Contextualising the adoption of male circumcision as an HIV prevention strategy in Zimbabwe

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Abstract

Zimbabwe has one of the highest HIV prevalence rates in the world with an estimated rate of 14.7 percent. In 2009 Zimbabwe adopted male circumcision for HIV prevention based on Randomised Controlled Trials conducted in South Africa and Uganda which showed 60 percent efficacy. This adoption comes in the background of a low national circumcision prevalence rate. While some studies have been done on acceptability, the present study investigated the level of knowledge among respondents in a mixed farming and mining community in Mazowe District. Data was collected using a questionnaire with both open and closed items. Analysis was done using descriptive statistics while the χ^2 was used to find out factors associated with knowledge. Results of the study showed a very high level of HIV/AIDS. Ninety percent of the respondents reported to have heard about male circumcision for HIV prevention. Having access to a radio was found to be significantly associated with better knowledge of MC. Also, men were more informed on MC issues compared to their female counterparts. The present study concluded that while there is overwhelming support for the roll-out of MC for HIV prevention, uptake by adult men is being hindered by fear arising from uncertainty. It is therefore recommended that public health programmes that promote MC for HIV prevention should target improving the knowledge of parents so that they can have their sons circumcised.

Key words: Male circumcision, attitudes, acceptability, HIV prevention

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Background

Zimbabwe has one of the highest HIV prevalence rates in the world. Statistics from the Ministry of Health and Child Welfare show that the prevalence rate among adults 15-49 years of age has been plummeting from 32 percent in the 1990s to the current 13.7 percent[1]. Despite this major drop in the HIV prevalence rate, 1.1 million Zimbabweans are currently living with HIV and more than 1 in 7 Zimbabweans are still infected. Current approaches to the fight against the AIDS pandemic have centred on the ABC model which integrates the following components:

A- abstinence
B- faithfulness to one uninfected partner, and
C- consistent use of condoms

The ABC approach has received considerable attention from scholars with some questioning its effectiveness on behaviour change. The major criticism of the ABC model is that it assumes that individuals are autonomous and have power to change their behaviour. The ABC model, like the Health Belief Model and the other theories of behaviour modification from which it is derived, makes a linear assumption about human behaviour thus overlooking the power of structural forces such as culture that grip individual decision-making processes, particularly in Asia and Africa where societal norms override individual decisions and choices (1).

Recent ecological and clinical studies suggest that male circumcision is efficacious in reducing the chances of contracting HIV by up to 60 percent (2, 3 and 4). These findings were further strengthened by mathematical models which showed that scaling up of male circumcision to reach about 80 percent of male adults and newborn males would avert nearly 750 000 adult HIV infections between 2009 and 2025. This would yield total net savings of more than USD3.8 billion during the same period (5). For these plans to succeed, a total of 1.1 million males have to be circumcised in the peak year, 2012. In line with these scientific findings, the Government of Zimbabwe through the Ministry of Health and Child Welfare and the National AIDS Council adopted male circumcision into the national HIV prevention strategy and subsequently opened the first circumcision clinic in Harare in 2009.

However, results from the 2005-06 Zimbabwe Demographic and Health Survey show that the average male prevalence rate in Zimbabwe was only 10 percent of the total male population surveyed (6). This suggests that male circumcision is not a common practice in Zimbabwe. Thus there is an urgent need to understand the cultural dynamics underlying male circumcision and the attitudes and acceptability of male circumcision as an HIV prevention strategy. The purpose of the present paper is to assess attitudes and acceptability of male circumcision as an HIV prevention strategy in Zimbabwe.

Methodology

Seventy three male and female respondents from a mixed farming and mining community in Mazowe district were interviewed using a questionnaire. The questionnaire collected information on the respondents' knowledge of HIV, their access to basic information on HIV and/or male circumcision, and their knowledge of male circumcision as an HIV prevention strategy. The instrument also contained items which solicited respondents' attitudes toward various aspects of male circumcision such as pain perception, having to abstain for six weeks while waiting to heal, using condoms after undergoing circumcision and the comprehension of information on male circumcision.

The questionnaires collected both open and closed responses. Open responses were coded before all were captured in SPSS for analysis. Data analysis involved descriptive statistics and focussed on individuals' knowledge of HIV,

[1] Revised to about 14 percent by the Ministry of Health in 2010

male circumcision, willingness to undergo or allow a son to be circumcised. The χ^2 test was used to determine whether response types were related to religion, marital status or other variable. A p-value <0.05 was considered to be significant.

