

Making the Case for Circumcision as a Public Health Strategy: Opening the Dialogue

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Abstract

Hispanics in the United States have lower rates of male circumcision and higher rates of HIV. Although MC has been demonstrated to reduce the risk of acquisition of several sexual transmitted diseases such as HIV, human papilloma virus infection, and herpes simplex virus type 2, MC is only medically reimbursable by insurance for adults or children following recurrent infection, injury, or malformation of the penis. We conducted two studies of attitudes regarding MC among health care providers to Hispanic clients at Miami, Florida STD and Prenatal Clinics. This study presents qualitative data drawn from intensive interviews with 21 providers, including a mohel. Qualitative data was analyzed for dominant themes and collapsed into overarching themes. Thirteen themes emerged; acceptability, appearance, circumcision and children, circumcision and HIV, cost, cultural differences, health benefits, knowledge and personal experiences, pain and injury to the penis, perceived HIV risk, religion, sexual performance, and sexual pleasure. Except for the mohel, Hispanic male providers related MC acceptability to American Pediatric Association guidelines, personal circumcision status, and were skeptical regarding health benefits for sexually transmitted disease (STD)/HIV risk reduction. Female providers focused on the financial burden to parents, lack of information, and low acceptability among Hispanic men. This study illustrates the differing attitudes on circumcision held by providers, and suggests that gender, culture, cost, and providers themselves may limit MC acceptability among Hispanic clients. Results suggest that promotion of MC as an HIV risk reduction strategy must begin with the support of medical practitioners to promote the endorsement of MC as a prevention strategy.

Introduction

THERE IS NOW ample scientific evidence¹⁻³ that male circumcision reduces the risk of acquiring HIV through heterosexual intercourse in males by approximately 51 to 60%. Furthermore, male circumcision has been associated with decreased risk of acquiring syphilis and chancroid,⁴ as well as human papilloma virus (HPV) infection and hence penile and cervical cancer⁵⁻⁷ and urinary tract infections.^{8,9} In March 2007, the World Health Organization and the Joint United Nations Programme on HIV/AIDS held a technical consultation on male circumcision and produced a document¹⁰ that stated that male circumcision should be recognized as an efficacious intervention for the prevention of heterosexually acquired HIV infection in men.

In the United States, Hispanics have the second highest rates of HIV infection¹¹ and the lowest rates of male circumci-

sion.^{12,13} Given the protective effects of male circumcision on HIV transmission, increasing awareness in the Hispanic community of the potential benefits of circumcision in decreasing rates of HIV acquisition would be beneficial. As the largest and fastest growing ethnic minority group¹⁴ in the United States, addressing the transmission of HIV/AIDS in the Hispanic community takes on increased importance in efforts to improve the nation's health. However, before interventions to promote male circumcision can be introduced in the Hispanic community, additional information is necessary to determine the factors that are related to the acceptability of this practice in this population. Most studies looking at acceptability of circumcision have focused only on the general population. For example, a recent review of acceptability studies of male circumcision in traditionally noncircumcising population in sub-Saharan Africa identified only 2 of 13 studies that included the attitudes of health care providers.¹⁵ These studies have shown that

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providers actively involved in circumcision programs are knowledgeable and supportive of circumcision. Conversely, providers from low circumcision regions and those not involved in circumcision programs are not necessarily aware of the medical benefits of circumcision and often are reluctant to discuss it with their patients.¹⁶⁻¹⁸ To our knowledge, the attitudes of health care providers of Hispanics living in the United States have not been explored.

The primary objective of the article is to report an assessment of attitudes regarding male circumcision among health care providers to Hispanic clients in Miami, Florida, and provide qualitative data of the attitudes and beliefs surrounding male circumcision that could be used in the formulation of culturally appropriate interventions designed to promote circumcision as part of an HIV prevention strategy in the Hispanic community.

Methods

Study design

This study reports the qualitative analyses of a non-randomized sample of key informants of the Hispanic community in Miami who agreed to participate in in-depth interviews that assessed awareness and attitudes towards circumcision among Hispanics. Hispanics represent the largest ethnic group in Miami-Dade County and are drawn from the majority of countries in Latin America. Most are immigrants who have been in the United States differing periods of time, spanning several generations to several months.

