and productive population 2030

## **2.3 Perception on adverse effects of circumcision**

Majority of both respondents who have undergone and those who have not undergone VMMC (64.6%) think that VMMC has adverse effects z-test (p-value=.996) indicates that knowledge of VMMC adverse effects absence was similar among circumcised and uncircumcised respondents. Poor wound healing and wound complications are the most cited (38.2%) adverse effects of VMMC.

## **2.4 Cultural factors affecting uptake of VMMC**

**Cost and accessibility**

Both components of data identified access to VMMC and cost as a major hindrance to uptake of VMMC .many participants stated that the cost in form of either transport to access free VMMC services or payment for the procedure in private health facilities was beyond their means.

## **2.5 Cultural influence**

Culture is another contributing factor to the lower uptake of VMMC by 19%.

In Sub Saharan Africa and other traditional communities of the world, MC has been practised for reasons other than religion in any one country prevalence of MC can vary dramatically by ethnicity (Merck 1997). In Kenya for example although 84%of all men are circumcised the prevalence is much lower among the Luo and the Turkana (14% and 40% respectively). No history of traditional male circumcision has ever been documented to exist though men had their six lower teeth removed (UNAIDS, 2007). In many culture the practise is a rite of passage to manhood, though sometimes is a sign of endurance and bravery. More often than not it is associated with masculinity, self-identity spirituality and social cohesion as boys of the same age group get circumcised at the same time. The Luo’s in Kenya have reported that they are continuously discriminated against because of their circumcision status WHO (UNAIDS, 2010)

## **2.6 Fear of pain and bleeding**

Some participants indicated that fear of complications associated with VMMC kept away some men from undergoing some procedure. Indicating that it was an operation that involves cutting of the foreskin. Fear of pain associated with undergoing circumcision was a concern stated quite often (60%) while 31% identified bleeding as another factor preventing men from accessing VMMC services as some believed could lead to death.

Fear for pain was attributed for injection given before the procedure cutting off the foreskin and post-operative healing

## **2.7 Lack of secrecy and female providers**

The study found the hospital environment to be a source of humiliation because of lack of privacy as well as the presence of female providers. Most participants pointed out that lack of special rooms to keep circumcised men out of sight of relatives and other villagers who visit the hospital was perceived shameful. Similarly many older participants expressed that being attended to by female health providers was embarrassing, particularly considering the fact that one was not sick.

Major reasons given were that some youths would erect as a female provider prepares them for circumcision. Male circumcision was valued as a sensitive issue carried out in a male only setting in many traditionally circumcising communities. This finding concurs with others which found that many youths were not comfortable with women clinicians being part of the circumcising team for fear of being exposed as youths who had not been circumcised and the potential of sexual arousal

## **2.8 Socio-economic status**

It has been shown that socio economic factors influence the uptake of male circumcision especially in the countries with more recent uptake of the practise ,especially the English speaking industrialized nations (UNAIDS ,2007)between the 19th and 20th century ,MC was mostly practised among the rich about 74%and 57% in private and non-private health facility by the year 1953. This has recently been seen among the poor immigrants (UNAIDS 2007).

In the Sub Saharan Africa, MC is not consistent with socio economic status with some countries such as Tanzania and Ethiopia showing consistency with this association whereas Lesotho is contradictory. (UNAIDS 2007)

## **2.9 Level of education.**

Lack of awareness of the importance of circumcision as an intervention strategy against HIV transmission has been one of the major challenge to its adoption in many African communities. A Christian tribal chief in Lusaka, Zambia decided to become a campaigner of circumcision after reading about the medical benefits of circumcision such as hygiene and reduction of HIV infection rates.

He supported his decision with biblical practise of the Old Testament. Tanzania launched her VMMC programme in areas where they don’t practise as part of their religion or as a rite of passage during infancy puberty or adolescence stages.

### **2.9.0 Knowledge that circumcision helps prevent HIV burden in the community.**

In the year 2012, UNAIDS estimated that a total of 35.3 million people were living with HIV globally. It shows that more people are receiving anti-retroviral therapy. New HIV infection declined from 3.4million in 2001 to 2.3million. The total number of HIV/AIDS related deaths was 1.6 million. The number of people receiving ARVs was 9.7million among the low and middle income countries (WHO/UNICEF/UNAIDS 2003).

