

Community perception on male circumcision for HIV/AIDS Prevention in Makete District

A.N. Sikira¹ & A.P. Sanga²

¹Senior Lecturer, Sokoine University of Agriculture

²Community Development Officer, Makete District Council,

Abstract

A study was conducted to assess community perception towards male circumcision and HIV prevention in Makete District. A cross-sectional research design was used employing quantitative and qualitative for data collection. Quantitative data were collected using a questionnaire administered to 420 respondents, while qualitative data were collected using a checklist with questions administered to key informants and focus group discussants. The prevalence rate for HIV/AIDS was found to be 11% determined using secondary data from Makete district Hospital. It was noted that 59.7% of the respondents had a negative perception towards male circumcision while 32.7% had a positive perception. Positive perceptions of men and women were found to be an important aspect towards male circumcision. It was also noted that cultural factors hinder men to opt for male circumcision. The need for including women in the campaign towards male circumcision was found to influence male circumcision of their sexual partner. These findings lead to the conclusion that in order to have an effective HIV/AIDS prevention programs, a combination of approaches is required. Nonetheless, male circumcision should never replace other known methods such as use of condom for HIV prevention.

Keywords: Community perception, male circumcision, HIV/AIDS prevention

Introduction

The HIV/AIDS pandemic poses the greatest health challenge in Tanzania during these times, particularly in Makete district. The overall prevalence rate of HIV for Makete District in 2008 was 16.9% compared to National average, which was 7% (MDC, 2008). There are many factors leading to high prevalence of HIV in Makete district including economic factors such as low income among people in the district leading to transactional sex; these are encouraged by social-cultural factors that tolerate multiple concurrent partners, substance abuse, gender inequalities, widow inheritance, polygamy and low level of male circumcision (MC) practices (TACAIDS *et al.*, 2008^a). Male circumcision has recently been proved to be a preventive measure towards the spread of HIV/AIDS worldwide (Auvert *et al.*, 2005). Evidence from research has indicated that the spread of HIV/AIDS was higher in communities where

non-circumcision was common compared to other communities where circumcision was commonly practiced (Bailey *et al.*, 2007; Gray *et al.*, 2007; TACAIDS, 2008^b). There is convincing evidence from three randomized clinical trials conducted in South Africa, which indicate that circumcision reduced men's risk of becoming infected with the HIV virus (Auvert *et al.*, 2005; Bailey *et al.*, 2007; Gray *et al.*, 2007). One of the randomized controlled trials indicated that male circumcision reduces sexual transmission of HIV from women to men by 60%, offering an intervention of proven efficacy for reducing the spread of HIV through sex (Williams *et al.*, 2006).

On the other hand, circumcision has not been shown to directly protect females from acquiring HIV from an infected male partner (Wawer *et al.*, 2009). There are also biological studies of men's foreskin of their sexual organ, which show a high concentration of cells very susceptible to HIV infection (Patterson *et al.*, 2002). Studies have indicated that routine circumcision across sub-Saharan Africa could prevent up to six million new HIV infections and three million deaths in the next two decades (Williams *et al.*, 2006). Given such strong evidence, the World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) recommended that male circumcision should be considered as imperative and additional intervention for HIV prevention (WHO, 2007). In this regard, Tanzania is at its initial stages of introducing and scaling-up male circumcision services (MDC, 2011).

In Tanzania, male circumcision is largely done as a cultural or religious practice. About 75% of the men are circumcised in regions where this practice is prevalent including; Mara, Arusha, Manyara, Singida, Dodoma, Morogoro, Tanga and Coast regions (TACAIDS, 2008). In the remaining regions of mainland the prevalence of male circumcision is much lower; for instance, the prevalence of male circumcision is lowest in Shinyanga (21%), Mwanza (21%), Kagera (26%) and Iringa (29%) (TACAIDS, 2008).

- A national high profile campaign to promote male circumcision was introduced in 2010. The Ministry of Health, with support from President's Emergency Plan for AIDS Relief (PEPFAR) through USAID's Maternal and Child Health Integrated Program, launched the campaign in Iringa region (MDC, 2011). During six weeks of Voluntary Male Circumcision Campaign (VMCC) under medical care, 10,352 adolescent and adult males were circumcised. Statistics from the exercise indicate that over three quarters of the beneficiaries of the campaign were young male adults; only 24% of circumcised communities were older than 20 years indicating less

demand of VMMC by male adults (MDC, 2011). Regardless of the campaign initiatives, male circumcision in the region is still low (Mahle *et al.*, 2011), and community response on male circumcision in the district is still low (MDC, 2011). Individual perceptions towards male circumcision have been said to contribute to low prevalence of male circumcision. Apart from the number of circumcised male, very few studies have been conducted to assess male circumcision in Makete district in a wider context. For instance, there is no information regarding other achievements of the circumcision campaign in relation to attitudes, practices and beliefs about sex, in relation to male circumcision. The purpose of this paper is to assess the perceptions prevailing among male and female members of the community in Makete district regarding male circumcision as a strategy for preventing new infections of the HIV virus.