Participants: key informant interviews

Twenty-one in-depth interviews were conducted with a nonrandom sample of health care providers of the Hispanic community in Miami, Florida. These providers were current or former employees of the University of Miami and Jackson Memorial Hospital (Miami-Dade County Hospital or Miami-Dade County Health Department). The first two institutions provide inpatient and outpatient services and the last one outpatient services only. All three institutions combined employ several thousand medical providers and have facilities distributed throughout the county that can be accessed by all ethnic groups in the county. Almost all providers approached agreed to participate in the study. Most of the health care providers interviewed in the study provided health care services to Hispanics with public health care insurance or without medical insurance, although some provided care to insurance-only patients. Nine of the key informants were individuals (all Hispanics, 6 females and 3 males) who were working with adult Hispanic men at risk for STD/HIV infections. These key informants comprised 2 nurses, 1 nurse practitioner, 2 medical assistants, 1 laboratory coordinator, 1 group therapist, 1 case manager, and 1 health educator. The other 12 (9 Hispanic, 3 white non-Hispanic; 7 females and 5 males) interviews were held with individuals working with pregnant Hispanic women and or their partners: a hospital midwife, a community health center OB/GYN and pediatrician, a licensed practical nurse, 2 pediatricians, 3 infectious disease specialists, and 1 OB/GYN mohel (an individual certified to perform ritual circumcision for those of the Jewish faith).

The selection criterion for interviewees was provision of health care on a daily basis to the Hispanic community in

Miami, Florida. Interviewees were medical providers involved in prenatal care and involved in the treatment and prevention of STDs. The interviews were semistructured, audiotaped, and conducted face to face for 30–60 min in a private room. All interviews were conducted by a female medical provider who was trained to conduct qualitative interviews (here referred to as “facilitator”). The collected information included: identification of facilitators and challenges for the promotion of circumcision as an HIV prevention strategy and identification of attitudes, beliefs, and perceptions relating to adult and neonatal male circumcision in the Hispanic community. Interviews were conducted in both English and Spanish, and interview audio recordings were transcribed and translated into English for review and qualitative analyses.

The study was approved by the Institutional Review Boards of the University of Miami and the Florida Department of Health.

Qualitative analysis

Data analysis was guided by a system in which transcripts from each session were reviewed first by the entire team (2 physicians, 3 psychologists) to develop a list of specific topics and concepts. Next, the transcripts were coded using NVivo7 (from the system Nu*Dist; Non-numerical Unstructured Data Indexing, Searching, and Theorizing) computer software. Coding was conducted by the team psychologists (2) who established the following coding procedures to review the coded data. Coders compared a subset of the transcripts for agreement to discuss any disagreements in coding to specific topics.

Disagreements were presented to the team for final review and agreement. At the completion of coding, the team reviewed the topics and concepts of all coded data and collapsed them into overarching themes.

Results

In total, nine acceptability themes emerged regarding male circumcision, including knowledge about circumcision and HIV, circumcision and children, cost, cultural differences, health benefits, pain and injury to the penis, perceived HIV risk, religion, sexual performance, and sexual pleasure. Most key informants working with high-risk Hispanic males reported that there was little or no discussion about the topic of male circumcision among the Hispanic community and some interviewees described it as “taboo.” They also reported that Hispanics are exposed to little or no information about circumcision and its health benefits. Only one provider was not aware of the research on circumcision.

Key informants working with pregnant females and or their partners reported that similar issues exist among both men and women, although some issues were more salient or of more interest to men or women. In addressing issues related to neonatal circumcision, male practitioners appeared to identify with their patients and asserted that male parents would be unwilling to circumcise their children or themselves. When asked about the Hispanic community’s beliefs surrounding male circumcision, a male pediatrician interviewed reported his belief that there are more disadvantages than advantages to male circumcision and added,

Provider: . . . from the point of view of someone who is selfish and is worried about their own pleasure, I have no problems saying that I'm not circumcised.

