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Perceptions of male circumcision among male adults in Livingstone, Zambia

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Title

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Abstract

Male circumcision offers partial protection against HIV/AIDS and other STIs. In Zambia overall adult HIV prevalence is 13.1 % with 1.6 % of the adult population becoming newly infected each year. Even if the government supports male circumcision, the practice is still limited. Therefore, this qualitative study aimed at explore perceptions of male circumcision among male adults in Livingstone, Zambia.

A descriptive design with qualitative approach was used in the study. Thirteen men, circumcised and uncircumcised, aged 18-48 years from different ethnic groups and with different marital status and education who frequented, socialized and were active in sports, were interviewed. The transcribed interviews were analysed using qualitative conventional content analysis.

The results showed that participants perceived male circumcision as diverse in health, sexuality and culture. Results were presented under various categories. Disease prevention against HIV and sexually transmitted diseases was one of the main views mentioned by participants. Participants also had diverse views on sexuality as some described that male circumcision improved sexuality while others augured that it was ineffective. Further, more cultural and traditional views were highlighted such as male circumcision was primitive and old. The study provides an insight in the phenomenon of male circumcision. Understanding the perception of male circumcision with regard to health will help health care professionals to develop more effective programmes in the scale up of circumcision activities regardless of tribe or education. Additional research is recommended to look at acceptability in non-circumcising tribes in Livingstone.

Keywords

Male circumcision, perception, adult, qualitative methods, interviews

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Introduction

A number of scientific studies have looked at the benefits of male circumcision (Chanda et al., 2012; Bailey et al., 2001). Data from a range of studies have shown that circumcised men have lower prevalence of HIV (Human immune virus) than those that are uncircumcised and throughout the world, HIV prevalence is generally lower in populations that practice male circumcision than in populations where most men are uncircumcised (Chanda et al., 2012). Zambia is now scaling up male circumcision and a program through the Ministry of Health, with support from NGOs trained health workers in almost all hospitals, has provided the extra resources such as drugs and surgical supplies specifically for this program (MoH, 2012). Despite the efforts to encourage men to go for male circumcision, the utilization is still very low (Adams, 2012). The male circumcision target for Livingstone was 6,463 for 2014, but only 432 men were reported to have been circumcised in December 2012 (LCH report, 2012). There is thus a need for a deeper understanding of why the prevalence of the procedure still is low.

Several studies have highlighted the beneficiaries of male circumcision to prevent HIV transmission (Muller et al., 2002). Randomized Controlled Trials (RCTs) are the more authoritative in providing evidence of effectiveness or non-effectiveness of health interventions (Lie and Miller, 2011). A randomized controlled trial (Auvert et al., 2005) involving 3,274 HIV negative men aged 18-24 at an Orange farm in South Africa found that male circumcision conferred a protection rate of 61 % against HIV infection through sexual intercourse with infected women. Another RCT (Bailey et al., 2007), on male circumcision for HIV prevention in young men in Kenya reviewed similar results with male circumcision showing a significantly reduced the risk of HIV infection in circumcised men by 60 %. Observational studies have also reported an association between male circumcision and reduced risk of HIV virus to a female sex partner (Wawer et al., 2009). Also a randomized controlled trial by Wawer et al. (2011), on the effect of circumcision of HIV negative men on the transmission of human Papilloma virus to HIV negative women was done in Rakai, Uganda, indicated that male circumcision should now be accepted as an efficacious intervention for reducing the prevalence and incidence of Human Papilloma Virus (HPV) infection in female partners. The issues surrounding male circumcision is based on opinion that male circumcision is anchored on disease

prevention which has been backed with scientific research results. The studies have significantly contributed to the perceived effectiveness of male circumcision and other methods. Also WHO promulgated male circumcision to be a safe and efficacious intervention for prevention of HIV transmission and advocated for its use as an additional preventive strategy in the fight against HIV/AIDS (Weiss et al., 2007).

Male circumcision has thus been reported to have several health benefits. Over the past decade, numerous epidemiological studies have reported a significant association between lack of male circumcision and risk of HIV infection, leading to recommendations for male circumcision to be added to the armamentarium for effective HIV prevention (Bailey et al., 2001). Westercamp and Bailey (2007) and WHO (2007) considers this level of protection to be significant and therefore recommends introduction of male circumcision in traditional and non-circumcision areas which are plagued with the HIV/AIDS scourge as well as scaling up of safe circumcision efforts in traditional circumcision areas. A study done by Tarimo et al. (2012) showed that informants perceived male circumcision as a health promoting practice that may prevent HIV transmission and other sexually transmitted infections. This is supported by Chanda et al. (2012) where the findings suggest that there is a remarkable and consistent trend in the way that medical male circumcision is perceived amongst college and university students. They present virtually universal knowledge about the procedure, its practice, where it should be conducted, the facts about circumcision and what the prevailing untruths are about the procedure. This indicate that increased knowledge can be a means to increase the practice.

