

Acceptability of Adult Male Circumcision for Sexually Transmitted Disease and HIV Prevention in Zimbabwe

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WORLDWIDE, OVER 35 CROSS-SECTIONAL and prospective studies,^{1–6} various ecologic analyses,^{5–8} and investigations of biologic plausibility,^{1,9,10} sexually transmitted infection (STI) epidemiology,^{1,2,11} and a longitudinal study of HIV-discordant heterosexual couples¹² have identified lack of male circumcision as a significant risk factor for HIV acquisition. (However, some cross-sectional studies have found no correlation,^{2,6} and in a Rwandan study, women who reported that their current partners were circumcised had an increased risk of HIV.^{13,14}) In the regions of east and southern Africa where heterosexually spread HIV epidemics are especially severe, large populations of men are uncircumcised, pointing to a possible prevention intervention.^{6,11,15} Previous studies in 6 sub-Saharan African countries have explored men's and women's awareness of the potential health benefits of male circumcision and men's willingness to undergo adult circumcision. Currently, pilot programs to introduce safe, affordable circumcision, as part of male reproductive health services, are being implemented or are planned in Botswana, Haiti, Kenya, South Africa, and Zambia.^{11,16,19}

In Zimbabwe, circumcision is traditionally practiced in only a few small populations such as the Tonga and is reportedly rare among the dominant Shona ethnic group. As part of a larger survey of men interviewed at Harare beer halls in April–August of 2000,²¹ we included measures on self-reported prevalence of circumcision, knowledge of health benefits or risks associated with circumcision, and willingness to undergo adult circumcision. Recruitment followed the venue–day–time (VDT) sampling methodology and approximated a representative sample of men attending Harare beer halls,²¹ similar to protocols for behavioral surveillance of gay men at bars, dance clubs, and other venues in the United States.²² Establishments operated by the largest beer hall owner (approximately three fourths of all Harare beer halls) were included in a sampling frame comprising 4-hour VDT periods reflecting general attendance patterns. Four-hour VDTs were randomly sampled from all possible VDTs. During each sampling event, every third man crossing a line at the entrance of the beer hall was intercepted, assessed for eligibility, and invited to participate in the survey. Partway through the main survey, a series of questions relating to

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circumcision were added to the instrument. Therefore, the present data were collected from a consecutive subsample (200 men, mean age 31 years) of the larger survey. A focused group discussion was also conducted with 12 men to gain more in-depth understanding on issues related to male circumcision.

Fourteen percent ($n = 28$) of the participants reported being circumcised. Circumcised men were more educated ($P = 0.01$) and younger ($P = 0.060$) than uncircumcised men. We found no association between being circumcised and current HIV infection (as measured by an enzyme-linked immunosorbent assay examination) or self-reported history of STI, although we did not ask about age at circumcision. (Men circumcised as adults, ie, for reasons other than culture or religion, may have been infected before being circumcised and also generally tend to be higher-risk individuals.^{2,15})

In response to the question “Is there anything that people in your community believe to be healthy or unhealthy about circumcision?,” 43% ($n = 86$) said they had heard of positive health benefits. Sixty-nine respondents mentioned circumcision-reducing STIs; however, HIV or AIDS was specifically mentioned by only 6 men. One of the focus group participants, for example, expressed the belief that although “circumcision is a means of trying to minimize the chance of getting infected. . . you should not say if I am circumcised it automatically means I can do without condoms. Let's say you had been influenced by alcohol and have unprotected sex, the chances of getting HIV may then be reduced if you are circumcised.”

Twenty-three men (12%) spoke more generally about circumcision promoting hygiene/sexual cleanliness. Six men (3%) suggested that circumcision could have unhealthy or risky consequences such as the danger of (traditional) circumcision spreading HIV through use of a single blade. Circumcised men were more likely to state positive health benefits of being circumcised ($P = 0.001$).

In response to the question “If you are uncircumcised, would you like to be circumcised if this practice is confirmed to reduce the risk of contracting HIV or STIs and if it is performed safely and affordably?,” 45% answered yes. Men willing to be circumcised were younger ($P = 0.035$) and never married ($P = 0.010$). Willingness to be circumcised was not associated with recent

The authors thank Robert Bailey, Jeffrey Klausner, and Glenn Post for their helpful comments.

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Received for publication May 11, 2004, and accepted September 20, 2004.

sexual risk behavior as measured by having unprotected sex with casual partners, paying for sex, or having sex while intoxicated (all *P* values ≥ 0.1).

The acceptability level of circumcision in this Harare survey was somewhat lower than in studies from other African countries, where the proportion of men reporting they would like to be circumcised ranged from approximately 60% in Kenya, Uganda, South Africa, and Tanzania^{11,16–18} to over 80% (after a brief informational session) in Botswana.¹⁹ In considering the feasibility of adult male circumcision as a public health intervention, our data nonetheless suggest a substantial degree of preexisting knowledge among these Zimbabwean men of various STI prevention and other benefits of circumcision, although only a few directly associated it with HIV/AIDS. Despite the absence of specific educational or promotional efforts, and before knowing the results of current clinical trials of circumcision's efficacy in preventing HIV,¹¹ nearly half of the men expressed willingness to undergo the procedure.

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