Facilitator: And you wouldn't have it done now?

Provider: No! For nothing in the world.

Acceptability. Acceptability is defined here as finding circumcision to be acceptable or approving of circumcision. Female practitioners were more likely to present strategies to increase the acceptability of neonatal male circumcision among patients and practitioners, such as health education campaigns and enhanced knowledge about hygiene and STD/HIV protection and denied potential problems with pain, sensation or pleasure. Some female practitioners asserted that male attitudes about male circumcision and sensation, potency and virility were very deeply rooted and would have to be addressed directly if male circumcision was to be promoted. Conversely, male practitioners were less likely to support male circumcision, and to propose issues related to culture, sexual pleasure, virility, potency and appearance as challenges to gaining acceptability.

The acceptability of adult circumcision was perceived as being related to the health benefits of the procedure, and more likely to be accepted if the health information would be provided to pregnant women, young couples, and provided by medical professionals. In general, younger people were perceived as more open to circumcision than older adults in the Hispanic community. Those Hispanics residing in the United States for a longer time were perceived as having more favorable attitudes about circumcision in comparison to those who had more recently immigrated.

Appearance also had a reported role in the acceptability of circumcision as male practitioners asserted that women would be unlikely to accept the appearance of a circumcised penis. In contrast, most female practitioners commented that Hispanic women were not concerned with the appearance of men who were circumcised, but some felt male circumcision was abnormal and not in keeping with a "natural" state.

Perceived benefits to circumcision

Family pattern and appearance. Most key informants reported that Hispanic males have a preference for wanting their sons' penises to look like their own. As such, Hispanics would consider circumcision if their partner (of women) or fathers had been circumcised. When asked about factors that influence patients in their attitudes about male circumcision a female pediatrician asserted:

Provider: It depends on the history of the father. If he or any members of the family are circumcised then it makes a difference in the decision regarding on whether or not to circumcise the baby.

A few key informants reported they believed that Hispanic women prefer circumcised penises because they look cleaner and more aesthetic.

Cultural attitudes, religion, and education. Practitioners working with adult circumcision observed that living in the United States for a longer time period was associated with increased acceptability of circumcision. All practitioners felt that education played a more important role in male cir-

cumcision than culture and noted that male circumcision is common in some Hispanic culture groups and countries.

For those working with neonates, most practitioners knew that Jews perform ritual circumcision; others were aware that Muslims also circumcise. Only one male practitioner had a female patient who felt that her religion forbade male circumcision. Among those working with adults, all providers believed that religion did not play a significant role in attitudes towards circumcision among Christian Hispanics. Two key informants noted that religion may play a role among Jewish Hispanics.

Health benefits. Most practitioners felt that circumcision was not promoted by other medical personnel and that parents did not perceive a health benefit conferred by male circumcision. Few practitioners promoted male circumcision with parents, but several noted that mothers frequently asked about male circumcision for neonates. Some practitioners agreed that male circumcision could be used to benefit overall hygiene and reduce infection, while others felt that the African trials were not conclusive and they would not recommend male circumcision.

Sexual performance and sexual pleasure. Only one male practitioner working with neonates asserted that male circumcision results in reduced sensation and virility and an altered appearance and that he had also heard this from his male patients, while the female patients did not similarly comment. He felt that rubbing against underwear would ultimately reduce sensation. Most male practitioners related infant male circumcision and eventual sexual performance to their own experiences and circumcision status. Responses to the effects of circumcision on sexual performance were varied with some key informants reporting that there are no effects on sexual performance, others reporting that circumcision results in increased sensitivity for pleasure, and still others reporting that circumcision results in decreased pleasure.

In summary, most key informants reported that the advantages to circumcision perceived by Hispanics are hygiene and prevention against infections. They reported that Hispanics believe that male circumcision results in easier cleaning of the penis, better hygiene, and prevention of infections including sexually transmitted diseases.