According to 2013 UNICEF statistics, South Africa for example has one of the highest HIV prevalence in the world with heterosexual transmission of virus. VMMC is therefore one of the main strategies adopted in reducing HIV transmission in the sub Saharan Africa (Scott, Weiss and viljoen 2005)

### **2.9.1 Perceived health and sexual benefits beyond HIV**

Different surveys have shown that among the English speaking industrialized nations and traditionally non-circumcising SSA, MC is associated with improved penile hygiene and reduced risk for infection. Similar studies in the USA, Ghana, Kenya ,Botswana ,Zimbabwe ,Zambia and republic of Korea confirm the same association as the driving force behind seeking MC(UNAIDS,2007). Another study in Nyanza showed that 55%of the uncircumcised men believed that women enjoyed sex more with circumcised men and this association is a stronger predictor for VMMC than other determinants. Similar studies that yielded similar observations have been conducted in Uganda (Wilken et al, 2010), North West Tanzania, Westonaria, South Africa and southern Nigeria (UNAIDS, 2007)

### **2.9.2 The direct and indirect benefits of VMMC**

Voluntary medical male circumcision (VMMC) is indirectly beneficial for the women, said Cindra fever. If HIV rate is lowered in the community then women also benefit from VMMC indirectly, because it only directly protects transmission from female to male partner it doesn’t protect against HIV transmission from male to female partner(WHO/UNAIDS,2012)

Voluntary medical male circumcision also reduces transmission of human papilloma virus (HPV) and herpes. If a man is circumcised he is less likely to transmit HPV and herpes to the woman.HPV is the biological agent causing penile cancer in men and cervical cancer in women. Herpes and HPV can also facilitate HIV infection.it is a great benefit to reduce this risks of HIV,HPV and herpes by VMMC(JPIEGO,2009)VMMC has been found to reduce the risks of herpes simplex virus-2,human papilloma virus in men and their female partners. And is associated with a reduction in the risk of genital cancer in both men and women. (Njehumeli et al, 2011). A man is expected to abstain from sex for six weeks after circumcision. This allows for full healing to occur thereby reducing further risks of infection during this period (Jpiego, 2009) on another study on ecological analysis of religion male circumcision and infection disease in 118 developing countries MC was also strongly associated with lower HIV prevalence among countries with primarily heterosexual HIV transmission but not among countries with primarily homosexual or injection drug use HIV transmission. These findings strengthen the reported biological link between MC and some sexually transmitted infections disease including HIV and cervical cancer (Drain halperin Hughes, Klaussner and bailey 2006).

Another major turning point in HIV prevention research was when HPTN 052 study results were announced in the year 2011. The HPTN 052 study found that early initiation of antiviral therapy (ART) substantially reduced the risk of HIV transmission within serodicordant couples (Boileym, desar k gumel 2012.

# 3.1 CHAPTER 3: RESEARCH METHODOLOGY

This chapter discusses the research methods that was employed in this research. Areas discussed in this chapter include the research design, study population and determination of the sample size and sampling procedures. The research also looks at the collection, presentation of data and it concludes by discussing data.

## **3.2. Study area**

The study was conducted in Kisumu North Sub County an administrative division of Kisumu County. The area is divided into a number of villages, including usare,korando B, Rota.

Rota having a warm climate and temperature varying from 64 F to 88F and is rarely below 61 F or above 93F

## **3.3. Research design**

Researcher used a cross-sectional study to conduct the research at Lumumba hospital among youths on the low uptake of VMMC.

## **3.4. Study population**

The target group for the study were the health providers and the care givers who assisted the researcher on getting the information on the uptake of VMMC since they were the immediate people who have the information.

Unit of analysis were the health providers and care givers, because the aim of the study was to capture the low uptake of VMMC according individual youth.

Caregivers were involved since they had the adequate information on the low uptake of VMMC while participants were not since they were not able to give adequate information some could go far as giving inaccurate information, therefore generalization of the results from such information could not be as precise but rather relative, equally in some instances participants could disclose only information they were comfortable disclosing.

## **3.5. Sampling procedure**

Data was collected using simple random techniques to administer the questionnaire the method was designed that the individuals were chosen randomly. This was done by developing a list of all possible participants that could be surveyed and then selecting a sub-group that represented a whole.

