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If you are circumcised, you are the best': understandings and perceptions of voluntary medical male circumcision among men from KwaZulu-Natal, South Africa

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Abstract

While the uptake of voluntary medical male circumcision (VMMC) is increasing, South Africa has only attained 20% of its target to circumcise 80% of adult men by 2015. Understanding the factors influencing uptake is essential to meeting these targets. This qualitative study reports on findings from focus-group discussions with men in rural KwaZulu-Natal, South Africa, about what factors influence their perceptions of VMMC. The study found that VMMC is linked to perceptions of masculinity and male gender identity including sexual health, sexual performance and pleasure, possible risk compensation and self-identity. Findings highlight the need to understand how these perceptions of sexual health and performance affect men's decisions to undergo circumcision and the implications for uptake of VMMC. The study also highlights the need for individualised and contextualised information and counselling that can identify, understand and address the perceptions men have of VMMC, and the impacts they believe it will have on them.

Introduction

One of the major success stories in HIV prevention was of three trials in Kenya, South Africa and Uganda that demonstrated that voluntary medical male circumcision (VMMC) reduced HIV acquisition among heterosexual men by up to 60% (Auvert et al. 2005; Bailey et al. 2007; Grey et al. 2007; Padian et al. 2011). Mathematical modelling indicated that the potential public health benefit of VMMC could significantly reduce HIV prevalence in men, which may also indirectly benefit women (Njeuhmeli et al. 2011; Williams et al. 2006). The large-scale rollout of VMMC in South Africa has become a national priority, with high-level support from President Jacob Zuma and King Goodwill Zwelenthini (Kaiser Daily Global Health Policy Report 2009).

South Africa has the highest number of HIV infected persons of any country and one of the highest HIV prevalence rates globally. Prevalence in men in South Africa increases significantly with age, from 5.6% in men aged 15 – 19 years, to 17.3 and 25.8% in men aged 25 – 29 and 30 – 34 years, respectively (Shisana et al. 2014). KwaZulu-Natal (KZN) is the most heavily affected province (Shisana et al. 2014) with overall HIV rates in KZN as high as 27.6% in the 15 – 49-year-old age group (Shisana et al. 2014). This high prevalence in the general population highlights the need for a range of effective HIV prevention measures, of which high uptake of circumcision, as a primary prevention among men to reduce incident HIV infections, is essential. While the cumulative number of VMMCs completed in South Africa has steadily increased from 1.5 million in 2011 to 3.2 million in 2012, South Africa has still only reached 19.9% of its target to circumcise 80% of adult men by 2015 (CDC 2013; UNAIDS 2013). Self-report data from a large-scale survey conducted in 2012 suggest the cumulative circumcised population in KZN is approximately 23.2% and given the province's high HIV prevalence and incidence, a lot of work is needed to increase VMMC rates to at least 80% in order to have a substantial

public health impact (Shisana et al. 2014). Factors affecting the uptake of VMMC range from sociocultural issues and supply and demand creation challenges (Herman-Roloff et al. 2011; Lissouba et al. 2011; Westercamp et al. 2012). It is estimated that an 80% coverage of circumcision in adult men could avert up to 1-in-5 new HIV infections and is therefore particularly pertinent for South Africa, which is characterised by its high HIV prevalence and low VMMC rates, to encourage the procedure as one pathway to reducing new HIV infections by 50% by 2015 (UNAIDS 2013; WHO 2013).