Perceived barriers to circumcision

Knowledge about circumcision and HIV. Most practitioners working sexually transmitted infection cases reported that the Hispanic community has little or no knowledge about circumcision and that some are confused about what it is. This lack of information about circumcision is perceived as a barrier to the procedure.

Most practitioners working with neonates felt that patients had little knowledge of male circumcision or of its association with HIV, and generally discussed it with parents after their babies had developed a urinary tract infection. One female midwife stated:

Provider: I know something about circumcision and HIV, yes. But it's not something that I discuss with patients.

Male practitioners who were aware of circumcision and HIV research were skeptical of the outcomes as effective in

HIV transmission prevention as the studies were conducted in Africa. A female nurse practitioner stated, "The data regarding HIV and circumcision has not been published at all in the US and I know that I don't feel comfortable talking about that [with patients] because the research was done in African communities with other issues that aren't necessarily true here" (Avenues transcript #5). Some male practitioners commented that they did not tell parents of neonates about the relationship between male circumcision and HIV transmission due to skepticism or cost of the procedure. Most practitioners agreed that patients failed to perceive their own risk of HIV infection. For example, one provider stated:

Provider: I think that they [Hispanics] are not concerned enough about the risks, . . . some of them think, that happens to others and it is not going to happen to me.

Approximately half of the STD clinic practitioners believed that Hispanics were aware of their own risk of HIV infection; however, most reported that Hispanics have an "impulsive" approach to sex that does not involve safe sex practices and that this behavior is present regardless of their awareness about their risk to contract HIV. Several reported that many Hispanics who know about the risk of contracting sexually transmitted diseases "do not believe that it can really happen to them." All key informants with the exception of one stated that Hispanics are not aware that male circumcision can provide protection against the infection of HIV.

Circumcision and children. Most practitioners felt that circumcision of children, although previously common, is less common today due to lack of insurance coverage, lack of perceived benefit, or less knowledge about the procedure by the parent. One male practitioner recommended neonatal circumcision and another said many mothers inquire about it. Most practitioners felt that fathers who were not circumcised would not circumcise their children. Others commented that mothers have problems cleaning the foreskin in the infants.

Some female practitioners felt that male circumcision is no longer needed as hygiene and urinary tract infections were no longer a problem if parents were properly instructed. One female practitioner cited her own experience with her sons and her difficulty in finding someone to perform the procedure at a hospital, commenting that some pediatricians avoid performing it and gynecologists and obstetricians do not inform mothers about the procedure. Essentially, one commented, it is seen to be only appropriate when medically indicated, according to the American Pediatrics Association, and would require a large volume of patient data before that attitude changed.

Cost. Both male and female practitioners felt that the cost of male circumcision, as an elective surgery not insured or covered by Medicare or Medicaid, was a significant barrier to its acceptance. In the words of a female nurse practitioner:

Provider: In terms of attitudes about circumcisions, the only time you hear anything that's indicated if there is an organic medical reason to do it. It's not about attitudes. It's a clinical decision. Otherwise it's not paid for and nobody even talks about it. Because you're not going to get it unless you can come up with the money to do it. So I don't know what the community thinks because it doesn't matter what they think because they can't afford it.

When asked about possible barriers to circumcision, a male infectious disease physician stated:

Provider: I'll tell you honestly, we don't talk about it [circumcision] a whole lot in our practice. We just talk about using condoms and not having sex. But circumcision is not an option cause nobody's gonna pay for it.

Some felt that it could be incorporated in health policy as a prevention procedure.

Pain and injury to the penis. Some male practitioners asserted that male circumcision was avoided for neonates due to potential pain or scarring to the penis, while female practitioners did not remark on this issue. In contrast, most practitioners with sexually transmitted infection clinic patients reported that Hispanics perceive circumcision to be a safe procedure, especially if it is done in infancy. Most reported that Hispanic men and women worry about the pain, trauma and injury to the penis that may involved in circumcision, particularly among infants. Several key informants identified concern about pain and trauma as a potential barrier to circumcision among Hispanics. A male infectious disease stated:

Provider: In fact, many Hispanic patients do not like the idea to have the circumcision done because they fear that the procedure is painful, and some of them do not like the idea to "remove a part of their normal anatomy."