Conceptually, this paper borrowed some ideas from the cognitive dissonance theory, which holds that contradicting cognition serve as driving forces that compels the mind to acquire or invent thoughts or belief, or to modify existing beliefs (Festinger, 1957). Similarly, inadequate knowledge (conflicting cognition) towards male circumcision might influence the perception of men and women in the area. Positive perception and the correct information regarding male circumcision is required for behavioral change, which would in turn enhance prevention of HIV.

Methodology

A cross-sectional study was conducted in Makete District, which is located at the extreme Western end of Njombe Region¹¹ about 110 km from the regional headquarters. Makete district was chosen because it has high prevalence of HIV/AIDS (16.9%) with low prevalence of male circumcision (MDC, 2011). The District has a population of 97,266, being 45,300 male (46.6%) and 51,966 female (53.4%) as per 2012 census.

Makete District was purposively selected, followed by simple random sampling to select one ward from each of the six divisions and one village from each of the selected wards. Qualitative data were collected from elders, traditional healers, influential community members including youths and religious leaders using Focus Group Discussion (FDG) methods. Five to seven men and women participants from each village were involved in the focus group discussion. Two focus group discussions were convened in each village (one for women and another for men alone separately).

¹¹ Until 2011 Makete district was part of Iringa region. Following the establishment of Njombe region, Makete district is now one among four districts in Njombe region

Respondents for quantitative data collection were determined using Fisher's formula as indicated in appendix 1. A total of 70 men and women respondents were randomly selected from each village making a total of 420 respondents. Quantitative data were collected using a structured questionnaire administered to men and women in the study area. Qualitative data were gathered through FGD and key informant using a checklist. Issues related to knowledge and perception of communities towards male circumcision was included in the checklist.

Determination of community's perception

Perception was measured using a bipolar Likert scale. The format of a typical five-level Likert was used in which the respondent was asked to; strongly disagree, disagree, neither agree nor disagree (uncertain), agree or strongly agree against the statements. Statements that were used to construct the Likert scale included assumptions that; (i) male circumcision leads to infidelity among men, (ii) circumcision makes the male sexual organ firm, not easily prone to cuts and bruises thus reducing the chances of contracting other sexually transmitted diseases, (iii) the belief that men who practice male circumcision were Muslim, Christian and (iv) that male circumcision improves hygiene for men.

Fourteen (14) statements (represented in Table 2) were developed to assess the respondents' attitudes in relation to different aspects of male circumcision. Positive and Negative statements towards male circumcision were developed and included in the questionnaire. A numerical score was given by each respondent for each question indicating their negative, neutral or positive attitude towards male circumcision. The score for each respondent for each question was recorded, and their total score was computed. The proportion of respondents falling under each of the five categories (scoring 1 to 5) was then determined, and the findings are presented in Table 2 below.

Study findings

Social economic characteristics

The age distribution of respondents indicates that the youngest respondent was 17 years old and the oldest was 73 years old. Slightly more than one third (34%) of respondents were between 25 and 35 years old and nearly a third (29.3%) fell in between 36 and 45 years old. This implies that majority of the respondents were in the reproductive age, which is also sexually active, therefore at high risk of acquiring HIV infection (TACAIDS, NBS and Macro, 2005). Religious affiliation was dominated

by Christians. Majority (65.5%) of the respondents were protestants (Lutherans, Assemblies of God and the Seventh Day Adventist), followed by Roman Catholics (29%). Followers of traditional beliefs and Muslims constituted a minority, being 4% and 1.2% respectively (Table 1). About 52.1% of respondents were male while 47.9% were females.

Majority (80.2%) of the respondents had standard seven level of education, which is regarded to be too low for influencing the respondents' knowledge and perception towards male circumcision for HIV prevention. This is inline with what was reported by Wolfe and Behrman (1987) who pointed out that education is a key determinant of the lifestyle and the status an individual will attain in society. Education attainment has a positive effect on health – seeking behavior and attitudes. Education attainment is also strongly related to awareness, knowledge, perception and behavior towards prevention of HIV, care and support regarding HIV/AIDS.

