



Original Article

## Impact of Modern Male Circumcision on STI/HIV in Samia Sub County, Kenya

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**Keywords:**

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**Purpose:** The study aimed at investigating the impact of Modern Male Circumcision (MMC) on STI/HIV in Samia Sub-County, Kenya. As at 2015-2019 the uptake of male circumcision in Samia Sub County was 52% which was below 80% recommended by WHO. **Methodology:** The study design was a cross sectional descriptive study. Sample size was 385 respondents. Stratified sampling was used to select households while purposive sampling procedure was used to select men. Questionnaire was used to collect data. Data gathered was edited, analysed using SPSS version 25.0 at p value of 0.05 considered statistically significant. Ethical consideration was observed during the entire process of the study. **Results:** Majority of the respondents 72 (20%) were in the age bracket of (18-26) years. 45% had attained primary level education. Further, 60% of respondents reported that Male circumcision reduced STI/HIV transmission by 60% at 0.001. However, they were hindered to seek male circumcision services due to long distance to the health facility at (45%). 50% believed that women health professionals were not allowed to touch men's penis. **Conclusion:** Provision of MMC services is a concern, it reduced STI/HIV transmission by 60% among men in Samia Sub County community. However, as regards distance to some healthy facility to access MMC services still it was an obstacle to men. Moreover, Female health providers still posed hindrance to up take of MMC services because from the study, it was noted from Samia Sub-County that it is a taboo for women to touch men's penis. **Recommendation:** Despite some impediment of distance and culture towards MMC, the MOH need to strengthen the uptake of male circumcision in order to reduce the magnitude of STI/HIV in Samia Sub-County.

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## INTRODUCTION

Modern male circumcision (MMC) is the cutting of glans of the penis of a man and it is conducted all over the globe for varied rationales. (Bailey *et al.*, 2007). According WHO and UNAIDS, circumcision of men should be provided in areas where we have low uptake of cutting while HIV/AIDS pose a burden to the health care system. This service should be given by competent qualified health professionals (WHO, 2009). The republic of Kenya in the year 2008 introduced the national Voluntary Medical Male Circumcision (VMMC) program, and planned to circumcise 860,000 males by 2013 (MOPHS, 2009). In spite of multiple challenges, Kenya has made progress toward the 80% VMMC target by circumcising 52.2% of uncircumcised males in Nyanza province, but considerable variations in coverage by age. Further, Kenya as a country has put more effort in delivery of VMMC especially regions with high magnitude of HIV/AIDS prevalence.

Despite these approaches we had several Socio-economic and demographic, healthy facility and cultural factors that facilitated uptake of MMC. These included the "Beliefs that MC led to improved hygiene, protection from sexually transmitted infections (STIs) and HIV, improved sexual pleasure and performance, and greater acceptability by other ethnic groups" (Westercamp and Bailey, 2007). Nevertheless, on the other hand, inhibitors to of MC commonly identified were "pain, culture and religion, cost, possible adverse

events (AEs), and the potential for risk compensation (i.e., an increase in risky sexual behaviour following MC". Another research done in Nyanza indicated that men sought circumcision services for some rationales such as feeling clean in the private area, the risks of contracting HIV and STI was very low, chances of getting neoplasm of the penis was minimal and prolonged sex period for both partners. However, on the other hand, some hindrance to MC were affliction after the cutting, adverse effects, protracted time of recovery, long sick off from place of work and some traditional beliefs (Herman-Roloff, *et al.*, 2010). Further, men who had undergone cut, they said that they could do a number of sex rounds with easy, wearing of the condoms was very easy and they could not experience any injuries/wounds on their penis. (Edgil *et al.*, 2011).

Further, according to Impact Research and Development Organization (2019), the data collected from January 2015 to June 2019 male circumcision was 52%. However, the uptake is still below 80% recommended by the WHO. In spite of government creating awareness through mass media and employing community health and extension workers (CHEW's) to be sensitizing the community on issues regarding voluntary medical male circumcision. This is because the impact has not up to 80% in order to reduce the prevalence of STI/HIV.

**METHODOLOGY**

This was a cross sectional descriptive study. The study was conducted in Samia Sub County, Busia County, Kenya. Samia Sub County has a total area of 281.4 km, it borders Busia County to the North, Bunyala sub county to the south, Siaya sub county to East and Uganda to West. It is inhabited by Luhya, Luo, and Baganda from Uganda. (Samia district development plan, 2019). This study used Stratified sampling to select households where these men reside and Purposive sampling procedure was used to select men between ages 18-50 years due for MMC services. Stratified method involved categorizing the members of the population. 385 participants were chosen purposively to represents the entire target population. The research used numerical method and narrative methods to obtain data. The raw data was obtained from the study area. The study utilized a self-administered questionnaire targeting men aged 18-50 years. The questionnaire was both structured and semi-structured in order to collect the required information adequately; research assistants were used.

Pretesting involved a run of a small study and the reason was to be able to rectify any anomalies in the tools of data collection. Thus ensure valid results. In this study, a total of 38 (10% of 385 respondents),

men seeking MMC at Matayos Sub-County were utilized for pre-testing. The investigator was given a chance to refine tools and the procedure to collect data. Data obtained was entered into the laptop for storage. Data analysis was done by use of computer statistical software programme for social science and presented in form of tables by the same software (SPSS version 26.0).