## **3.6 Data collection instrument**

Self-administered questionnaire was used to collect information from study participants. According to leedy and ormand (2005) a questionnaire is an instrument with open or closed questions or statement, to which a respondent must react.it, was used as a primary source of data collection. Each questionnaire was accompanied by a covering letter explaining then purpose of study to the prospective respondents. General instruction on completing the questionnaire and importance of completing the questions were included. The covering letter explained why it is important that the potential respondent personally completes the questionnaire by providing accurate and objective response to all questions apart from establishing a rapport; it also aimed at gathering as much information as possible on their demographic characteristics, their knowledge and perceptions of male circumcision and their acceptability of the procedure. They were asked to state how they would want circumcision to be performed, female youths were asked if it mattered to them having a circumcised partner or not, weather circumcision would be of any importance to them and whether they would accept to circumcise their male children.

## **3.7 DATA COLLECTION PROCEDURE**

Questionnaire was used to collect data per scheduled respondents. Questions were both open and closed ended and given to caregivers and health providers allowing them to fill.

## **3.8 ETHICAL CONSIDERATIONS**

The researcher extensively explained the purpose and objectives of the study to all participants and gave them opportunity to ask questions on issues that needed clarification.

Verbal informed consent was sought from all the study subjects before allowing their participants into the study, this is because some participants could misinterpret the information, some did not know how to read and some were not be able to write. The study subjects were assured that the study is anonymous and that the information they supply will be treated with utmost confidentiality and is only going to be used for the purpose of the study as explained. Access to the study participant’s information was limited to people with something to do with the study and no one else, and is limited to the institution sponsoring the study only for the purpose of exams administration by institution in question.

However, the participants were notified that the processed information (study reports) could be made available to anyone interested in the study with the direct consent of the researcher

Participants were assured that their names would not appear anywhere in the study instruments .participants were informed that they could withdraw from the study at any time without providing reasons and without any disadvantages

## **3.9 DATA ANALYSIS PROCEDURE**

All questionnaires were arranged and other records for easier processing and analysis, questions were numbered and arranged in order and the circumcised groups were compared to uncircumcised group to see their characteristics.

# 4.0 CHAPTER 4: DATA COLLECTION AND INTERPRETATION

The study discusses the presentation of the study findings. It begins by presenting the socio demographic investigated, followed by results of the findings on the influenced of household related factors on uptake, socio cultural norms and belief systems and finally the reasons why many men have hesitated to circumcise.

## 4.1 socio-demographic characteristics

The study was conducted in 3 villages of Kisumu north Sub County in January to February 2018. A total number of 100 participants. A total of 44% were aged between, 19-25 years, 22% were 27-28 years, 27% were between 29-31years and 7% were of 32Years.

Fig 4.1.0. Distribution of age and percentage frequencies.

A total of 32% had not completed primary education, a total of 48% had completed primary education and a total of 20% had a level of secondary education and beyond.

**Table 4.1.1. Distribution of level of education**

|  |  |
| --- | --- |
| Not completed primary education | 32% |
| Completed primary education | 48% |
| Level of secondary and beyond | 20% |

A total of 62% of the participants were married, 27% were singe and 11% were widowed. A total of 91% were Christians and 7% were Muslims and 2% had traditional beliefs. Only 23% participants were in formal type of employment

### 4.1.1. Spouses level of education verses circumcision

**Table 4.1.2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Undergone VMMC | Spouses level of education | | | |
|  | none | primary | secondary | tertiary |
| undergone | 4 | 22 | 15 | 16 |
| Not undergone | 0 | 30 | 7 | 6 |

\

The table above shows the level of spouses’ education against uptake. Participation in MC is highest among respondents whose spouses do not have any formal education.

### 4.1.2 Extent of VMMC

Only 51.5% of the respondents have undergone VMMC while 48.5% have not done.

Fig 4.1.3

MC coverage for adults is way below average, although the study methodology did not carry out any observational study on the participants, they could have been small participants who could have indicated that they were circumcised when actual they were not.