Despite the knowledge about the preventive effect of male circumcision, the HIV epidemic continues to exact toll, with the number of people living with HIV/AIDS continuing to increase every day. In 2007, global statistics estimated a total of 33.4 million people living with HIV/AIDS while the newly infected were estimated to be 2.5 million. Statistics for 2012 show that these numbers increased to 34.0 million and 2.7 respectively (UNAIDS, 2012). In Zambia overall adult prevalence of HIV is 14 %, and 1.6 % of the adult population becomes newly infected each year (MoH, 2010). This simply implies that traditional preventive measures such as condom use, abstinence, faithfulness to one partner, as well as various health promotion strategies are achieving less than desired results. It is, however, important to bear in mind that when comparing the effectiveness

of male circumcision to the other barrier methods, condoms are far better. Condoms still remain the most effective barriers against the sexually transmission of the human immunodeficiency virus (HIV) (Eaton and Hoesley, 2014). Where heterosexual intercourse is common, male condoms have proven to be 80 % to 90 % effective and female condom has similar results. In terms of comparison condom are ranked more highly than male circumcision, which is only at 60 %. Absence and being faithful to one sexual partner are the best, as they are 100 % effective. There is thus a risk that male circumcision can impact negatively on other HIV interventions such as abstinence, being faithful and using condoms. Men may engage more often in unsafe sex if they believe that circumcision protects them from acquiring HIV (Titus and Moodley, 2011). This is supported by findings from Macintyre et al. (2014) reporting that older men, while expressing positive beliefs about circumcision, often doubted that they would go for the procedure because they were 'older' or because they were married and thus felt that it was no longer necessary (Macintyre et al., 2014). There is thus a risk that male circumcision increases disinhibition, a form of risk compensation, i.e. a risky behaviour due to a decrease in perceived risk.

While the beneficial effect of male circumcision is recognized, those benefits must be weighed against the risks. Male circumcision is perceived as a practice that instils fear amongst uncircumcised men, with the most highly indicated source of fear being that of the pain experienced with the procedure and the healing process of male circumcision (Bailey et al., 2002; Bailey et al., 2008; MOH, 2009). There are also other arguments against male circumcision, such as male circumcision is an embarrassing disfigurement. Furthermore, if the control of immoral behaviour has been the only benefit promised by circumcision, it would never have won acceptance beyond a narrow circle of ascetics (Darby, 2013). Circumcision solutions have several fundamental flaws that undermine the potential for success (Van Howe and Storms, 2011). According to the conclusion of the study by Howe and Storms (2011), the circumcision solution is a wasteful detraction that takes resources away from more effective, less expensive, less invasive alternatives. They explore data on which circumcision recommendation are biased, the difficulties in translating results from high risk adults in a research setting to the general public, the impact of risk composition and how circumcision compares to existing alternatives. The gap between advocates of male circumcision and those against is wide and this creates different perceptions towards the subject of male circumcision.

There are a few studies that have investigated the perception about and the motives for male circumcision. Westercamp and Bailey (2007) conducted a review of studies from nine sub-Saharan African countries to assess acceptability of male circumcision in traditionally non circumcising populations. They found the following barriers to circumcision: apprehension over pain after the procedure, not part of culture or religion, cost of accessing the service, possibility of complications and adverse effects, infidelity emanating from assured protection from male circumcision, difficulties in accessing the service, cost of the service, require time away from work, loss of penile sensitivity, reduction in the size of the penis, decreased ability to satisfy women, excessive sexual desire and viewing male circumcision as old fashioned. On the other hand the review also found motivators to circumcision such as penile hygiene, protection from STIs including HIV, enhanced sexual pleasure, acceptability by other ethnic groups, ease of use of condoms by circumcised men, male circumcision as proof of manhood and improved aim during urination. More recent studies including that done by Muhamadi et al. (2013) showed perceived medical benefit in the form of protection against contraction of HIV and other STIs, peer/partner influence, sexual satisfaction, safety of procedure in comparison to traditional methods and cost to access services. Muhamadi et al. (2013) suggested use of new campaign strategies that took account of their findings to enhance male circumcision uptake. Tarimo et al. (2012) did a similar study in Tanzania where they assessed perceptions about male circumcision and found similar results as Muhamadi, et al. (2013), however informants were concerned about the cost involved in male circumcision and cleanliness of instruments used in medical and traditional male circumcision. They also expressed the confusion about the shame of undergoing circumcision at an advanced age and pain that could emanate after circumcision.

According to Plotkin et al. (2013) both men and women generally has a positive attitude towards voluntary medical male circumcision, but highlighted barriers such as shame associated with seeking services co-located with younger boys and perceived inappropriateness of voluntary medical male circumcision after puberty particularly after marriage and after having children. Another study (Downs et al., 2013) showed that, Christians perceived male circumcision as a Muslim practice in the Iringa region in Tanzania. The practice of male circumcision seems to be culturally dependent, and the results from one study cannot easily be transferred to other contexts. Therefore, there is

also a need for context specific studies, to increase the local understanding of barriers towards male circumcision.