The factors affecting men's decision to undergo VMMC are complex and multifaceted. Locally, studies from South Africa and Zimbabwe suggest individual issues include fear of the procedure and pain, low risk perception, lack of information, misunderstandings regarding circumcision and a reticence on the part of young men to access VMMC services alongside older men (International Initiative for Impact Evaluation 2013; Khumalo-Sakutukwa et al. 2013; Scott et al. 2005). Logistical issues such as the inconvenience in accessing and utilising VMMC services and the attitudes of clinic staff have also been reported to impact wide-scale uptake in Kenya, South Africa and Tanzania (Herman-Roloff et al. 2011; International Initiative for Impact Evaluation 2013; Jewkes and Morrell 2010; Kelly et al. 2012; Lissouba et al. 2011; Plotkin et al. 2013). Finally, beliefs about the effects that VMMC could have on penile and sexual function have also been found to affect uptake in some African countries (Jewkes and Morrell 2010; Kelly et al. 2012; Plotkin et al. 2013).

One area that requires further exploration is the link between male sexuality, masculinity and VMMC decisions and motivations. Masculinity refers to culturally endorsed and internalised standards or role behaviours that dictate how men should behave (Brown, Sorrell, and Raffaelli 2005; Pleck, Sonenstein, and Ku 1993). Campbell (1997) reported that in South Africa men often demonstrate their masculinity through increased risk taking, high sexual drive, a preference for 'flesh-to-flesh' sex and fathering children. These behaviours may be strongly influenced by socialisation from peers, the wider community and sexual partners (Mahalik, Burns, and Syzdek 2007; Marston and King 2006; Sigler, Mbwambo, and Di Clemente 2012). Previous research has suggested a relationship between men's decisions to be circumcised and masculine ideals of sexual performance showing that this influence could be positive (i.e., a perception of increased improved sexual pleasure) or negative (i.e., fears of the potential loss of penile function) (Bengo et al. 2010; Kagumire 2008; Tenthani 2010). Given the public health importance of VMMC, there is a need to understand masculine ideals of sexual performance in high- HIVprevalence settings and whether these perspectives influence community attitudes and men's individual decision-making about VMMC. Additionally, understanding the role masculinity plays in affecting VMMC uptake could help to tailor messaging around VMMC in order to address concerns, questions and any false perceptions men may have regarding the procedure and its outcomes.

This paper reports on qualitative work conducted in the context of a home-based HIV testing study in a high-HIV-prevalence, rural community in KZN, South Africa, where circumcision uptake is low. The paper explores how sexual performance and masculinity may influence the decisions men make regarding VMMC in this context and describes how understanding how these factors could help us understand how men perceive VMMC as a public health intervention.

Methods

Study setting

The study was conducted in Vulindlela, a rural district in KZN, South Africa, nested within a larger study that provided home-based HIV testing (HBCT) with associated linkages to HIV treatment and VMMC (Van Rooyen et al. 2013). The qualitative study was

conducted from February to August 2013 in order to obtain in-depth information on the experiences, thoughts and opinions of community members regarding circumcision (Krueger and Casey 2000).

Data collection and ethical review

The study conducted focus-group discussions with a sample of rural men. This paper explores these men's perceptions about VMMC, masculinities and sexual performance. Men in the focus groups were separated according to whether or not they reported being circumcised, and were recruited from participants enrolled in the HBCT study (Van Rooyen et al. 2013). A sampling frame of all men enrolled in the larger HBCT study was stratified according to those reporting being circumcised and those reporting being uncircumcised. The men were then randomly selected from the list and study staff from the HBCT study contacted potential participants. The study staff screened the men by verbally confirming circumcision status and then recruited them to participate in the study.

The age range for the focus groups was 18-54 years. Focus-group discussions comprised three groups of uncircumcised men: two with men under 35 years and one with men aged 35 years and older. Three focus-group discussions were conducted with circumcised men under 35 years. One of these under 35-year-old groups contained mostly young, rural men aged 18-21 years. Each of the groups contained between 6 and 10 participants. The focus-group sessions were arranged in convenient and neutral spaces. They were conducted in isiZulu by a trained research assistant and audiotaped. All participants provided informed consent and were reassured about the confidentiality of the focus groups. No participants declined to participate or withdrew from the study. The Human Sciences Research Council in South Africa and University of Washington ethical review committees granted ethical approval for the study. Participants received approximately US\$3 reimbursement for their time and participation.