### 4.1.3. Age at circumcision

Most reports of having been circumcised before attaining 18 years 52% while others reports on having been circumcised at 18 years and above 48% **.**

### 4.1.4. Religion verses circumcision status

Catholic, protestant and Muslims participated in the study and cross tabulated below

Table 4.1.4

|  |  |  |  |
| --- | --- | --- | --- |
| Undergone VMMC |  | RELIGION |  |
| catholic | protestant | Muslim |
| undergone | 25 | 30 | 5 |
| Not undergone | 30 | 10 | 0 |

VMMC uptake is high among Muslims respondents and least among Catholic respondents. A man’s religion has got no effect on his choice to circumcise or not in Luo Nyanza. Those whose circumcision are influenced by religion are quite few and not for HIV prevention.

### 4.1.5. Marital status verses circumcision

Table 4.1.5

Marital status

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Undergone VMMC |  |  |  |  |  |
| Married monogamous | Married polygamous | single | Divorced/separated | widowed |
| undergone | 20 | 2 | 25 | 0 | 0 |
| Not undergone | 25 | 5 | 20 | 3 | 10 |

## 4.2. Economic factors

## 4.2.1. The type of employment verses circumcision

**Table 4.1.5**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Undergone VMMC or not | Occupation | | | |
| unemployed | Self employed | Employed (salaried) | student |
| undergone | 30 | 12 | 2 | 14 |
| Not undergone | 15 | 15 | 4 | 4 |

Unemployment, self-employment, salaried employment and students were tabulated and presented on figure 4.1.5 above whether is circumcised or not depends on his employment status. Uptake is highest among student respondents. There is least uptake among self-employed respondents. Self-employed men are the least interested in circumcision understandably due to their fears that circumcision time might compromise their work.

**4.7 spouses’ employment verses spousal circumcision status**

**Table 4.1.6 undergone VMMC spouse occupation tabulated**

|  |  |  |  |
| --- | --- | --- | --- |
| Undergone VMMC | spouses’ occupation | | |
| unemployed | self-employed | Employed (salaried) |
| undergone | 30 | 6 | 12 |
| not undergone | 12 | 15 | 25 |

Among married whose spouses’ were employed, the effect on uptake was tabulated and presented in the table 4.1.6 above. Circumcision uptake is least among the respondents who were employed (salaried) this is because most of them are the bread winners of their families. However this does not have influence in a man’s choice.

### 4.2.2. Monthly income verses circumcision status

**Table 4.1.7 undergone VMMC monthly income range tabulation**

|  |  |  |  |
| --- | --- | --- | --- |
| Undergone VMMC | Monthly income range | | |
| Below 1000 | Between 1000 to 5000 | Above 5000 |
| undergone | 30 | 6 | 12 |
| Not undergone | 12 | 15 | 25 |

The income range and uptake were presented in table 4.1.7 above .VMMC is high among respondents earning below 1000 and least among respondents earning above 5000.

**Table 4.1.8 spouses’ income verses spouses’ circumcision status**

|  |  |  |  |
| --- | --- | --- | --- |
| Undergone VMMC | Spouses monthly income | | |
| Below 1000 | Between 1000 and 5000 | Above 5000 |
| undergone | 27 | 3 | 10 |
| Not undergone | 30 | 10 | 20 |

The income levels of spouses’ were tabulated and presented in the table 4.1.8 above

## **4.1.3. The influence of fathers on their son’s circumcision**

Most respondents would take their sons to be circumcised as presented in the table below. Hygiene and the need to reduce HIV/STIs infection risk is cited as the most common motivation for allowing son to be circumcised.

**Table 4.1.9: reasons for allowing or not allowing son to be circumcised**

Allow son to be circumcised =total (% N

Allow (%N= Not allow (%N=

Table 4.1.9

|  |  |
| --- | --- |
| Hygiene, reduce HIV/STI infection risk | 65% |
| Child’s choice | 4.7% |
| modernization | 4.9% |
| He is still young | 5.7% |
| No benefits | 4.5% |
| Religious reasons | 1.7% |
| Like father like son | 3.6% |

Both majority of fathers who have undergone and those who have not would similarly allow their sons to be circumcised. Fathers who have not undergone VMMC are significantly allow their sons to be circumcised. Although different reasons are cited for circumcising one’s son, majority of interviewed men would allow their sons to be circumcised.