Statement of the problem

Zambia is a developing country with diverse social and cultural perspective on issues related to health. Different perceptions and beliefs influence people's consumption of health related service including male circumcision. The problem is that these perception and belief if negative influence negatively on the uptake of health service including male circumcision. In Livingstone, no study on peoples' perceptions on male circumcision was found to have been conducted. Although statistic shows that in Livingstone district the target for voluntary male circumcision 2014 was 6,463 and at a static station at the Livingstone Central Hospital, only 432 males were reported to have been circumcised (MoH, 2012 and Livingstone Central Hospital HMIS, 2014). According to WHO and USAIDS (2010) the prevalence of males who have been circumcised is still low and stands at 13.1 % in Zambia.

Rationale of the study

No study on people's perceptions regarding male circumcision has been done in Livingstone. It is envisaged that a study in this area would help gather information as well as gain more insight on their perceptions, influences and beliefs on male circumcision. The study Information would also develop educational interventions which can be used to mitigate the impact of HIV/AIDS and related services in the district.

Aim

The study aimed at exploring perceptions of male circumcision among male adults in Livingstone, Zambia.

Material and Methods

Design

A descriptive design with qualitative approach was used in the study. The purpose of the descriptive design was to provide a picture of situations as they naturally happen (Burns

and Grove, 2008) i.e. the researcher does not manipulate any variable and makes no effort to determine the relationship between variables (Brink et al., 2006). In this design, the researcher merely searches for accurate information about the characteristics as a single sample – subject, groups, institutions or situations - or about frequency of a phenomenon's occurrence (Brink et al., 2006).

The study was conducted at Barati sports complex in Livingstone. Barati sports complex is a place where different sports activities take place. The sports complex attracts a number of people in different age groups. It was selected because it was convenient and easily accessible to most of the people involved in sports. The complex had a quiet conference room where interviews were conducted away from the sports activities.

Sampling and participants

Participants were selected using purposive sampling, where the researcher consciously selected participants, to obtain information about perceptions on male circumcision (Burns and Grove, 2008). The inclusion criteria was being male and 18 years and older. Men, who frequented, socialized and were active in sports at Barati sports club, were invited to participate in the study. Those who accepted to take part were given appointment dates.

Thirteen participants, circumcised and uncircumcised, of age range between 18-48 years, with different ethnic group, marital status and education (see Table 1, p. 11) were selected for interviews. According to Grove et al. (2014), the number of participants in a qualitative study is adequate when saturation and verification of information is achieved in the study area. Saturation of study data occurred when additional sampling provided no new information, only redundancy of previous collected data.

Data collection

Participants were given time to go through the information sheet (Appendix 1). Written informed consent was obtained from those who were willing to participate (Appendix 2) and the informants filled in details of their demographic profile (Appendix 3). The interview addressed perceptions of male circumcision and were conducted using a semi-structured interview guide (Appendix 4). A pilot study was performed to test the interview

guide and no adjustments were necessary. Hence participants who participated in the pilot interview were included in the main study. Open ended question were asked and probing was done to give detailed description. The researcher entered the conversation with no presuppositions; hence probing was used to give detailed description and allowed participants to reflect on the questions. Interviews were tape recorded to ensure that no information should be missed by the interviewer and transcribed in English. The interviews lasted 45 to 60 minutes for each participant.

Table 1. Characteristic of the participants in the study

Characteristics	n=13
Age, range (median)	18-48 (36) yrs
Education	
Secondary	6
College	5
University	2
Marital status	
Single	6
Married	7
Ethnic group	
Tonga	5
Lozi	3
Nyanja	1
Bemba	3
Lunda	1
Circumcision status	
Circumcised	7
Uncircumcised	6

Data analysis

The transcribed data were analysed using conventional content analysis (Hsieh and Shannon, 2005). Qualitative content analysis focuses on human communication and is useful for analysing both oral and written data as for interpreting and summering large and rich materials. The conventional content analysis is inductive and is useful when limited knowledge about the phenomenon exists (Hsieh and Shannon, 2005).

The analysis started immediately after gathering data from the participants. The first step involved multiple reviews of the transcribed narrative text to get an overall meaning. The second step involved extracting meaning units in the text that related to the perception

and understanding of participants regarding male circumcision. The third step involved revising the meaning units to ensure they contained sufficient information. In the fourth step, the meaning units were coded for its content. In the fifth step, similar codes were grouped in subcategories. The main categories were then developed from the subcategories (Table 2). Meetings were held regularly with participants who participated in the study to discuss and ensure the trustworthiness of the findings during analysis. In the presentation of the results, quotations that best represented the content of the range of ideas voiced, are presented.