Analysis

Data were transcribed and translated into English and reviewed for quality. Transcripts were coded using NVivo for Mac Beta (Version 10.0.1) software. Thematic coding of data was guided by the research questions as well as the information-motivation-behaviour change model developed by Fisher and Fisher (1992). This model suggests that the interaction between health-related information, motivation and behavioural skills affects decision making about health. Coding was an iterative process based on multiple readings of the data. Members of the primary research team met to discuss and gain consensus on emerging themes.

Results

A total of 24 circumcised and 21 uncircumcised men were recruited to participate in the six focus-group discussions with an average of 7.5 men per group. The results of the analysis are presented below. Respondents have been allocated pseudonyms to ensure confidentiality.

Personal motivational factors

Our analysis revealed four key areas where beliefs and motivations about VMMC intersected with aspects of male sexuality and ideals of masculinity. The areas included perceptions that VMMC could: (1) enhance sexual performance, (2) increase their sexual appeal, (3) negatively impact sexual functioning and (4) lead to risk compensation.

VMMC enhances sexual performance

Men from both the circumcised and uncircumcised groups believed that VMMC could positively affect their sexual performance. Across the different focus groups, it was

repeatedly mentioned that the physical removal of the foreskin had positive effects on sexual performance and experience. As one respondent from the under-35 circumcised group reported:

I think there is a difference in sexual experience between before circumcision and after circumcision ... For instance, maybe while you still had your foreskin you were not performing in a way that really satisfies you. Your foreskin was getting in the way of your enjoying sex. But when you come back now [after circumcision you] become satisfied when you perform. (Sipho, under 35, circumcised)

Circumcised men under 35 years felt that VMMC improved sexual performance by facilitating better penetration and reducing condom slippage during sex:

The first benefit is when engaging in sex. You are able to penetrate until you get to the deepest point. It's not like before where she would hold you to prevent you from going deep. Also when you are circumcised it's easy to use a condom. When you have the foreskin during sex the condom slip out very eas[il]y. (Themba, under 35, circumcised)

Men in the focus groups who had been circumcised repeatedly described how being circumcised delayed ejaculation, and allowed them to have sex for longer, which they believed also improved their partner's satisfaction. Male circumcision was associated with increased virility for many circumcised respondents:

I can only say you have a lot of fun during sexual activity. I would say after circumcision I don't have the problem with early ejaculation. Previously my foreskin would make me reach the climax very quickly and ejaculate very early, but not so after circumcision. She thanked me. And it was for the first time. I had never had that before. (Jerome, under 35, circumcised)

Another respondent noted:

Okay there is a huge difference ... because when I had foreskin I ejaculated quickly. Now I can go for 45 minutes, I can have sex for a long while. (Mbongeni, under 35, circumcised)

Men under 35 who were circumcised also reported that circumcision not only improved their ability to have sex, but also increased their libido, increasing their desire to have sex:

She even said to me the other day circumcision created problems between us because now I always ... I always want her. (Siyabonga, under 35, circumcised)

Additionally, they believed that circumcision increased the size of the penis:

I see the difference being that my penis is bigger than before, the size always differs from [before circumcision] the last one. .. . it really grows indeed [most participants agree to this] especially when they tell you that if you notice that it's getting better ... (Thokozani, under 35, circumcised)

VMMC increases sexual appeal

Beliefs about masculinity are often influenced by the ability to attract female partners and to satisfy them sexually (Morrell 1998). Both circumcised and uncircumcised men perceived that women preferred and desired circumcised men:

The other thing I've heard about this is that people say when you are circumcised; women say you will keep doing this They say once a woman sleeps with a circumcised man, she won't want another man. I don't know how true that is because I have never been circumcised. (Thulani, over 35, uncircumcised)

Another respondent provide an additional argument:

Yah what I can say is those woman who have uncircumcised husbands should advise their partners to circumcise because it will change their sex life. (Lungisani, under 35, circumcised)

Men in the circumcised group also perceived that women found it more enjoyable to have sex with a circumcised man because of the difference between sleeping with a circumcised man versus an uncircumcised man:

[Women] think there is a difference when you are circumcised. They feel it's more enjoyable sleeping with a circumcised man. They say there is a big difference. You are more enjoyable now and strong. (Thabo, under 35, circumcised)

VMMC negatively impacts on sexual functioning

An important negative perception of VMMC reported by men in the uncircumcised FGDs was the fear that circumcision could negatively impact penile function. These were often stories that men heard within their social networks or men who knew other men with personal negative experiences of VMMC:

What I want to know is why does it happen that sometimes when people go for circumcision some come back paralysed, or even die? The [man] I know, before circumcision his penis could be erect, but after circumcision he couldn't get it to be erect. (Thobani, under 35, uncircumcised)

Another man described a similar instance:

Yes, there is [a man] that I know, and in his case his penis does not function at all any more. (Sandile, under 35, uncircumcised)

The importance of virility, as well as the fear of these possible negative effects on virility were often factors that men in the study cited for fearing VMMC.

Possible impacts of VMMC on condom use and sexual risk taking behaviour

Some circumcised and uncircumcised men, in both the under and the above 35 years of age focus groups said that they would use condoms less if circumcised:

I like it [circumcision] because you become free [condom-less] when you are going to meet with a woman [have sex]. (Malume, over 35, uncircumcised)

Two participants stated that it was not necessary to use a condom for either hygiene or HIV if you were circumcised unless a man wanted to avoid pregnancy:

That will be so because without you being aware, your foreskin is sucking all the dirt in there. You will realise after circumcision that now you are clean and you don't get infected. Well sometimes you don't use it [protection]. I think if you are circumcised, you only need protection if you don't want to make a girl pregnant, because obviously your parents will have told you that you should not just sleep around. (Nkosinathi, under 35, circumcised)

What I can say is that there is no good infection, because some of them think that when you are already circumcised it is said that the chances of infecting others are small and make it seem like there is a 100% assurance that you won't get infected, so they continue spreading it all over. (Mdu, under 35, circumcised)

One man in the younger age group expressed the view that circumcision would lead to having more sexual partners. He stated:

They don't behave. There isn't any good behaviour. Because now a girl I have sex with will go and tell another girl that she had great sex with a certain guy and that girl too will want have sex with that guy; so all the girls will come to that guy. Therefore as a guy you will be promiscuous. (Sakhile, under 35, circumcised)

Social motivational factors

In addition to the importance placed on personal motivation factors, two social factors emerged as having important implications for men's perceptions and decision-making regarding VMMC.

Partner influence

Men's opinion of circumcision was influenced by the perception that circumcision increased their appeal to sexual partners, exerting a positive pressure for uptake of the service. On the other hand, some men felt that a partner's request for them to go for a circumcision would raise their suspicion about her sexual behaviour:

No, a girl will never tell you to go and get circumcised. She may say something [where] you will interpret their meaning yourself and you will see that well there is something you have to fix. But she will never directly tell you to go and circumcise. (Bongani, under 35 circumcised)

Another man also noted:

My girlfriend will never tell me to go and circumcise, or else she will have to tell me where she saw a circumcised man. She may rather ask my friends to encourage me to go, not her coming directly to me. (Siya, under 35, circumcised)

Family influence

One focus group of men under 35 that included men aged 18 - 21 years reported that they had felt unable to discuss VMMC with their families when they were deciding to have a VMMC because they felt this required disclosing that they were sexually active. As one participant reported:

I think our parents, older people, I would say they are the first people to talk about these things [circumcision], [now] it would seem like I am a child, [but] if I could talk about sex [with them] they would look at me with a different eye, in a way that [their] child is a grown up now. (Mzamo 21, circumcised)

Discussion

Our findings suggest that in addition to the sociocultural challenges that hinder VMMC uptake, circumcision appears to linked to male sexuality and masculinity in complex ways. This relationship in some cases promotes, and in other cases, hinders, the uptake of VMMC. Barriers and facilitators to VMMC uptake need to be understood and addressed in South Africa, if VMMC targets are to be met.