**Father’s circumcision verses son circumcision.**

## 4.2.0 INTERPRETATION OF RESULTS

### 4.2.1. Reasons why many men have hesitated to circumcise

Some participants gave and described different reasons that contribute to delayed uptake of MC, and these included fear of pain is cited as the major reasons (43.8%) why men still hesitate to circumcise followed by losing family income (19.5%) cultural/mythical beliefs about circumcision (19.5%), lack of knowledge on circumcision (15.9%). About 7.8% still do not see need to circumcise while about 8.6% think they are too old to circumcise.

One of the participant also gave out his opinion that,” circumcision is for children. They actively recruit during school holidays, picking and dropping children. As a father I did not have an idea that my son was going to be circumcised, I realized at a later date when he appeared uncomfortable and in pain I asked him and he clarified that he was collected by ‘jonyange’ ( the circumcisers) who came to their school and mobilized them for circumcision. I am not the first to encounter this scenario, many parents will confirm to you similar sentiments. Circumcision is for children not adults.

**Another participants observed**

I do not understand why they prefer to treat adults in the same way they treat children. I would be ashamed to sit on the same bench with my son awaiting circumcision on the same day. Why would I even go for circumcision at the same facility with my son, I think that issue on reproductive health and sexuality are sensitive to each parent, Since they have not considered a better way of handling our concerns, it will remain a children of interventions.

**Table 4.2.0 reasons for hesitating to circumcision**

|  |  |
| --- | --- |
| **Reasons for hesitate** | **Frequency percent (N=100)** |
| Afraid of complication | 3.6% |
| Age factor | 8.6% |
| Cultural or mythical beliefs | 19.0% |
| Fear of inexperience/female personnel | 3.9% |
| Fear of abstinence during healing | 2.6% |
| Fear of pain | 43.8% |
| Fear of testing | 1.3% |
| Lack of knowledge | 15.9% |
| See no need | 7.8% |
| Fear of family income loss during prolonged healing | 19.5% |

### 4.2.2. Knowledge on the process of circumcision

Although some of the men have false perception about circumcision procedure, some showed accurate understanding of the process as depicted.

**Table 4.2.1 the VMMC process**

VMMC process frequency percentage (N=100)

Before VMMC

Counselling; education on post operation care 34.3%

Unaware 29.8%

Counselling HTC 10.2%

Premedication 3.2%

Can’t remember 2.3%

During VMMC

Anaesthesia injection, removal of foreskin, suturing 49.4%

No idea 30.1%

Removal of foreskin 1.3%

After VMMC

Not aware 32.0%

Bandaging 31.0%

Wound care; abstinence information 14.8%

Given fare 3.4%

### 4.2.3 Reasons for/against HTS during VMMC

Respondents (45) who think that HIV should not be tested during VMMC cite the possibility that testing discourages those who fear testing while 55 of the respondents cite that need to know their status.

**Table 4.2.2 reasons for/against HTS during VMMC**

Reasons for testing/not testing during VMMC percent (N=100)

Discourages those who fear 25%

Protect service provider from infection 10%

Government requirement 6.0%

Know own status 69%

**5.4 implementing male circumcision at no cost on user**

Majority of the respondents think that VMMC should be offered for free while others

Think that it should be offered at a cost. Those who think it should be offered for free cite affordability of the services and those who think that it should be offered at a free cite, it will benefit to be circumcised person alone as in the table below

**Table 4.2.3 VMMC service charge**

**S**hould VMMC be charged? Total (%=75)

Free of charge (% N=25)

Affordability 3.4% 8.3% 53.4%

Enhance uptake 39.4% 27.8% 38.3%

Sole beneficiary 7.2% 34% 12.5%

**5.5 The choice of service provider as possible determinants of choice for circumcision**

52.1% of the respondents think that VMMC should be offered by the government while 47.9% think that it should be offered by NGOs. Government is chosen because of accessibility while NGOs is chosen because of better quality services and equipment as the reason for preference.

**5.6 Perception on weather circumcision has benefits or not**

Majority of those who have undergone VMMC and those who have not, think that VMMC have benefits. Those who have undergone are more aware of its benefit as compared to respondents who have not undergone

**5.7 perception on adverse effects of circumcision**

Both respondents who have undergone and those who have not think that VMMC have adverse effects. Absence was similar among circumcised and non-circumcised respondents. Poor wound healing and wound complications are the most cited adverse effects of VMMC. Shown in the table below

**Table 4.2.3 benefits and adverse effects of VMMC**

Knowledge of benefits

Undergone not undergone

Benefits 55% 25%

No benefits 5% 15%

Potential benefits of VMMC

Offers up to 100% HIV protection 8.3% 9.8%

Offers up to 60% 80% 40%

Protects men from some STIs 55% 23%

Improves penile hygiene 66% 3%

Knowledge of VMMC effects

Undergone not undergone

Effects 35.4% 35.4%

No effects 64.6% 65%

Adverse VMMC effects.