Table 2. Example of the qualitative content analysis process

Meaning unit	Condensed meaning unit	Code	Sub-category	Main category
When you are circumcised, you can't even be infected with diseases like syphilis and HIV, even AIDS cannot enter in your body because you are circumcised as the virus can't stay on the foreskin.	Circumcised people have some protection from diseases like syphilis and AIDS	Disease preventing	Circumcision prevents diseases	Circumcision affects health

Ethical considerations

Ethical clearance and permission to conduct this research was sought from Excellence in Research Ethics and Science (ERES) COVERGE IRB No. 2014-sept-012 and Bharati management, respectively. The aim of the study, data collection procedures, time period of the interview were explained and contact phone number of the principle investigator given to the participants. The participants were informed that there would be no monetary gains for participating in the study and that they might benefit from shared knowledge and experiences had an opportunity to voice their concern on a highly debated subject.

Potential risks were explained to the participants such as sensitive issues of cultural, religious and sexual nature, which could provoke emotions. In case of discomfort, a contact with the counsellor at the hospital could be arranged. Participants were informed of their rights to refuse in participating in the study or withdraw from the study at any

point (Appendix 1). Questions were asked to ensure they understood the information correctly and informed written consent was obtained (Appendix 2).

Confidentiality was maintained by conducting individual interview discussion in a private room (sports centre conference room) where nobody had access to and no names were used during the interview. The principal investigator kept the recorded tapes under lock and key. After completion of the thesis, the tapes will be kept for 3 years for future reference in case of eventualities. All informants were assured of confidentiality during the individual interview discussion because codes were used instead of names.

Some of the disadvantage of participating in the study was the time period of 45-60 minutes of interview, with busy schedule of sports activities and other social programmes. However participants ensured they created time by re-adjusting the schedule to attend the interviews.

Pre-understanding

According to the researcher's personal experience, male circumcision has diverse perceptions among males and some of these perceptions promote male circumcision while others perceive male circumcision negatively. A lot of financial resources have been put to mitigate HIV, through preventive methods such as male circumcision, but the perceived notion hampered the progress in the uptake of male circumcision services by men.

Findings

The overall understanding of perception of male circumcision is diverse. The results showed that there are individual perceptions of male circumcision from adult males with diverse views for and against male circumcision. The proposition is that individuals have many beliefs, some of which are true while others are false. The fact that there was diverse views re-affirms the many beliefs among adult men concerning circumcision. The experiences could be understood in three main categories: Circumcision; affects health, affects sexuality and the practice has cultural connotations, with internal variation shown as subcategories (Table 3).

Table 3. Overview of the categories and subcategories

Subcategories	Main categories
Circumcision prevents diseases Circumcision can be painful Circumcision promotes good hygiene	Circumcision affects health
Circumcision enhances sexuality and masculinity Circumcision leads to impotence	Circumcision affects sexuality
Circumcision is a primitive and old practice There are a lot of false myths around circumcision	The practice of circumcision has cultural connotations

Circumcision affects health

The participants' perceptions were that male circumcision affected health. Health issues brought diverse perceptions and provoked emotional attachment to the subject. They mentioned that a circumcised man was responsible to his wife and family due to the protective effect, and emphasised that any project or activity aimed at reducing sexually transmitted disease would be embraced strongly. Whilst there were positive perceptions concerning the impact on health, such as disease prevention and promotion of good hygiene, negative perceptions also emerged such as pain experienced during the procedure.

Circumcision prevents diseases

The narratives from the participants suggested that a number of them perceived male circumcision as a procedure meant to protect one from sexually transmitted infection and HIV/AIDS and that disease prevention focuses on keeping people healthy. The participants described that individuals and communities are engaged in health behaviour that reduces the risk of developing chronic diseases such as HIV/AIDS. The perception was that the virus can stay on the foreskin. One participant stated:

“When you are circumcised, you cannot even get infected with diseases like syphilis and HIV. Even AIDS cannot enter in your body because you are circumcised as the virus can't stay on the foreskin.”

Participants suggested that male circumcision should be aggressively promoted as a HIV preventive procedure. A participant alluded that it was a common understanding and perception that if you are not circumcised you can contract HIV.

“...it's common knowledge that when you are not circumcised, then there are higher chances of you contracting HIV”.

Additionally some participants stated that even transmission of the papilloma virus, which causes cervical cancer, was reduced in circumcised men. It was a general view that male circumcision has health benefits as far as the protection against sexually transmitted diseases.

Circumcision can be painful

The participants expressed that male circumcision creates a range of emotions such as traumatic stress. Individual participants expressed these physiological consequences as painful. The removal of the foreskin during the procedure was seen as injurious and penile erection after circumcision was described as painful. Male circumcision was thus perceived as a practice that brought fear of pain, but also fear concerning the healing process of the wound. A participant mentioned that,

” Some people fear wounds will not heal”.

Because of this, some participants viewed male circumcision as having negative effect on one's health.

Circumcision promotes good hygiene

The issue of hygiene in most cases concerned individual behaviour. The perceived improved hygiene after male circumcision deepened the emphasis in the desire to undertake the procedure. Participants also described the foreskin as one that contribute to harbouring of micro-organisms. One respondent suggested that;

“When you are circumcised, even when you don't bath, your penis is clean, it also increases the cleanliness”.