Results in Table 1 also show that about 89% of the respondents were small scale farmers; followed by those who were employed (6%), while 5% were engaged in petty business. Farmers in Makete district face many challenges including low productivity and poor access to markets, which means most of the farmers earn low income levels. Such low income increases the likelihood of the affected persons engaging in risky behavior, such as young women engaging in sexual transactions with older men, hence increased their vulnerability to HIV infection (Gupta *et al.*, 2003).

Table 1: Social economic characteristics of study respondents (n= 420)

Characteristics	Frequency in %
Age in years	
25 -35	34.0
36 – 45	29.3
46 -60	20.2
18 – 24	10.5
60>	5.0
<18	1.0
Religion	
Protestant	65.7
Roman Catholic	29.0
Traditional	4.0

Characteristics	Frequency in %
Muslim	1.2
Sex	
Female	48
Male	52
Education level	
Standard seven	80.2
No formal education	9.3
Secondary education	6.0
Certificate level	2.6
Diploma	1.4
Undergraduate	0.5
Occupation	
Small scale farming	89
Petty business	6
Salaried employment	5

HIV prevalence in Makete district

Information sources from the district indicate that HIV/AIDS prevalence was 18.9% during 2006. The National HIV testing campaign in 2008 revealed the HIV prevalence rate of 16.9% for Makete district (Tanzania HIV/AIDS Malaria Indicator Survey (THMIS) for 2007/2008). Secondary data from Makete District hospital was used to calculate the HIV prevalence rate for the year 2011 which was found to be 11% as indicated in Fig. 1. This figure is lower than the overall prevalence for Iringa region, estimated at 15.7%, being the highest in the country during 2007/2008 (TACAIDS *et al.*, 2008). These findings suggest a declining trend of HIV/AIDS infection rates in Makete district (Figure 1).

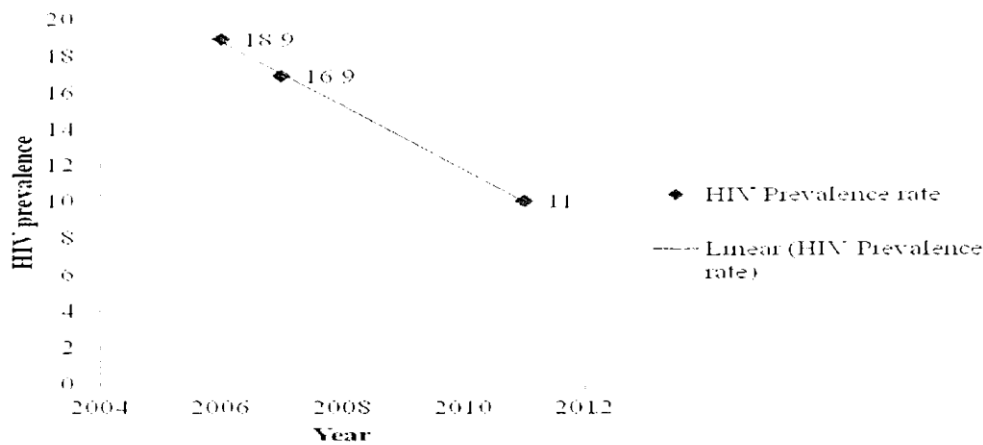


Figure 1: Prevalence of HIV/AIDS in Makete District.

The decreasing trend in prevalence rate of HIV in Makete District is attributed to various initiatives including increased HIV/AIDS prevention awareness programmes such as; Voluntary Counselling and Testing (VCT), Prevention of Mother To Child Testing provided to the community members as well as the initiation of new HIV prevention services like male circumcision, just to mention a few. The district high volume campaign towards male circumcision started in early 2010 (MDC, 2011).

Perception of community towards male circumcision for HIV prevention

The five levels of the Likert scale were reduced into three (Table 2) to bring more meaningful results. From the findings, it is commonly believed that male circumcision leads to high sexual desire among men (MDC, 2011). Research findings as presented in Table 2 indicated that 61.9% of respondents strongly disagreed with the statement that male circumcision leads to infidelity among men. Nearly a third (27.8%) of the respondents agreed with the statement whereas 10% were uncertain. Male circumcision was linked to religious beliefs. About 70% respondents strongly disagreed that male circumcision is for Muslim only and not for Christians, which means more than half of the respondents associated the practice with the Muslim faith. Similarly, many (65%) respondents strongly disagreed with the statement that practicing male circumcision amounted to abusing Gods’ creation because the fore skin is meant for protection of the male reproductive organ (Table 2). Such perceptions are likely to reduce the rate of practicing male circumcision. Providing the correct information on male circumcision is necessary to reverse such perceptions.

