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ROUNDTABLE

Male Circumcision: Implications for Women as Sexual Partners and Parents

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TWENTY years of observational data demonstrating an association between male circumcision and lower HIV prevalence followed the first publications in 1986 suggesting a possible role for male circumcision in HIV prevention.[1,2] However, randomised, controlled trials were necessary to determine the level of the protective effect, ascertain adverse surgical events rates and document sexual behaviour post-surgery.

The now-published trials opened a space for public debate among stakeholders, even before all the results were known, in countries such as Lesotho, Kenya, Malawi, Swaziland, Tanzania and Zambia. WHO and UNAIDS also organised a regional consultation in Nairobi in November 2006;[3] one on strategies and approaches to male circumcision programming in Geneva in December 2006;[4] one on perspectives from social science in Durban in January 2007;[5] a meeting on male circumcision and young men's sexual and reproductive health in Geneva in January 2007; and the WHO/UNAIDS international consultation on the policy and programming implications in Montreux in March 2007.[6]

What do the results of these trials mean at the population level for women? Indirectly, it is anticipated that women currently living in high HIV prevalence settings with low male circumcision prevalence may benefit 10–20 years hence, if there is a reduction in HIV incidence among men who are circumcised in programmes achieving wide coverage. This is because women would have a lower probability of encountering a sexual partner with HIV infection. As for a direct effect on risk for women, recruitment in a Rakai trial looking to confirm or disprove previous observational data suggesting an important effect of male circumcision on HIV transmission to women was stopped; it may never be known whether or not male circumcision affects the probability of sexual transmission of HIV from men to women.[7] This paper highlights some of the implications of the results of the male circumcision trials for women as sexual partners and parents and discusses some gender-related concerns.

Non-HIV-related benefits to women of male circumcision

Women benefit as sexual partners if men have fewer penile infections. Systematic reviews show that circumcised men are at significantly lower risk of syphilis and chancroid.[8,9] Circumcised men in the United States are also at significantly lower risk of invasive penile cancer,[10–13] and a lower risk of cervical cancer in partners of circumcised men has also been reported.[14] This may be due to decreased human papillomavirus infection, which causes ano-genital and cervical cancer.

Women also benefit when men have better penile hygiene and are less likely to transmit infections. In contrast to the rapid drying of the circumcised penis, the foreskin of the uncircumcised penis creates a moist environment where secretions can be trapped and pathogens flourish, requiring regular cleaning. A study of male partners of women with bacterial vaginosis in Nairobi, Kenya, found that both increased post-coital washing and male circumcision were independently associated with lower prevalence of HIV infection.[15] Thus, improved penile hygiene may reduce the risk of HIV and other sexually transmitted infections, irrespective of circumcision status. Among both circumcised and

uncircumcised men in Malawi, a study of post-coital penile wipes containing a topical microbicide concluded that the wipe was safe and acceptable, and could decrease the frequency of penile colonisation with micro-organisms.[16] Whether frequent penile cleaning with a microbicide wipe could cause inflammation and micro-abrasions leading to increased risk of HIV acquisition remains to be evaluated. Efforts to improve penile hygiene practices in general need to be developed and assessed in different socio-cultural and economic contexts, alongside work promoting new social norms for safer sexual behaviour. Raising the importance of good genital hygiene practices in discussions about male circumcision is important because of the benefits with respect to reduction of sexually transmitted infections that can be achieved for both partners.

Epidemiology and acceptability of male circumcision

Worldwide, the prevalence of male circumcision is highly variable, depending on its acceptability and the religious, cultural, social and medical reasons for which it is performed. An estimated 665 million men (30% of all men) over 15 years of age worldwide are circumcised. Of these, approximately two-thirds (68%) are Muslim, 0.8% are Jewish, and 13% are men in the United States who are not Muslim or Jewish.[17] Religious, social and cultural reasons for circumcision far outweigh medical ones, such as difficulties retracting the foreskin (phismosis) or returning it to its original position (paraphimosis), in influencing acceptability of the procedure.

Social desirability or the desire to conform to social norms plays an important role, sometimes more so than advice provided by medical authorities.[18] For example, the American Academy of Pediatrics has issued several statements on neonatal circumcision since 1971, with its most recent statement in 1999 saying there are insufficient data to recommend routine neonatal circumcision.[19] Yet, there appears to have been little decline in prevalence of neonatal circumcision in the USA as a result. An estimated 61% of male newborns were recorded as being circumcised on hospital discharge sheets in 2000,[20] and community surveys that include newborns circumcised for religious and other reasons outside the hospital setting have found higher neonatal male circumcision prevalence of 76–92%.[21] On the other hand, declines were seen both in Canada and Australia following similar statements by the medical authorities in those countries, and in the United Kingdom following the decision not to cover neonatal male circumcision on the National Health Service.[17]