Cultural attitudes. Machismo values were associated with a negative attitude toward circumcision among Hispanic men. For neonatal circumcision, most practitioners estimated low rates of male circumcision among their patients, while some males felt that male circumcision was simply no longer a "trend" for patients. Female practitioners more often posed practical strategies to increasing male circumcision acceptability among their patients, but noted that their female patients reported *machismo* as a barrier to condom use or sexual risk reduction, and as such, male circumcision would be difficult to implement among men though several practitioners noted that attitudes about sexual behavior and *machismo* are changing.

In summary, the following barriers to circumcision were described: lack of information about the health benefits of circumcision, *machismo*, the cost of the procedure, and worry about the pain involved in the procedure.

Discussion

This study sought to describe attitudes and beliefs regarding male circumcision among health care providers to Hispanic clients to formulate a culturally appropriate intervention to promote circumcision in the Hispanic community. We found that male circumcision is not promoted or even routinely discussed between health care providers and Hispanic patients. Some reasons include the lack of knowledge of the health benefits of male circumcision by providers and the health care providers' belief that Hispanic patients will not be interested in male circumcision for diverse reasons, including lack of awareness of the surgical procedure, adherence to traditions/family patterns, costs, and fear of pain and trauma to the penis and possibly the lack of support from the American Academy of Pediatrics for male neonatal circumcision.¹⁹

The majority of health care informants interviewed in this study were also Hispanics. While, nationwide, a small minority of the health care providers are Hispanic²⁰ (approximately 5% of physicians and less than 2% of registered nurses), this lack of knowledge of about the benefits of male circumcision in the medical community has been shown in a recent national survey.²¹ Of 1500 American clinicians sampled (250 obstetricians, 250 pediatricians, 490 internists, and 510 family physicians), 29–46% of each physician group surveyed indicated that they were “not at all” familiar with the randomized trial showing the benefit of male circumcision as an HIV prevention strategy. Given this lack of knowledge about the benefits of male circumcision in the medical community and the low level of awareness of circumcision in the Hispanic community, it is not surprising that one of the main barriers identified in arises from the Hispanic health care providers themselves.

This study illustrates the differing attitudes on circumcision held by providers, and suggests that gender, culture, and cost also limit male circumcision acceptability among Hispanics. As has been found in existing studies with African Americans, religion was not perceived as a barrier to male circumcision. Thus, parents’ religious beliefs may play a minor role in influencing decisions to circumcise children and religious practice may not be a significant factor in the decision to circumcise.

This situation in the United States is very different from that in several African countries, e.g., Kenya, Zambia, Swaziland, and Rwanda, that are expanding safe male circumcision programs to respond to the conclusive evidence that male circumcision offers significant protection from men from HIV infection. International funding agencies are backing male circumcision with programs such as the US President’s Emergency Plan for AIDS Research (PEPFAR) providing funds to complement domestic funding for expanded circumcision services.

Furthermore, the Agence Nationale de Recherche sur la SIDA (ANRS), the Bill and Melinda Gates Foundation and the US National Institutes of Health are supporting operational and related research.²² More recently, male circumcision has even been discussed in countries such as India^{23,24} with low HIV prevalence (0.36%) and where religion and ethnicity seem to be major determinant of circumcision.

Current programs in the United States, with an overall relatively low prevalence of HIV (0.4%) and high rates of circumcision,¹⁶ (79%) have not promoted circumcision due to an anticipated minimal impact. However, ethnic minorities, in particular Hispanics, with lower rates of circumcision, higher rates of HIV infection and relatively higher rates of heterosexual transmission of HIV, may indeed benefit for higher rates of circumcision.^{25–27} This is particularly relevant in cities like Miami, which has the highest positivity rate of HIV infection²⁸ in the country, 2.7%, or almost seven times the national average.¹⁵ Circumcision rates in South Florida are presumably low due to the large number of Hispanics (more than 50% of the general population of Miami and Fort Lauderdale) and the high number of immigrants from South America where rates of circumcision are low (more than 20%).^{29–31}