According to participants description cleanliness promoted the wellbeing and protection of diseases and the foreskin was reported to harbour dirt. The informant said;

“Aah... the foreskin should be removed because that’s usually what harbours some bacteria that smell”.

According to another participant the foreskin present a barrier to hygiene;

“When the foreskin is covered it is very difficult to clean and some people do not clean, but if you open or the foreskin is removed then you are clean.”

Participants perceived male circumcision as leading to genital cleanliness and healthy living.

Circumcision affects sexuality

The participants’ perceptions were that male circumcision affected sexuality, i.e. the sexual habits and desires of a person. Male circumcision was discussed in details to dispel misconceptions concerning issues of sexuality that influences men’s choices to go for circumcision. A mixed perception on sexuality was expressed by participants. The men’s experiences concerning sex drive was viewed differently and was found as subcategories; circumcision enhances sexuality and masculinity and circumcision leads to impotence.

Circumcision enhances sexuality and masculinity

The informants perceived that male circumcision could increase sexual pleasure and confidence during penetrative sexual intercourse. The participants’ diverse views on sex drive were illustrated as improved sexuality and muscularity.

The participants felt that male circumcision defined the stage from boy to man. The feeling of muscularity was associated to a positive perception of male circumcision. One informant said,

“If you are not circumcised then you are not a man.”

Another participant explained how he enjoys sex as a man;

“Men who are circumcised, I think they tend to enjoy sexual intercourse more, you see, if the manhood is in the woman, it will take long to ejaculate therefore a man will have a longer period to sex as compared to someone who is not circumcised. That makes a man feel masculine.”

Several men perceived male circumcision as increasing sexual pleasure specifically due to increased time of ejaculation during sexual intercourse. One participant said;

“There is long time taken, instead of ejaculating within 1 minute or 5 minutes, it takes 30 minutes.”

One participant further emphasised that you are only a man if you are circumcised;

“Where I come from, if you are not circumcised then you are not a man, where I come from, if you are not circumcised then you are not going to be accepted by a woman, who has undergone also where women go.”

Apart from being a man, male circumcision was reported to illustrate bravery, as another participant said;

“It made therefore that when you come out of that mukanda ceremony circumcised, you come out as a brave man.”

Circumcision leads to impotence

Even though circumcision was expressed as enhancing sexuality, the contrary was also mentioned, even if this aspect seemed more difficult to talk about. The participants perceived that, in communities the issues of sexuality is a private affair and peers not usually share information. Some participants reported that male circumcision affected their sexuality negatively as the circumcised men lost penile erection and the desire for sex was reduced. Some participants expressed that male circumcision even caused impotence:

“I have heard my friends complain that the erection is not good when you are circumcised, even me, I feel the same, there is no lust; this can bring dissatisfaction and shame you know. I feel when you remove that part of the skin it reduces erection and men don't like this”.

The practice of circumcision has cultural connotations

The participants perceived that male circumcision had cultural connotations, which concerned shared patterns of behaviour and interaction. Men who participated in the interviews were from diverse tribes, religion and social grouping. Their experiences varied as some were circumcised while others were uncircumcised. Some participants

strongly perceived male circumcision as a culturally heritage to be passed on to the young one as a symbol of identity.

“...for the Luvales it’s non-negotiable because they know for everyone to be deemed that he is a mature person, he should undergo male circumcision”.

Some participants argued that there nowadays are less people who are going for circumcision and estimated that may be 3 out of 10 get circumcised, hence male circumcision was also negatively perceived, mainly on grounds of culture. One participants mentioned that;

“...the traditional one though I am not from the circumcising tribe, it is quiet dirty”.

The perceptions about cultural connotations included the subcategories; circumcision is an old and primitive practice and a lot of false myths around circumcision.

Circumcision is a primitive and old practice

The participants perceived that, although there was a positive change of attitude towards male circumcision, some individual still have strong resentment towards the procedure while others strongly support the procedure on tribal lines. A thine line is usually drawn between tribal groups that circumcise and those that do not circumcise The labelling of male circumcision was perceived a primitive, degrading and embarrassing as synonymous with non-circumcising tribes while circumcising tribes supported it. One participant pointed out that,

“Our community is not taking it seriously. There is a bad attitude out there. They think circumcision is primitive and old culture. Even if you asked most of the men who are circumcised, they will not tell you that there are circumcised”.

Another participant expressed resentment towards male circumcision as it was strange and a laughing matter in the community, if one was heard to have been circumcised. A participant mentioned that;

“Traditionally the issues of circumcision were not there. I remember in 1997, one of our cousins did circumcision in Choma. And when they heard, all the family members were called to ask why he did that”.

On the other hand, some participants maintained the strong stance on male circumcision as a traditional practice that is part of their culture. One participant alluded that;

“According to what I think, and culturally what I know, and of course at the sometime as a person who has been circumcised as part of my cultural requirement and as a Lunda, where we take circumcision as part of our culture, to make one what he should be in life and in society”

The cultural beliefs seemed to strongly divide individuals in the way male circumcision was perceived.