Bleeding after MC 24.1% 12.3%

Delayed healing 7.6% 8.8%

Encourage prostitution 1.3% 3.5%

Infection during or after MC 11.4% 15.8%

Loss of sexual strength 13.9% 3.5%

Pain 10.1% 8.8%

Wounds and complications 31.6% 47.4%

# CHAPTER 5: CONCLUSION AND RECOMMENDATION

## 5.1 CONCLUSION

Those who have undergone VMMC in Kisumu North were much younger than those who had not, with a significant proportion of these group having been circumcised before they were 18 years. This shows that circumcision rates among adult men age 19-32 years are still low. Therefore for the purpose of understanding the male circumcision prevalence among the adults of the reproductive age in this region, these findings are crucial.

It is important to take age factor into consideration when designing health interventions, the implementation of these interventions should be designed in such a way that there is constant designers and implementers have to involve adults in the community right from the onset otherwise they will feel left out in the consecutive programmatic stages

The government and international community policy of providing free male circumcision services as a way of scaling up uptake has played a key role in influencing those who have participated in VMMC. Majority of Luo men have faith in Government hospital and personnel arguing that these facilities are static and accessible unlike NGOs that they say are seasonal. These should however be accompanied by medical supplies and quality improvement in service delivery

## 5.2 RECOMMENDATION

The ministers of health of the county and national governments should liaise with local VMMC service providers in designing adult friendly VMMC services.

Those that feel loosing family income when seeking or healing from VMMC should, within program budget be adequately and transparently compensated for the lost time in order to promote coverage.

Implementers of the voluntary medical male circumcision should stratify the program based on age, these should create different age strata that take into consideration the concerns of adult men. The sensitivity of doing male circumcision in a common fashion for both adults and children should be addressed through community forum

Conduct further research, there is need to conduct a further research on the impacts of the VMMC interventions in order to create a clear picture on tangible progress and implications of interventions in the region, this will help in the revision of policies on VMMC.

REFFERENCE

Auvert B et al, 2005, Randomized controlled intervention trial of male circumcision for reduction of HIV infection risks: the ANRs 1265 trial. PLos medicine,Dol: 10.1371/journal.pmedd 0020298 (2005).www.plosmedicine.org/2010/12/12

Auvert et al Randomized Controlled intervention trial of male circumcisionfor reduction of HIV infection risk: the ANRS 1265 trial. PLos med 2005; 2(11):e 298.Epubs 25 october 2005

Auvert B, Taljaard D,Lagard E, Sobingwi. 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.e298.E pub 2005.

Bailey R et al, male circumcision for HIV prevention in young men in Kisumu, Kenya: A randomized controlled Trial Lancet Infect DU 2007, 369:643-56.

Bailey R, Moses S, Agot K.A Randomized controlled Trial of male circumcision to reduce HIV incidence in Kisumu, Kenya: progress to date August 2006; XVI international AIDS conference; Toronto

Bailey R.C Muga R poulussen R, Abitch H, 2002. The acceptability of male circumcision to reduce HIV infections in Nyanza Province. Kenya AIDS care 14:27-42.

Bailey R.C plummer FA and moses S,2001, male circumcision and HIV prevention:current knowledge and future research directions, The lancet infectious disease Vol 1 November 2001 14

Bailey R.C Moses S, parker GB Agot K maclean 1 Kriegar, JN Williams CFM Campbell RT, Ndinya Achola JO male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomized controlled trial. Lancet 2007; 369:643-56

Bell JA, (1993) qualitative research design: an interacvtive approach thousand oaks CA:sage

Bhimji A M.D 2000 infant male circumcision a violation of the Canadian charter of rights and freedoms, health law 2000,www.crip.org/library/legal 2010 12/12 canada