In contrast to African studies of male circumcision, the rate of heterosexual transmission of HIV infection in Miami²⁸ is relatively low at 22%. For these reasons it may be debatable if

in this or similar cities male circumcision should be fully supported by public health funds as an additional HIV prevention strategy. However, on the individual level, it is also clear that health care providers should be expected to be knowledgeable and ready to share the potential role of male circumcision in the prevention of HIV acquisition in heterosexual men. We are not aware of any study or report looking at potential barriers or facilitators of male circumcision in Hispanics in the United States or in Latin America as an additional prevention strategy for heterosexual men.

Among Hispanics, reported attitudes surrounding male circumcision appeared to vary between regional groups (urban, rural, country) and levels of acculturation. Additionally, attitudes appear to differ between those regarding adult circumcision and infant circumcision, and between men and women. These issues have been well explored in African communities and summarized in a recent comprehensive review.¹⁵ The median proportion of uncircumcised men willing to become circumcised was 65% (range, 29–87%), similarly 69% (range, 47–79%) of women favored circumcision for their partners and 71% (range, 50–90%) of men and 81% (range, 70–90%) of women were willing to circumcise their sons. Similar to the results obtained in this U.S. study, the three most salient barriers to the acceptability of male circumcision were fear of pain, concerns of safety, and the cost of the procedure. The main factors associated with willingness to be circumcised were improved penile hygiene and reduced risk of sexually transmitted infections.

In conclusion, ethnic minorities, especially Hispanics, may benefit from increased rates of circumcision in areas of the country with high rates of HIV incidence and low rates of circumcision. However, our results suggest that promotion of male circumcision as an HIV risk reduction strategy must begin with the support of medical practitioners to promote the endorsement of male circumcision as a prevention strategy.

Acknowledgment

This study was supported by NIH grants P30A1073961 and P60MD002266.

Author Disclosure Statement

No competing financial interests exist.

References

1. Auvert B, Taljaard D, Lagarde E, et al. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 trial. *PLoSMed* 2005;2:e298.
2. Bailey RC, Moses S, Parker CB, et al. Male circumcision for HIV prevention in younger men in Kisumu, Kenya: A randomized controlled trial. *Lancet* 2007;369:643–656.
3. Gray RH, Kigozi G, Serwadda D, et al. Male circumcision for HIV prevention in men in Rakai, Uganda: A randomized trial. *Lancet* 2007;369:657–666.
4. Weiss HA, Thomas SL, Munabi SK, Hayes RJ. Male circumcision and risk of syphilis, chancroid, and genital herpes: A systematic review and meta-analysis. *Sex Transm Infect* 2006;82:101–110.
5. Castellsague X, Bosch FX, Munoz N, et al. Male circumcision, penile human papillomavirus infection, and cervical