Results

Characteristics of respondents

A total of 73 individuals participated in this survey and 54 percent were men while the rest were women. Seventy five percent reported to be married, 17.3 percent were never married and the remaining 7.7 percent were either divorced or widowed. The majority of respondents (96.2 percent) had a formal education and of these 88.5 percent had a secondary education. Sixty seven percent reported that they are Christians. Also, the majority (84.6 percent) reported that they were in employment. In terms of age, the youngest participant was 15 years and the oldest was 58 years. The mean age of the respondents was 32.6 years.

Knowledge of HIV, perception of risk and risky sexual behaviour

The study solicited information on respondents' knowledge of HIV and their sexual behaviour. These are important variables in the discourse of male circumcision as an additional prevention method.

All the participants in this study had very good knowledge of HIV- how it is transmitted and how one can prevent possible infection. Twenty one percent of the respondents reported that they have no risk of getting infected by HIV while another 32.6 percent reported a low risk. The reasons most cited for the low risk included faithfulness (57 percent), abstaining (17 percent) and condom use (18 percent). One respondent cited circumcision as the reason for the perceived low risk.

Respondents were asked questions on their sexual behaviour, condom use and HIV testing. Only 19 percent reported to have used a condom during their first intercourse and 29 percent used a condom at their last sexual encounter. The average number of sexual partners for both women and men in the last 12 months is 1.8 while the number of lifetime sexual partners for women is 4.9 compared to 10.4 for men. Eighty three percent of the respondents reported to have had an HIV test at some point in the past.

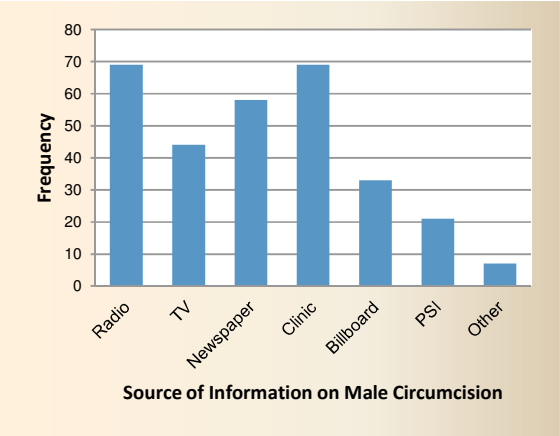
Access to main sources of information

The analysis of access to sources of information is important in public health programming. The present study sought information on access to the major sources of information and to other sources that have been used in the male circumcision roll-out campaign. The majority of respondents reported having access to a radio (88.5 percent), a television (75.2 percent) and a newspaper (73.1 percent).

Knowledge of male circumcision for HIV prevention

Ninety percent of the respondents reported that they have heard of male circumcision for HIV prevention. Data on their main source of information on male circumcision for HIV prevention is shown in Figure 1. Respondents were asked if they have ever heard of male circumcision. Access to a radio was significantly associated with having ever heard about male circumcision *($p<0.05$)*. Respondents were also asked if they were aware that circumcision does not provide 100 percent protection against HIV, that circumcised men still have to use condoms and that a circumcised man has to abstain for 6 weeks to allow full healing of the wound. Affirmative responses to these questions were very high and ranged between 75 and 87 percent. Access to a radio and a newspaper were significantly associated with better knowledge of male circumcision. The sex of a respondent was also associated with a knowledge of male circumcision (*$p=0.002$*). Generally, men were more informed than women. No significant differences in knowledge according to marital status and religion were observed *($p>0.05$).*

Figure 1: Main sources of information on male circumcision



In addition to having ever heard of male circumcision, respondents were also asked to recall the main messages that they had heard. In response to this question, the majority of the respondents (81 percent) cited HIV prevention as the main message they had heard about male circumcision. Other messages on male circumcision included that it helps prevent sexually transmitted infections (44 percent) and that it improves penile hygiene (19 percent). Two respondents cited improved sexual prowess as the main message they had heard on male circumcision.

Prevalence of and support for male circumcision as an HIV prevention strategy

The observed prevalence of male circumcision among males in the study sample was 23 percent (*n=39*). All of the circumcised men, except one who reported having had circumcision for medical reasons, were circumcised as part of a cultural rite or a religious ritual. Four of the female respondents reported having circumcised partners.