There are a lot of false myths around circumcision

The participants perceived that myths in the communities influence the understanding of male circumcision, because they contain unverified and usually untrue statements. The facts and fiction surrounding the practice of removing the foreskin from a penis was met with uncertainty due to conflicting myths. Some participants were worried of where they take the foreskin after the procedure, while others believed that it was used for Satanism and witchcraft. One participant stated that;

“.....i think aah, OK let me say people, people because there are people, who have been circumcised and they say where they take those foreskins.”

Other misconceptions such as fear of death during the procedure also had potential influence on how participants perceived male circumcision in the communities. A participant mentioned that,

“Others fear that when you go in theatre you will be given medicine that will make you sleep and you won't wake up.”

When describing the male circumcision the perception was that one myth concerned that the practice was for sick people only. The discussion among peers and the stronger emphasis on male circumcision campaigns in the fight against HIV/AIDS, made some participants feel it actually was related to sick people. One participant mentioned that,

“Most of those who go for male circumcision are those who may be sick or not well, but the strong ones may be, its just 1 out of 50 is circumcised.”

Because of misconception some participants had a negative perception of male circumcision.

Discussion

The aim of this study was to explore perceptions of male circumcision among male adults in Livingstone. The findings of the study showed diverse views and included; circumcision affects health, it affects sexuality and the practice of circumcision has cultural connotations. According to social constructivism, people construct their own understanding and knowledge of the world, through experiencing things and reflecting on these experiences. Individuals develop subjective meanings of their experiences (Creswell, 2009). Equally the participants had their own views and experiences and constructed their own meaning about male circumcision. Most of the participants in this study perceived male circumcision as a preventive procedure in the HIV and sexually transmitted diseases. They gave no hesitation to indicate that male circumcision has changed from traditional way of perceiving the procedure to contemporary due to the emerging sexually related diseases. The perception of the protective effect seemed to be what attracted men to go for circumcision. This is in line with other studies, showing that circumcision actually is a health promoting practice that may prevent HIV transmitted and other sexually transmitted infections (Tarimo et al., 2012; Auvert et al., 2005; Gray et al., 2007). To the contrary, some participants in this study perceived male circumcision as a practice that instilled fear among uncircumcised with most indicative source of fear being that of pain. According to Boyle et al. (2002), some circumcised men have described their current feelings in the language of violation, torture, mutilation and sexual assault. The participants in this study mentioned that it was experienced as a risk and that it could be painful, probably as no analgesics is used in the traditional male circumcision. Another sources of pain was penile erection after circumcision, something that participants described as unbearable and painful. A study done by Rai et al. (2013) described pain as mild to moderate after circumcision in adults under general anaesthesia with an intraoperative penile block. The study by Rai et al. (2013) also showed that severe pain was rare and mostly related to complications, and that younger patients generally have more discomfort.

The results showed that the perception was that circumcision promoted good hygiene and as a procedure to maintain cleanliness. The hygiene part of male circumcision was what had encouraged men to go for male circumcision. A review on acceptability of male circumcision by Westercamp and Bailey (2007) indicated that a great majority of males

and females in multiple studies, agreed that it was much easier for circumcised men to maintain cleanliness. The participants in this study mentioned that the bad odour is disgusting and brought about by the foreskin that is usually removed in circumcision. Other studies agree that hygiene plays a role in male circumcision uptake. WHO (2007) revealed that one of the driving determinants in the spread of circumcision practice in the English-speaking industrialized world has been the perception that it results in improved penile hygiene and lower risk of infection. However, knowledge about hygiene aspects might be related to education and the way men viewed cleanliness in this study might be related to that most of the participants who were interviewed had secondary to tertiary education.

The results also showed that the perception was that circumcision affected sexuality. Participants expressed the perception that circumcision enhanced sexuality and masculinity. Participants viewed good sexual life if one was circumcised. A Danish study by Frisch et al. (2011), found that circumcised and uncircumcised men had comparable sexual histories, they considered a good sex life equally important and they were equally likely to be sexually active. This is in contrast to the review by Westercamp and Bailey (2007) by studies from sub-Saharan Africa, where circumcision was perceived to influence sexual drive, sexual performance and sexual pleasure for the man himself or for partner, which is likely to influence decision making around male circumcision. While a study by Krieger et al. (2008) indicated that adult male circumcision was not associated with sexual dissatisfaction, circumcised men, reported increased penile sensitivity and ease of reaching orgasm. Furthermore a study by Collins et al. (2002) indicated that circumcision does not appear to have adverse, clinically important effects on male sexual function in sexually active adults who undergo the procedure. But some participants had divergent views as they mentioned the perception that male circumcision leads to impotence. A study done by Frisch et al. (2011) demonstrated that circumcision was associated with frequent difficulties in Danish men, most notably orgasm difficulties, dyspareunia and a sense of incomplete sexual needs fulfilment. However, a study done by Kim and Pang (2007) showed no significant difference in sexual drive, erection, ejaculation latency time, between circumcised and uncircumcised men. There are thus contradictory results concerning the sexual effect of male circumcision, and different studies show diverse results. As the studies have been performed in different cultural contexts the perceptions might differ according to that.