- cancer in female partners. *N Engl J Med* 2002;346:1105–1112.
6. Svare EI, Kjaer SK, Worm AM, et al. Risk factors for genital HPV DNA in men resemble those found in women: A study of male attendees at a Danish STD clinic. *Sex Transm Infect* 2002;78:215–218.
 7. Maden C, Sherman KJ, Beckerman AM, et al. History of circumcision, medical conditions, and sexual activity and risk of penile cancer. *J Natl Cancer Inst* 1993;85:19–24.
 8. Schoen EJ. Ignoring evidence of circumcision benefits. *Pediatrics* 2006;118:385–387.
 9. Alanis MC, Lucidi RS. Neonatal circumcision: A review of the world's oldest and most controversial operation. *Obstet Gynecol Surv* 2004;59:379–395.
 10. Joint United Nations Programme on HIV/AIDS (2007). New data on male circumcision and HIV prevention: Policy and programme implications. www.who.int/hiv/mediacentre/MCRecommendations_en.pdf (Last accessed April 4, 2010).
 11. Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report, Vol 17, Revised Edition, June 2007. www.cdc.gov/hiv/topics/surveillance/resources/reports/2005report/ (Last accessed April 4, 2010).
 12. Xu F, Markowitz LE, Stemberg MR, Aral SO. Prevalence of circumcision and herpes simplex virus type 2 infection in men in the United States: The National Health and Nutrition Examination Survey (NHANES), 1999–2004. *Sex Transm Dis* 2007;34:479–484.
 13. McKinney CM, Klinger EJ, Paneth-Pollak R, et al. Prevalence of adult male circumcision in the general population and a population at increased risk for HIV/AIDS in New York City. *Sex Transm Dis* 2008;35:814–817.
 14. US Census Bureau. Annual estimates of the population by sex, race and Hispanic or Latino origin for the United States: April 1, 2000 to July 1, 2006. www.census.gov/popest/national/asrh/NC-EST2006-srh.html (Last accessed April 4, 2010).
 15. Westercamp N, Bailey RC. Acceptability of male circumcision for prevention of HIV/AIDS in Sub-Saharan Africa: A review. *AIDS Behav* 2007;11:341–355.
 16. Bailey RC, Muga R, Poulussen R, Abicht H. The acceptability of male circumcision to reduce HIV infections in Nyanza Province, Kenya. *AIDS Care* 2002;14:27–40.
 17. Rain-Taljaard RC, Lagarde E, Campbell C, MacPhail C, Williams B, Auvert B. Potential for an intervention based on male circumcision in a South African town with high levels of HIV infection. *AIDS Care* 2003;15:315–327.
 18. Scott BE, Weiss HA, Viljoen JI. The acceptability of male circumcision as an HIV intervention among a rural Zulu population, KwaZulu-Natal, South Africa. *AIDS Care* 2005;17:304–313.
 19. American Academy of Pediatrics, Task Force on circumcision. Circumcision policy statement. *Pediatrics* 1999;103:686–693.
 20. Grumbach K and Mendoza R. Disparities in human resources: Addressing the lack of diversity in the health professions. *Health Affairs* 2008;27:413–422.
 21. Kretsinger K. Abstract A01-3, 2009 National HIV Prevention Conference. Atlanta, GA: August 24, 2009.
 22. Weiss HA, Halperin D, Bailey RC, Hayes RJ, Schmid G, Hankins CA. Male circumcision for HIV prevention: from evidence to action? *AIDS* 2008;22:567–574.
 23. Chandhiok N, Gangakhedkar RR. The new evidence on male circumcision: An Indian perspective. *Reprod Health Matters* 2007;15:53–56.
 24. Madhivanan P, Krupp K, Chandrasekaran V, et al. Acceptability of male circumcision among mothers with male children in Mysore, India. *AIDS* 2008;22:983–988.
 25. Leibowitz AA, Desmond K, Belin T. Determinants and policy implications of male circumcision in the United States. *Am J Public Health*, 2009;99:138–145.
 26. Sullivan P, Kilmarx P, Peterman TA, et al. Male circumcision for prevention of HIV transmission: What the new data mean for HIV prevention in the United States. *PLoS Med* 2007;4:e223.
 27. Centers for Disease Control. Male circumcision and risk for HIV transmission and other health conditions: Implications for the United States. 2008. www.cdc.gov/hiv/resources/factsheets/circumcision.htm (Last accessed April 4, 2010).
 28. Florida Department of Health. Division of Disease Control. Bureau of HIV/AIDS. HIV Counseling and Testing Annual Report, 2008.
 29. Brinton LA, Reeves WC, Brenes MM, et al. The male factor in the etiology of cervical cancer among sexually monogamous women. *Int J Cancer* 1989;44:199–203.
 30. Castellsague X, Peeling RW, Franceschi S, et al. Chlamydia trachomatis infection in female partners of circumcised and uncircumcised adult men. *Am J Epidemiol* 2005;162:907–916.
 31. Sanchez J, Gotuzzo E, Escamilla J, et al. Gender differences in sexual practices and sexually transmitted infections among adults in Lima, Peru. *Am J Public Health* 1996;86:1098–1107.

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