There appears to be strong support for male circumcision for HIV prevention. Seventy-seven percent of all respondents (75 percent males and 79 percent females) said they would support the rolling out of male circumcision for HIV prevention. Respondents were asked on their willingness to have their sons circumcised for HIV prevention and 69 percent (82 percent males and 54 percent females) agreed. The recommended mean age for circumcision is 8.5 years.

Respondents were sceptical about men's willingness to undergo circumcision for HIV prevention. Only 48 percent thought men would be willing to get circumcised for HIV prevention. The most cited reason for the unwillingness was pain followed by those who felt that the period one has abstain waiting for full healing is too long. Some even suggested the possibility of 'reducing' the healing period from 6 weeks to about three. Some respondents even questioned the efficacy of male circumcision for HIV prevention (7 percent).

Attitudes towards male circumcision

The present study investigated people's attitudes toward certain aspects of male circumcision for HIV prevention. Other than what has already been reported on pain perception, respondents were asked to give their attitudes toward stigmatisation of circumcised men, perceived improvement in sexual pleasure or satisfaction and reduced sexual drive. Some studies on the effects of MC on sexual satisfaction seem to suggest that MC improves overall satisfaction (7) while others imply that MC leads to keratinisation of the glands penis thus reducing sensitivity and therefore pleasure (8).

The findings of the study did not support the view that circumcised males are stigmatised in society. Twenty six percent of the respondents felt that circumcision might lead to stigmatisation. Only 9 percent felt that circumcision would lead to reduced sexual drive and 19 percent believed that it would lead to increased sexual pleasure. Respondents' attitudes toward fears that circumcision might lead to behavioural disinhibition were also investigated. Forty four percent of the respondents agreed that circumcision might lead to reduced risk perception leading to the abandoning of regular condom use and increased sexual partners.

Discussion

The present study sought to investigate people's knowledge, attitudes and beliefs about male circumcision for HIV prevention. In addition to attitudes, the study also investigated the acceptability of male circumcision as an HIV prevention strategy. There appears to be overwhelming support for the roll-out of male circumcision as an additional HIV prevention strategy. However, this support does not seem to be directly related to the uptake of male circumcision. In the study, 77 percent of respondents reported that they would support male circumcision roll-out but were sceptical about men's willingness to be circumcised. This reluctance seems to stem from the uncertainty surrounding male circumcision. Fear of pain and complications appear to be the greatest obstacles to the roll-out strategy. These findings support earlier results by Mavhu et al (9) who also identified fear as a barrier to male circumcision acceptability. It is likely that women will play an important role in encouraging their partners to get circumcised. However, women in this study displayed low levels of knowledge on male circumcision and thus are unlikely to play a significant role in promoting male circumcision. There is thus a need to educate women in particular on MC issues.

Access to sources of information is critical in the scaling up of MC for HIV prevention. A large number of respondents in this study (>75 percent) reported that they have access to a radio, a newspaper or a television. The findings show that access to a television was not significantly associated with knowledge of male circumcision for HIV prevention *(p=0.697)*. While the Zimbabwe Broadcasting Corporation through ZTV has been screening various messages and programmes related to male circumcision such as adverts and a drama called New Dawn sponsored by PSI in conjunction with NAC and the Ministry of Health, such programmes appear to miss the targeted population due to incessant power cuts and also due to the fact that a number of households have installed satellite dishes to access free South African television channels. Thus, using a radio seems to be the most viable medium through which MC programmes can be channelled.

The present study has strengths and limitations. The greatest limitation is that it utilised a relatively small sample drawn from a largely farming and mining community. Thus the attitudes reported in this paper may not be generalised to the entire country. Be that as it may, the findings of the study were comparable to those obtained by studies which utilised large samples. For example, the number of lifetime sexual partners obtained in the study is comparable to those reported in the Zimbabwe Demographic and Health Survey of 2006. Equally comparable is the MC prevalence rate reported in this study to that reported by Mavhu et al whose study had a sample of with more than 1500 participants.

Conclusion

While there is overwhelming support for both neonatal and adult male circumcision for HIV prevention, it is unlikely that increased knowledge will translate to increased uptake by adult men in Zimbabwe. However, improving people's knowledge on the advantages of MC might positively influence people's attitudes toward MC. The primary concern for public health officials should thus shift from targeting men above 20 years toward encouraging parents to have their young boys circumcised.

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