In relation to hygiene, majority (81.9%) of respondents disagreed that male circumcision improves hygiene of male sexual organ and hence, reducing incidences of infections to the sex partners. This contradicts with Patterson *et al.* (2002) who supports the statement that improved hygiene of the male's sexual organ (mainly the fore skin) would lead to prevention of STIs among men. In addition, a good proportion (53.1%) of respondents contended that male circumcision reduces chances for cervical cancer in female sexual partners consistent with findings by (Williams *et al.*, 2006). These findings reflect awareness within the community in relation to male circumcision for disease prevention.

Table 2: Attitude towards male circumcision for HIV prevention (n = 420)

No	Statements	Scores (%)		
		(1)	(2)	(3)
1.	Male circumcision leads to infidelity among men.	61.9	10.2	27.8
2.	Men who practice male circumcision are Muslim not Christian	70	3.3	26.7
3.	Male circumcision reduce the size and strength of the male sexual organ	58.8	21.0	20.2
4.	Circumcision is not a new fashion so it should not be practiced	67.3	11.2	21.4
5.	Circumcised men fail to satisfy women during sex	57.9	22.1	20
6.	Male circumcision is for young boys only and not older men	71.4	1.4	27.1
7.	Male circumcision is like abusing God's creation because the foreskin is meant to protect the male sexual organ	65	6.4	28.5
8.	Male circumcision improves male's hygiene	81.9	12.4	5.8
9.	Male circumcision makes the male sexual organ firm and therefore not easily prone to cuts	83.6	11.0	5.4
10.	Male circumcision helps to reduce the risk of cervical cancer for the female sex partners	45.5	1.4	53.1
11.	Male circumcision reduces the risk of getting STI through the male organ.	53.8	1.0	45.2
12.	Uncircumcised male partner cause vagina infection in women	36.7	1.4	61.9
13.	Uncircumcised male partner increase a woman's risk of breast malignancy	47.4	1.0	49.7
14.	Male circumcision reduce the risk of urinary tract contamination in children	35.3	1.0	63.8
	Average score	59.7	7.5	32.7

Key; 1= Disagree, 2 = Uncertain, 3= Agree

Average scores indicated more than a half (59.7%) of the respondents had negative perceptions towards male circumcision, only 32.7% had positive perception and 7.5% were neutral (Table 2). This is in contrast with findings by WHO (2007), which has suggested that male circumcision can reduce HIV/AIDS infection among men. This calls for strategies to change prevailing negative perceptions so that communities can embrace male circumcision. This will happen if concerted efforts are made to raise awareness and provide the correct information

Negative perceptions towards male circumcision were also reflected during FGD where participants had this to say; *“God created our body parts which are not supposed to be tempered with; there are other parts that can be removed like hair in the armpits, but not the fore skin of the male sex organ. Male circumcision is like abusing God’s creation because the foreskin is meant for shielding the organs.”* (a male participant, in Iloilo Village). Another female participant in Ikuwo Village said *“I reject male circumcision because it is the same as turning my partner into Muslim.”*

Such negative views however were in contrast to the scores of female respondent to questions for the Likert scale. Out of 201 female respondents, nearly three quarters (74.1%) preferred circumcised male sexual partners while 26% of the respondents preferred uncircumcised partners. Such a positive perception could help to promote more male circumcision. But there are a significant proportion of female respondents who preferred uncircumcised partners, representing a part of the population whose negative attitudes need to be addressed through various means in order to overcome the persistent high prevalence of HIV and AIDs in Makete district.

Female respondents were asked to give reasons for preferring circumcised men relative to uncircumcised sexual partner. The majority (72.5%) of respondents contended that they prefer circumcised male partners for HIV and other STDs’ prevention (Table 3). About 22.8% of female respondents opted for circumcised male partner due to hygiene. These results indicate that majority of women are aware that it is important for men to be circumcised for HIV prevention and hygiene. Consequently, females may influence their male partners to practice male circumcision. During FGD with women discussants, one of the participants was quoted saying *“You enjoy a circumcised man as he is hygienically clean; however, there are risks of infection with uncircumcised male partner”* (Female participant, Mahanji Village). Another female participant in the same village added that *“Some men take a week without taking shower, in such circumstances; the*

uncircumcised men would lead to high risk of infection to their partners.” Another female participant in Iloilo Village added “... when uncircumcised men have affairs out of their wedlock, they may contract HIV/AIDS, hence infecting their wives.” (Female, Iloilo Village). Similarly, a man in Ukwama village was quoted saying “male circumcision not only prevent an individual from acquiring STIs but also improves men’s hygien. A man who is not circumcised has a bad smell just like a male buck”