The results further showed that the perception was that the practice of circumcision has cultural connotations and that male circumcision was a transitional practice from childhood to manhood and meant for those who are brave. The perception was common especially among the circumcising tribes who feel attaining circumcision is a passage to manhood and a social status and promotion of masculinity which has impacted positively on non-circumcising tribes also. According to UNAIDS (2007), tradition plays a major part for many ethnic groups. Among ethnic groups of Bendel State in southern Nigeria, 43 % of men stated that their motivation for circumcision was to maintain their tradition. In some settings where circumcision is the norm, there is discrimination against non-circumcised men. For the Lunda and Luvale tribes in Zambia, or the Bagisu in Uganda, it is unacceptable to remain uncircumcised, to the extent that forced circumcisions of older boys are not uncommon (UNAIDS, 2007). The results from this study showed that the participants described that in some tribes, male circumcision was a heritage and considered a shame if a man is uncircumcised. It thus seems as, in cultures that practice male circumcision it is a way to be accepted in the society and to be accepted by a woman for marriage. However, there were still perceptions about male circumcision as primitive and an old practice. Some participants mentioned that it was for cultural reason why they *not do* undergo male circumcision. The controversy surrounding male circumcision arises mostly between circumcising and non-circumcising tribes. The review by Westercamp and Bailey (2007) showed that the Luo tribe believe that they were often discriminated by other Kenyans due to their circumcising status, which led to social exclusion and even security concerns in times of social upheaval (Westercamp and Bailey, 2007). However, shame of being circumcised seems to be diminishing and the procedure seems to be accepted as evidenced from the results of this study, that identify that most participants perceived male circumcision as a preventive procedure. The only barriers seem to be privacy, especially for elderly men who feel shame and embarrassed as this, is inherent in the traditional setup where issues of sexuality are never discussed in public places.

The results also showed that there are also a lot of false myths around male circumcision. Participants viewed male circumcision with suspicion and secrecy. Some participants were worried of where they take the foreskin while others believed that it was used for Satanism and witchcraft. Some participants perceived male circumcision as a procedure for those who are sick. This was a negative perception of male circumcision in relation to HIV/AIDS. This perception could have been based on the common understanding that

male circumcision is for those who are promiscuous and would want to protect themselves from sexual transmitted infections. Hatzold et al. (2014) confirmed that myths and misconceptions seem to be a significant deterrent to circumcision. Therefore myths fuelled negative perceptions as misconception based on health related issues were counterproductive.

However, there has been steady progress of medical and traditional information availability on male circumcision. The Ministry of Health in Zambia, has ensured that information concerning cultural, social and religious beliefs, benefits and risks, the relationship between male circumcision and HIV infection, pain relief options, how and where to contact health care work, has been disseminated in Hospitals and clinics. Posters and flyers have been distributed to the general public for more information on male circumcision. This is in an effort to increase knowledge on the procedure which is needed for men to make an informed choices and also dispel rumours and falsehood. Other methods such as drama and mobile outreach have increasingly been promoted, but there seems to still be a need for more information to harmonise perceptions about male circumcision activities in Zambia.

Methodological considerations

Trustworthiness

Trustworthiness was achieved by selecting adult men with various experiences on male circumcision. The participants had various perspectives and contributed to the richer variation of the phenomena under study (Lincoln and Guba, 1985). Thirteen participants, circumcised and uncircumcised, of age range between 18-48 years, with different ethnic group, marital status and education participated in the study. The interview comprised of open ended questions that gave an insight on the phenomena under study. The interview brought out rich and deep understanding of male circumcision. The data was collected, sorted and analysis started immediately to ensure consistency. Even if the researcher selected suitable meaning units, condensed the meaning units, coded and developed categories that well covered the data, the supervisor reviewed the analysis process to strengthen the credibility of the analysis (cf. Lincoln and Guba, 1985). The principle benefit of the qualitative approach was that it brought out peoples' experiences to be able

to understand the deeper meaning or significance of an aspect of human experience. The conclusions made were purely based on much detailed information from the participants.

Study limitation

There was a number of limitations inherent in this study. The research was limited in its scope and applicability. This sample can only give limited insight into perceptions of male circumcision. Furthermore, as the researcher is a health worker in the ministry of health, participants could have wanted to bring out perception they felt were what the researcher wanted to hear. However, despite some methodological limitations, the findings may be useful to health care professionals. It is further important to highlight the impact of contextual aspects, such as culture and religion, which might limit the transferability of the findings of this study.