In this study, some men perceived that VMMC increased virility and sexual endurance and improved their ability to perform sexually, satisfy their partner and attract and maintain multiple partners. The perceived benefits of being circumcised included: (1) longer coitus, (2) increasing the number of times men could have sex, (3) increasing sexual desire and (4) improving the sexual enjoyment of their partner. These findings suggest that some men may perceive there being psychological benefits of VMMC beyond HIV prevention by improving perceived sexual performance and virility. In society where sexual performance is critical to the being male, having an understanding of how these factors influence the uptake of VMMC is important.

While these findings require further research for confirmation, they begin to highlight some of the misconceptions men may have about VMMC. When counselling for VMMC, it is important to stress the importance of condom use and continued risk of HIV infection (Courtenay 2000; Morrell 1998; Sigler, Mbwambo, and Di Clemente 2012), however, addressing perceptions of perceived sexual enhancement or performance remains absent from many counselling messages. Our findings suggest that men may feel they gain perceived benefits beyond a reduction of HIV risk, and that these beliefs should be addressed in counselling sessions.

Perceived benefits of being circumcised included the perception that circumcision may increase the size of your penis and that removal of the foreskin increases sexual satisfaction. These are important beliefs because regardless of whether they have a biological basis, they are powerful community or subjective perceptions that may influence how men think about circumcision with important consequences for resulting behaviours post-procedure.

Whilst research to date has discussed men's fear of pain and fear of testing for HIV as critical barriers to VMMC uptake (Khumalo-Sakutukwa et al. 2013; Lissouba et al. 2011;

Westercamp et al. 2012), we found that uncircumcised men were also afraid of losing penile function, and that had been a concern for many of the circumcised men before undergoing the procedure. The possibility of losing erectile function was repeatedly discussed by uncircumcised men and was informed by negative stories they heard in their community. The potential loss of penile function may be a difficult barrier to overcome in communities that are already sceptical about medical male circumcision. Therefore, promotion of VMMC could usefully include testimonials from men who have had both positive and negative experiences of VMMC and why these men would continue to advocate for the procedure. In this way, men may be given information that removes some of the fear surrounding the procedure, as well as addressing what happens if the procedure has a negative outcome.

Gender socialisation plays a major role in the construction of the male identity (Mahalik, Burns, and Syzdek 2007; Marston and King 2006). Social forces play an important role in constructing what it means to be a man, and suggest that peers, partners and families may influence circumcision uptake (Mahalik, Burns, and Syzdek 2007; Marston and King 2006). Our findings suggest that the perceived influence of peers, partners and families may often be subtle and indirect. Importantly, some men who had been circumcised did not want to discuss circumcision with their families, feeling that it important for them to maintain control over their decision. Some younger men who had been circumcised expressed the desire to keep this information confidential, as they perceived that knowledge of it this might initiate family discussion about their sexual activity. Keeping VMMC confidential was important in retaining 'sexual confidentiality'.

This has important potential implications for when men decide to have a VMMC. Epidemiologically, it may be advantageous for men to be circumcised as early as possible to minimise the risk of infection, but some men may delay the procedure until they can independently consent for it, or when they feel it is all right for their family or friends to know they are sexually active.