The published literature on the acceptability of male circumcision in sub-Saharan Africa, South Korea, the USA and other locations saw the light of day prior to the announcement of the partially protective effect of male circumcision against female-to-male transmission of HIV. A recent review of 13 acceptability studies in Botswana, Kenya, Malawi, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe reported that acceptability of male circumcision was already high. Women were interviewed or participated in focus groups in half the studies. Overall, approximately the same proportion of women said they would prefer circumcision for their partners or their sons as men who said they would prefer circumcision for themselves or their sons. In some cases, women were asked if they would prefer their partners to be circumcised ''if male circumcision were proven to be protective against HIV and STIs''; in others, they were asked their views ''if it were safe and affordable''. Overall, 69% (range 29–87%) of women favoured circumcision for their partners and 81% (range 70–90%) were willing to circumcise their sons.[22] The main concerns were pain, cost and complications; the most important factors influencing acceptability were safety, affordability and evidence that male circumcision was protective against HIV and STIs. For women in KwaZulu Natal, South Africa, the relationship between male circumcision status and acquisition of STIs was key.[23]

In countries where male circumcision is already socially accepted, e.g. in Turkey,[24] parts of West Africa and among some Asia-Pacific cultures,[25] boys do not consider themselves as men unless they are circumcised. In South Korea, male circumcision was rare before 1945, was introduced in the 1950s and increased dramatically in the 1980s and 90s. Now, greater than 90% of secondary schoolboys have been circumcised by age 12,[26] and social acceptability is currently high. A nationwide study in 2002 found that 91% of South Korean parents thought circumcision

was necessary, principally to improve hygiene. Mothers also cited improved future sexual potency as a reason.[27] Circumcision status of the father was the main determinant of the decision to circumcise an infant in one US study,[18] while another found ease of hygiene as the main motivator.[28] Still another US study found over 80% uptake of newborn circumcision despite differences in health care coverage status and race, indicating that economic factors did not outweigh social desirability.[29]

Effect on sexual pleasure?

Discussions of sexual pleasure in relation to male circumcision status are often heated. Although published studies are lacking among adult men pre- and post-circumcision and there are few among sexual partners who have had sex with both circumcised and uncircumcised men, women have been asked about their preferences, which are not uniform.

In several acceptability studies a significant proportion of women preferring a man to be circumcised cited reasons of hygiene.[30,31] Concerns about hygiene have also been reported anecdotally among sex workers. For example, a sex worker in Nkhotakota, Malawi, said ''the uncircumcised can harbour husks (*m'deya*) and sperm are trapped within the foreskin and so get disease easily''.[30] Both sex workers and young, unmarried women in focus groups conducted in four diverse districts in Malawi believed that circumcised men both enjoy sex more and give more pleasure to their partners than uncircumcised men.[30]

Women who had experienced sex with both circumcised and uncircumcised partners in a US study reported a strong preference for circumcised over uncircumcised sexual partners, both for aesthetic reasons and for various sexual activities, ranging from fellatio and manual stimulation to sexual intercourse[32] while in another US study circumcised men reported more varied sexual experience than uncircumcised men.[33] On the other hand, a survey of women recruited through magazines and anti-circumcision websites found a great preference for uncircumcised men,[34] and in a New Zealand study women reported more vaginal dryness during intercourse with circumcised men.[35] However, as women in the Malawi study concluded, male circumcision may be irrelevant to women's pleasure, with any difference arising from how the woman responds, her preconceived ideas about male circumcision and how she has been socialised.[30]

Women as parents considering male circumcision for infants

Male circumcision is an irreversible procedure which provides a child with no benefits in relation to HIV before sexual debut, except for reduced likelihood of urinary tract infections in infancy.[36] Social, cultural, religious and medical factors may influence the decision whether to circumcise an infant boy. Parents of uncircumcised boys in a US study were more likely to feel less respected by their health care provider and to reconsider their decision when they were not asked whether they wanted their child circumcised or did not receive adequate information about the procedure.[37] This underscores the responsibility of health care providers, particularly midwives and others attending childbirth, to be knowledgeable about the advantages and disadvantages of neonatal male circumcision in societies where it is done and to discuss this with parents.[38] Parents may prefer to leave the decision to the child, waiting until he has the capacity to decide on his own. Or they may view the lower risk of surgical complications associated with the procedure when it is performed in infancy as being in the child's best interests.[39]

In societies in which male circumcision is performed in childhood or adolescence, significant socialisation on what it means to become a man may be part of the circumcision rite. For example, in the Malawi study, women indicated that there were expectations that boys would be counselled on sexuality, genital hygiene and good behaviour.[30] The WHO/UNAIDS Montreux recommendations called for male circumcision programmes to maximise opportunities for education and behaviour change communication, promoting shared sexual decision-making, gender equality and improved health of both women and men.[6] Such services for adolescents and young adults can use social change communication strategies to question and support transformative changes in gender norms and roles. Whether or not a boy has been circumcised, mothers and fathers also have important roles to play in socialising their sons in this regard.