**RESULTS**

**Socio-Demographic Factors and Uptake of Male Circumcision**

In this study, of the 385 questionnaires that were administered, 360 questionnaires men responded while 25 questionnaires had no response. It was assumed that age was a crucial feature of the respondents that would influence the uptake of MMC services among men. The findings Indicated that, of the respondents who completed the questionnaires 72 (20%) were in the age bracket 18-26 years, 126 (35%) were in the age range of 27-37 and 162 (45%) in the age range 38-50 years. Out of the respondents, 45% (162) had primary level education, 20% (72) had secondary level of education, 20% (72) had tertiary level of education, 10% (36) had university level of education, and 5% (18) had no education.

**Table 1: Socio-demographic factors and uptake of male Circumcision**

Socio-demographic factors		Frequency	Percentage
Age	18 – 26 years	72	20.00
	27 – 37 years	126	35.00
	38 -50 years	162	45.00
	Total	360	100.00
Level of education	Primary	162	45.00
	Secondary and tertiary	144	40.00
	University	54	15.00
	Total	360	100.00

**Health Related Factors and Uptake of Male Circumcision**

The study showed that majority understood MMC what it meant and this was correlated to positive factors influence. 60% of respondents reported that MMC reduces STI/HIV transmission, 10% of

respondents said that it is provided by qualified staffs, 10% were influenced by CHEWS because they are closer to clients in the community, 5% were due to art of being clean for those circumcised, 5% were due to availability of pain killers, 5% were due to sterilized instruments making it safer method as compared traditional method, 5% were due to

getting transport to and from the hospital. Further 45% of the respondents were negatively influenced by distance and inaccessibility to some centres, 20% lack of privacy to some centres, 20% negative

attitude of some service providers, 10% long waiting time at service delivery point, 5% fear of female health provider

**Table 2: Health related factors and uptake of Male circumcision**

Health facility facilitator	Frequency	Percentage
STI/HIV transmission reduction	216	60.00
Qualified staff provision	36	10.00
CHEWS influence	36	10.00
Art of clean after circumcision	18	5.00
Availability of pain killers	18	5.00
Sterilized instruments	18	5.00
Provision of transport	18	5.00
Total	360	100.00

**Cultural Beliefs and Uptake of Male Circumcision**

believed that for Luo men, it is a taboo for their foreskin to be removed, 10% no anaesthesia for one to be a real man, 10% it took adults long to heal.

Out of the respondents, 50% believed that women were not allowed to touch men’s penis, 30%

**Table 3: Cultural beliefs factors and uptake of male circumcision**

Hindering beliefs	Frequency	Percent
Woman not allowed to touch men’s penis	180	50.00
Luo men’s it is a taboo their foreskin to be removed	108	30.00
No anaesthesia for one to be a real man	36	10.00
Adults take long to heal	36	10.00
Total	360	100.00

**DISCUSSION**

The study established that majority of respondents 72 (20%) were in the age bracket 18-26 years, 126 (35%) were in the age range of 27-37 and 162 (45%), in the age range 38-50 years This implied that younger men sought MMC services unlike older men and this was in line with WHO-UNAIDS (2009) that age as a factor had great influence on MMC services up take especially younger men due to peer pressure.

gone to school. It is worth noting that the level of education is critical in determination of the level of the information men had in regards to up take of free MMC services. Thus, the need to strengthen education. This is in line with Muhamadi *et al.* (2011) a study which state that education was a key factor that influenced MMC services.

According to the study, out of the respondents, 45% had primary level education, 20% had secondary level of education, 20% had tertiary level of education, 10% had university level of education and 5% had no education. From the research it shows that at all the respondents at one point had

Further, 60% of respondents reported that MMC reduced STI/HIV transmission, 10% of respondents said that it is provided by qualified staffs, 10% were influenced by CHEWS, 5% were due to art of being clean for those circumcised, 5% were due to availability of pain killers and 5% were due to sterilized instruments making it safer method as compared traditional method and 5% were due to getting transport to and from the hospital. This indicated that, MMC had strong influence in

reduction of STI/HIV transmission by 60% and these findings were similar to WHO-UNAIDS, (2009), whereby MMC reduced STI/HIV by 60% and more also some clients confessed that the comfort of having the operation under the trained hands of a surgeon was a motivator to them accepting MMC. MMC under trained hands is less likely to cause associated complications such as severe bleeding and post-surgical wound infection.

More also according to the study, most men 45% were negatively influenced by distance and inaccessibility to some centres, 20% lack of privacy to some centres', 20% negative attitude of some service providers and 5% fear of female health provider. This was in line with Macintyre *et al.* (2014), whereby MMC up take was affected by both distance and lack of health infrastructure.

According to this study, on the other hand hindering beliefs identified indicated that 50% of men, believed that women were not allowed to touch men's penis. This was supported by the findings of Hatzold *et al.* (2014) who highlighted factors that hindered men to under-go MMC as it took long for older men to heal and it was a taboo for women to practice MMC.

## CONCLUSION

Provision of MMC services is a concern, it reduced STI/HIV transmission by 60% among men in Samia Sub County. Distance to some healthy facility to access MMC services was an obstacle to men. Moreover, Female health providers posed hindrance to up take of MMC services because from the study, it was noted from Samia Sub-County it is a taboo for women to touch men's penis.

## Recommendation

Despite some challenges of distance and culture towards MMC, the MOH need to strengthen the uptake of male circumcision in order to reduce the magnitude of STI/HIV in Samia Sub-County.

## Competing Interests

The authors have no conflict of interest

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