Conclusion

Generally the participants in the study expressed diverse perceptions regarding male circumcision. The participants were aware about male circumcision and the main findings were that it concerned health, sexuality and culture. Participants described circumcision as a means to disease prevention of HIV and sexually transmitted infections. The effects on sexuality was described positively as well as negatively by the participants. Male circumcision seemed to be related to feelings of shame and embarrassment, which is embedded in the traditional setup where issues of sexuality are never discussed in public. As the overall adult HIV prevalence in Zambia is 13.1 % with 1.6 % of the adult population becoming newly infected each year, the findings will provide an understanding that will assist in the change of behaviour towards male circumcision, which in turn can increase male circumcision uptake in Zambia.

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Appendix 1: Participant information sheet for individual interview guide

Dear Colleague

My name is Filbert Macha a student of Masters at the University of Kristianstad in Sweden and work at Livingstone Schools of Nursing and Midwifery. I would like to invite you to this study am conducting here in Zambia for my master's thesis. This information leaflet is to help you to decide if you would allow me to talk to you. If you have any questions which are not fully explained in this leaflet, do not hesitate to phone me, Filbert Macha at +260 0977794696 during working hours. You should only agree to take part if you are completely satisfied with all the procedures involved.

The study is conducted by means of the individual interview guide. The discussion will be informal and concern the topic of male circumcision. The individual interview is expected to take between 45 minutes to 60 minutes, and the whole discussion will be audio recorded. If you choose to participate you may stop at any time. You may also choose not to answer particular questions that are asked in the study. If there is anything that you prefer not to discuss, please feel free to say so. You will also have the right, to have your questions about male circumcision answered.

The purpose of the study: is to explore perceptions of male circumcision among male adults in Livingstone, Zambia. It is a qualitative study that will use purposive sampling to generate information on a particular phenomenon. Bullet number one the purpose is stated

The interview will be conducted in Bharati sports complex conference room because this is where sports meetings and other social meeting at the complex take place.

Risks

Some people are uncomfortable about expressing their views and may emotionally react to the subject matter under discussion.

Benefits

The study will help the Ministry of health improve male circumcision services to increase, the MC uptake, hence mitigating the HIV impart in the country.

Cost, reimbursement and compensation

Your participation in this study is voluntary. You will receive no money for your participation. However; you will be given a thirty Kwacha rebased (Kr 30).

Confidentiality/anonymity

Data that will be collected won't contain any personal identification (e.g., name, address, email) and all information collected in this study will be kept strictly confidential.

For further information

We will be glad to answer your questions about this study at any time. You may contact us by phone or email.

Chairperson ERES Converge IRB: 33 Joseph Mwilwa Road . Rhodes Park, Lusaka.

Email: eresconverge@yahoo.co.uk Tel: +260 955155 633/ +260 955 155 634 Cell: +260 966 765 503.

Appendix 2: Consent form for individual interview guide discussion

Perceptions of male circumcision among male adults in Livingstone, Zambia

- Please listen carefully and take as much time as you need
- Please ask questions at any time about anything you do not understand
- Ask any member of the study team to explain any words or information in this informed consent that you do not understand

What does your agreement to this consent form mean?

If you agree to participate it means you have been informed about the study's purpose, possible benefits and risks. Your agreement means you have read and understood the Participant information sheet, and that you consent to participate in accordance with the conditions outlined in the Participant information sheet.

I agree to participate in this study on my own (Check boxes that are accepted)

In addition:

- I want a copy of my consent form
- I don't want a copy of my consent form
- Name of participant:.....
- Witness;.....

Principle Researcher: Livingstone Schools of Nursing and Midwifery.

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- Signature or thumbprint;.....

Appendix 3: Participant demographic profile

What is your age?	
Educational Level	None Primary Secondary College University
Marital Status	Single Married Divorced Widowed
Ethnic Group	Tonga Bemba Lozi Luvale Nyanja Lunda Kaonde Other (Specify) _____
Religion	Christian Muslim Hindu Other (Specify): _____
Male circumcision	Circumcised _____ Not circumcised _____

Appendix 4: Individual interview guide

Date of interview:.....

Place of interview:.....

Name of interviewer.....

Welcome to this discussion our topic is perception of male circumcision in Livingstone. You were selected because you accepted to participate in this discussion.

No right or wrong answers, only differing points of views

Turn off your phone or put the phone on silent during the session.

1. What do you think about the subject of male circumcision? Probe: suppose that you had a minute to talk about male circumcision, what would you say?
2. What are your views about traditional and medical male circumcision in your community? (Probe: tell me more about what you understand concerning 60 % protection against HIV for those circumcised?)
3. What are the positive issues regarding male circumcision?
4. What are the negative issues regarding male circumcision?
5. What are some attitudes you have heard about male circumcision?
6. In the community, tell me of any cultural norms, beliefs on male circumcision? (Probe:)
7. Tell me the reaction of the community towards male circumcision? (Probe: uncircumcised or circumcised)
8. Give me any suggestion or opinion about male circumcision in your communities.

Note: probe questions will be used as the interview goes on.

Conclusion

Let's summarize some of the key points from our discussion. Is there anything would like to add.

Thank you for participating in our discussion