Castellesgue ,X, peeling, Franceschi,de sanjose s,Smith,jes albero,Ga Diaz M.Herrero R,Munoz N,and Bosch F.X,chlamyddin trachomatis infection in female parties of circumcised and circumcised adult men.A.M.J epidemiol 2005. 162(9):p.907-16

Cheluget B et al (2006) evidence for population level declines in youth HIV prevalence in Kenya:sexually Transmitted infections,2006 April 82(1) 121-126

Gray R et al. Male for HIV prevention in men in Rakai ,Uganda:randomized trial Lancet 2007 Feb 24:369 (9562):657-66

[http://esapubs.org/esapubs/statistics.htm.2009/09/09 downloaded on 22/3/2012](http://esapubs.org/esapubs/statistics.htm.2009/09/09%20downloaded%20on%2022/3/2012)

Jewkes R et al.2006.evaluation of stepping stones: A gender Tran formative HIV prevention.pretoria, south Africa medical research counsil.

Laporte A,aggleton P.1998.HIV/AIDS,prevention in the context of new therapies rapport of meeting organized by UNAIDS, Geneva February 1998.

Lukoba M.O Bailey RC Acceptability of male circumcision for prevention of HIV infection in Zambia AIDS care 2007April 19 (4) 471-7

Macleod Edwards and Buchir, 2007. Principals and practise of medicine and surgery 20th edition Longman medical series, London

Mattson C.L Bailey RC muga, R, paulssen R, Onyango T. 2005, Acceptability of male circumcision and predictors of circumcision preference among men and women in Nyanza province, Kenya AIDS care 17:186-194 ministry of health and child welfare 2007, government of Zimbabwe plan for the nationwide provision of antiretroviral therapy 2007-2009. Ministry of health and child welfare

Nagelkerke NJD, Moses s, de V (a) SJ Barley RC modelling the public health impact of male circumcision for HIV prevention in high prevalence areas in Africa ,BMC infectious disease 2007;7:16.

NASCOP and ministry of health (2006) sentinel surveillance of HIV and STDs in Kenya National AIDS/STD control programme (2008) policy on male circumcision in Kenya ministry of health Republic of Kenya

Patterson BK, landay Asiegal JN Flener z pesses D chariano A, et al susceptibility to human immunodeficiency virus -1 infection of human foreskin and cervical tissue grown in explant culture. Am J pathol 2002,161 (3):8-73

Patterson BK Landay A,Siegel JN Flener Z pesses D chariano A et al susceptibility to human immunodeficiency viru-1 infection of human foreskin and cervical tissue grown in explant culture AMJ pathol 2002;161 (3):8-73

Scott B.E Weiss H.A and viljoen J 12005,the acceptability of male as an HIV prevention among a rural Zulu population –natal ,south Africa ,AIDS care 2005 (vol 17)(No.3 304-313)

Siegfried N, et al male circumcision for prevention of heterosexual acquisition of HIV in men cochiane database syst Rev 2003; 3:CD00362

Siegfried N muller m,volmink J Deeks J,egger M low N, et al .HIV and male circumcision a systematic review with assessment of the quality of studies. Lancet intect Dis 2005:5:165-73

UNAIDS Kenya country page www.unaids.org /en/geographical+area/by+country/Kenya.asp

UNAIDS ‘African fact sheet’,march 2005.

UNAIDS AIDS epidemic update Geneva: joint united nation programme on HIV/AIDS 2007

UNAIDS 2007.update epidemiological fact sheet on HIV/AIDS and sexually Transmitted infections Geneva

USAID/AIDS mark, 2003.male circumcision:current epidemiological and field evidence program and policy implications for HIV prevention and reproductive health conference report Washington ,DC:USAID

Weiss HA Thomas SL Munabi SK Hayes RJ.male circumcision and risks of syphilis cancroid and genital herps: a systematic review and meta- analysis. Sex Transm infect 2006:82(2) 101-9

JPIEGO(2009) manual for male circumcision under local anaesthesia version 3.1(Dec 09)(vol.1) kharwal s, and Bharat p.s.(2013) male circumcision within the context of HIV prevention india qualitative study conducted among young men in chandigah india 1/(3) 31-43

WHO/UNAIDS/UNICEF (2009) toward universal access: scaling up priority HIV/AIDS intervention in the health sector

WHO/UNAIDS operational guidance for scaling up male circumcision services for prevention world health organization and joint united programme on HIV/AIDS 2008