Our findings also suggested that the influence of partners on decision-making is complex and may be entwined with ideas around sexual appeal, which can have implications for how VMMC programmes target partners during promotional activities. Some circumcised and uncircumcised men implied that women should not interfere in a man's decision to undergo VMMC, linking to beliefs that men should demonstrate strength and self-reliance in their decision-making about health matters (Harrison et al. 2006; Morrell 1998; Pulerwitz et al. 2010). Being seen to make decisions based on pressure from a woman may be perceived as weakness or dependency, affecting the way in which men are perceived in the wider community (Courtenay 2000; Harrison, Xaba, and Kunene 2001; Varga 2000). Lastly, men from both groups felt that if a woman implied she preferred a man who was circumcised, this could raise questions of where she had seen a circumcised man. Some men in the focus-group discussion did not want to envision that their partner had the desire for him to be circumcised because of positive experiences with other circumcised men.

Multiple comments indicated that women play an important role in indirectly influencing men's decision to undergo circumcision, or in influencing those men who are thinking about it. The finding raise questions about how to promote VMMC within relationships and communities so that it becomes a norm endorsed by both men and women. The importance of making it a community priority for men to be circumcised early is highlighted by recent evidence from Uganda and Kenya, which suggests that the mid- and long-term effectiveness of VMMC on HIV acquisition is possible, with the Ugandan study finding high effectiveness of VMMC on HIV acquisition five years post-trial (Gray et al. 2012; Mehta et al. 2013). By promoting VMMC in younger men and communities, and

achieving high uptake in these younger groups, it may be possible to reduce the number of HIV infections in men as they get older.

Our study identified three beliefs among men in the focus groups that may suggest potential risk compensation. First, some men overestimated the protection afforded to them by circumcision; second, some men perceived that circumcision enabled men to have more partners and more sex; and, lastly, some men perceived that circumcision could reduce the risk of HIV infection so that the use of condoms might only be necessary to avoid pregnancy. These findings are important because if men have more frequent sex without condoms, or are less motivated to use condoms to prevent pregnancy or other STIs, the protective benefits of circumcision may be substantially undermined (Cassell et al. 2006; Thompson, Thompson, and Rivara 2001).

There are important limitations to our findings. Men in the focus groups were part of a larger home-based counselling and testing study and had received messages about VMMC before being part of the study. Additionally, data was collected within focus groups in which men were asked to articulate their views in front of others, and responses may have been influenced by the perspectives of other participants. Finally, the analysis does not include the views of women and whether the perceptions men had about VMMC would be corroborated by women.

In future work, there is a need to think more critically about to what extent, if at all, the impact VMMC may have on socially sanctioned risk taking behaviour among men (Campbell 1997; Morrell 1998). Although VMMC involves extensive counselling, including about the high but partial efficacy it has against HIV acquisition, there is room for more nuanced approaches to post-VMMC counselling. These messages could reinforce existing messages that promote risk reduction by addressing men's perceptions of how they think they will be different after having had a VMMC and discussing these beliefs. One approach would be to design individually contextualised counselling sessions that respond to men's specific beliefs around circumcision, the perceived benefits they expect from VMMC and their present and planned future sexual practices.

Conclusion

This qualitative research study has highlighted something of the complexity involved in decision-making and perceptions surrounding VMMC. Masculinity and male sexual identity are interlinked and these factors need further exploration in order to understand the influence they may have on VMMC uptake. Our findings suggest that men consider a wide range of issues when deciding to undergo circumcision and that these issues are interwoven with other social and structural factors, including false beliefs, negative experiences, fears and challenges with poor service provision (George et al. 2014; Padian et al. 2011; WHO 2013). Voluntary medical male circumcision is an intimate procedure that has important consequences for men, and may influence a broader set of issues relating to masculine ideals and sexual performance. In future work, it will be important to design messages that respond to men's perceptions of sexual performance and address these during information and counselling sessions. It is important, too, to consider how these perceptions influence community beliefs about VMMC and how these can be built into the individual, contextualised counselling sessions that address sexual health, performance and VMMC. More research is also required to understand the prevalence of these different perceptions of VMMC and how this relates to sexual performance, sexuality, individual risk and sexual health as factors influencing men's decision-making about VMMC.

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