Table 3: Reasons for not preferring uncircumcised male partner (n=149)

Reasons	Frequency	Percent
For hygiene	34	22.8
For HIV and other STI prevention	108	72.5
For cultural reasons	7	4.7

Table 4: Reasons for preferring uncircumcised male partner (n=52)

Reasons	Frequency	Percent
Norm/culture	25	48.1
Moral reasons	16	30.8
Personal interest	7	13.5
To maintain body temperature	4	7.7

A minority of female respondents however wanted culture and their traditional moral values to be preserved. Out of 52 female respondents 26% preferred uncircumcised male partners; of these, 48.1% made this choice to preserve their culture, while 30.8% were driven by moral beliefs. During FGD, one of the female discussants was quoted saying; *“I thought people who circumcise get changed into another religion. For me because I am a Christian I don’t prefer a circumcised man”* (Female participant, Iloilo Village). Such perception indicates lack of knowledge about the importance of male circumcision towards HIV/AIDS prevention as it was conceptualized by the cognitive dissonance theory. Both men and women had contradicting cognition towards male circumcision. Another woman from Mwakavuta Village also added that *“I used to think that male circumcision is for Muslims only, it is very recently, I started hearing people saying circumcision is for all men, this is not clear to me.”* Similarly a woman from Utweve Village was quoted saying that *“I usually hear that a circumcised man is not sexually energetic. I would not be able handle his*

inflexibility and coldness.” Another female from Mwakavuta village added that “*There is no way we can compare the two [circumcised and uncircumcised men] because we are already married to only one partner.*” Such comments show that the level of awareness regarding male circumcision should also target female members of the community

Conclusion and Recommendations

Based on the findings discussed above, the study concluded that majority of men and women had negative perception towards male circumcision. Such poor perceptions were attributed to inaccurate or lack of information (conflicting cognition). Cultural factors and beliefs served as a big barrier for not practicing male circumcision. Nonetheless, a good proportion of women preferred circumcised male partner in order to minimize the risk of contracting HIV. This means, awareness creation is necessary in order to improve people’s knowledge, which would in turn change the perception of men and women towards male circumcision as an important factor for HIV/AIDS prevention in Makete District.

Based on the findings, it is recommended that it is important to use different people within communities including; traditional leaders, women’s and men’s groups as well as religious leaders to promote the practice of male circumcision. However, male circumcision should not replace other known methods of preventing HIV infections. Prevention should always be considered as part of a comprehensive HIV prevention package. Stakeholders advocating for male circumcision should also target women in their work because women can influence their male partners to change perceptions and embrace male circumcision as caring partners. Religious leaders can be used to change the prevailing perception that male circumcision is practiced by Muslims only. Further research is recommended to comprehensively assess factors that hinder wider adoption of male circumcision in Makete district. Operational research should be conducted to assess the adoption and sustainability of the campaign for voluntary circumcision of men.

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Appendix 1: Sample size determination using Fisher's formula

Since the total population of Makete District was 120,818 which are more than 10,000, Fisher formula was used to determine the sample size. The total sample size for the study was 420 respondents. The sample size which was needed to measure a given proposition with a given degree of accuracy at a given level of statistical significance was calculated by using a simple Fisher formula, provided that the total population size was greater than 10,000 (Fisher *et al.*, 1991).

$$n = \frac{z^2 pq}{d^2}$$

Where:

n = the desired sample size (when population is greater than 10,000).

z = the standard normal deviate, usually set at 1.96 (or simply more than 2), which corresponds to the 95 percent confidence level.

p = the proportion in the target population estimated to have a particular characteristic. If there is no reasonable estimate, then use 50 percent (0.50).

$q = 1.0 - p$.

d = degree of accuracy desired, usually set at 0.05 or occasionally at 0.02.

$$n = \frac{(2.05)^2(0.5)(0.5)}{(0.05)^2}$$

$$n = 420.25; \quad n = 420$$

A sub sample of about 70 respondents from each village was obtained. The study also involved 72 participants for focus group discussion, each village had two (one for men and another for women) focus group discussion with almost 5-7 participants per group.