Potential gender-related effects of male circumcision for HIV prevention

Monitoring and minimising potential negative gender-related impacts of male circumcision programmes, such as conflation of male circumcision with female genital mutilation (FGM), unsafe sex and sexual violence, will be important in countries that include male circumcision within HIV prevention programmes. FGM, like male circumcision in some societies, is rooted in traditional culture, but its health consequences can be serious.[40] Partial or total removal of the external female genitalia is a manifestation of deep-rooted gender inequality, intended to reduce women's sexual desire and functioning.[41] It has no health benefits whatever, and complications can include severe pain, shock, haemorrhage, tetanus or sepsis, urine retention and ulceration of the genital region. The WHO collaborative prospective study in six African countries on female genital mutilation and obstetric outcomes, published in June 2006,[42] showed that deliveries to women who underwent all types of FGM were significantly more likely to be complicated by caesarean section, post-partum haemorrhage, episiotomy, extended maternal hospital stay, resuscitation of the infant and hospital inpatient perinatal death than deliveries to women who had not had FGM. Multilateral agencies and medical and nursing professional organisations consider FGM to be universally unacceptable as an infringement on the physical and psychosexual integrity of women and girls and a form of violence against them.[43] It is therefore critical that messaging about male circumcision for HIV prevention not only clearly distinguishes it from FGM but also contributes to efforts to eradicate FGM.

The risk that unsafe sex may increase or that violence against women will be provoked during male circumcision programme scale-up should not be under-estimated. Much will depend on the extent to which messaging about male circumcision and HIV at both the individual and community level creates a common understanding about the benefits of male circumcision for HIV prevention. Clear and consistent messages must emphasise that male circumcision is an additional prevention method for men, but that it does not replace measures such as delay in the onset of sexual relations, avoidance of penetrative sex, reduction in the number of sexual partners, and correct and consistent use of male or female condoms. Regardless of the male circumcision prevalence in a community or country, people need to be encouraged to learn their HIV status through HIV testing and counselling and to attend services for the treatment of sexually transmitted infections. In all settings, the ''partial protection'' message needs to be reinforced so that men who are circumcised understand that it does not afford them full protection.

As sexual partners, women should not abandon negotiation of condom use with circumcised men, and this will be greatly facilitated if everyone understands that with circumcision alone, men are not fully protected and their partners are not directly protected from HIV infection. If circumcised men abandon or do not adopt other prevention strategies, women may find themselves at increased risk of HIV infection. Campaigns to create new masculine social norms need to convey protection and prevention as ''real man'' attributes, e.g. ''I'm circumcised and I use condoms every time'', ''I'm circumcised and I'm staying with my partner'', ''I'm circumcised and I'm waiting to start sex'', ''He's circumcised and we use condoms to be safe''.

Women need to support men who undergo male circumcision in their intentions to follow through on combination HIV prevention, and they must not abandon their own HIV prevention strategies. When their partner undergoes male circumcision, regardless of his HIV status, he must abstain from sex until complete wound healing preferably until this can be certified by a health care provider. Complete healing normally takes six weeks. Women need to support their partner in following this important post-operative instruction and in the initial post-operative period assist him in avoiding erections. Early resumption of sexual activity before complete wound healing may increase the risk of complications and place HIV negative men at higher risk of HIV acquisition. If the man is HIV positive, the risk to his sexual partner(s) may also be increased, although the data are limited.[7]

Couples in sero-discordant partnerships in which the woman is HIV-positive may consider the possible benefits of male circumcision as part of their strategy to prevent HIV transmission. It may be an option that would lead to reduced anxiety during sexual relations by

providing additional protection, if it is in concert with their other HIV prevention strategies.

Conclusion

In the high HIV prevalence settings in which men may be offered male circumcision, women will face the challenge of negotiating for safer sex with men who may mistakenly think that they can stop condom use and other safer sex measures. If risk compensation[44] occurs in the wake of the news that male circumcision is partially protective against HIV acquisition in men, women will not be protected, and the indirect benefits of male circumcision for women may not materialise. Already mathematical modelling suggests that in the medium term the proportion of people living with HIV in sub-Saharan Africa who are women may rise as male circumcision programmes are scaled up in high HIV prevalence settings, due to the lag time for indirect effects for women to be felt.[45] The fact that, other than an increase in the number of sexual acts by the circumcised arm in the Orange Farm study, risk enhancement was not striking in any of the three trials is not reassuring enough. None of the trial participants were told that male circumcision provided any degree of protection against HIV – in fact they were told that the trials were being conducted to find this out.

As sexual partners and as mothers, women have personal views toward male circumcision that are conditioned by their own backgrounds and personal experience. Through their influence in various contexts women can contribute to ensuring that male circumcision for HIV prevention is used appropriately and ethically, does more good than harm, and helps to improve the sexual and reproductive health of both men and women. Whether it can help to change gender norms and roles and promote gender equality and equity or whether it leads to increased HIV risk for women will depend on societal engagement, both within and outside male circumcision services, and in comprehensive HIV prevention programming.

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