Doctors Opposing Circumcision HIV Statement

The Use of Male Circumcision to Prevent HIV Infection

A statement by Doctors Opposing Circumcision

History. The theory that male circumcision may be protective against HIV infection was invented and developed in North America. According to Professor Valiere Alcena, MD, of the Albert Einstein College of Medicine of Yeshiva University, he originated the theory that removing the foreskin can prevent HIV infection in 1986.[1] The late Aaron J. Fink, MD, a noted North American advocate of male circumcision, then promoted Alcena's theory in letters to medical journals.[2-4] North American Gerald N. Weiss, MD, who operates a website to promote circumcision, and others contributed to the development of the theory through a paper, which was published in Israel (1993), identifying the prepuce as a possible entry point for HIV.[5] North American circumcision enthusiasts have further promoted male circumcision with opinion pieces in medical journals.[6,7] Stephen Moses, Daniel T. Halperin, and

Robert C. Bailey are other well known North American promoters of male circumcision.[7]

Numerous studies were carried out in Africa, but the evidence-based Cochrane Review (2003) found insufficient evidence to advocate a circumcision intervention to prevent HIV infection.[8]

Randomized controlled trials. After the failure of observational studies to show a clear protective effect, circumcision advocates obtained funding from the United States National Institutes of Health to conduct randomized controlled trials (RCTs) in Africa. Three RCTs to study the value of male circumcision in reducing HIV infection have been conducted in Africa since the publication of the Cochrane Review. The studies were intended to find out if circumcision is an effective intervention to prevent female-to-male HIV infection. A RCT under the supervision of Bertran Auvert, French circumcision proponent, was carried out in Orange Farm, South Africa; a RCT was carried out in Kenya under the supervision of North American circumcision proponent Robert C. Bailey; and a RCT was carried out in Uganda under the supervision of North American circumcision proponent Stephen Moses. Dr. Auvert has been a circumcision proponent since at least 2003.[9] Professor Moses has been an advocate of circumcision at least since 1994.[10] Professor Bailey has been a circumcision advocate since at least 1998.[11]

All three studies found that non-circumcised males contract HIV infection more quickly than circumcised males. Only

one study has been published.[12] All three studies were terminated early, before the incidence of infection in circumcised males caught up with the incidence of infection in the non-circumcised males. If the studies had continued for their scheduled time, it is probable that there would have been little difference between the circumcised group and the non-circumcised group.

Cultural bias. When studying circumcsion, cultural bias must be considered:

> **Circumcision practices are largely culturally determined and as a result there are strong beliefs and opinions surrounding its practice. It is important to acknowledge that researchers' personal biases and the dominant circumcision practices of their respective countries may influence their interpretation of findings.[8]**

More than 50 percent of infant boys in North America still are subjected to non-therapeutic circumcision. There is a well known cultural bias in favor of circumcision in North America,[13-16] which may influence doctors at the National Institutes of Health as well as those directing the studies. Doctors conducting these studies may not possess the necessary attributes of neutrality and objectivity. Ideally, researchers from circumcising cultures, circumcised themselves, would recuse themselves from considering the data.

Risks, complications, and drawbacks. The reported complication rate of 1.7 percent seems unreasonably low. Williams & Kapila estimated the incidence of complications at 2-10 percent;[17] In the survey by Kim & Pang, 48 percent

reported decreased masturbatory pleasure, 63 percent reported increased masturbatory difficulty, and 20 percent reported a worsened sex life after circumcision.[18]

Effectiveness. Circumcision does not prevent HIV infection. The Auvert study in South Africa reported 20 infections in circumcised males.[16] A study in Kenya reported 22 infections in circumcised males. The United States has the highest rate of HIV infection and the highest rate of male circumcision in the industrialized world. Male circumcision, therefore, cannot reasonably be thought to prevent HIV infection.

There are many methods of HIV transmission, including:

- mother-to-child infection,
- transfusion of tainted blood
- infection with non-sterile needles used in health care,[19]
- infection by homosexual anal intercourse,[20]
- infection by needle sharing to inject illegal drugs,
- traditional African scarring practices,
- tribal (ritual) circumcision,
- female circumcision,[21]
- male-to-female heterosexual transmission, and
- female-to-male heterosexual transmission.

Male circumcision might only reduce infection by the last method, so the overall influence on the HIV epidemic in Africa, at best, would be likely to be slight, however, the risk of male-to-female transmission is much higher than that of female-to-male transmission, so a means of partial prevention that targets only the second means at the expense of the first would be counterproductive.

There is no indication that male circumcision would protect women. Viral load is the chief predictor of the risk of HIV transmission.[22] Malaria infection increases viral loads, so enhances infectivity.[23] Male circumcision would not reduce viral loads and would not reduce infectivity to the female partner.

Condom usage. Condoms have been shown to be effective at preventing HIV transmission.[24] The use of condoms is necessary to prevent infection whether or not the male is circumcised.

Effect on condom use. Male circumcision removes nerves from the penis[25] and causes significant loss of sexual sensitivity and function.[26] For this reason, many circumcised men are reluctant to use condoms. A program of mass circumcision may reduce condom usage and have an adverse effect on the overall HIV infection incidence.

Vaginal abrasion. "Dry sex" is practiced in sub-Saharan Africa.[8] [27] Women place various drying agents in their vagina to absorb vaginal lubication. This practice may itself cause abrasion and fissures that provide a portal for the HIV virus.[8] [27] Circumcision also reduces vaginal lubrication, curtails the gliding action, increases friction and vaginal abrasions,[28] so, when combined with "dry sex", may increase the risk of female HIV infection through abrasions. The combination of dry sex and circumcision appears to sharply increase the risk of male-to-female transmission of HIV.

Relevance to developed nations. These African studies

were carried out in HIV “hot-spots”—places where the incidence of HIV infection in the population is high and where the method of transmission is heterosexual intercourse. They are not relevant to developed nations, such as the United States, where the incidence of infection is low and where the predominant methods of transmission are through homosexual anal intercourse or through needle-sharing by drug addicts.[29]

Circumcision of children. These RCTs cannot be used to support the practice of non-therapeutic circumcision of children. Infant boys do not engage in sexual intercourse so they are not subject to sexually-transmitted HIV infection. They, however, are subject to various complications of circumcision, including infection through an open circumcision wound with various pathogens, such as deadly CA-MRSA.[30,31] Other risks include hemorrhage, exsanguination, and death;[32] and various surgical accidents, including urethral fistula, penile denudation, and traumatic amputation of the glans penis.[33] By the time today’s newborn boys became sexually active, HIV vaccine is likely to be available so circumcision today, in an attempt to prevent HIV infection in the distant future, is contraindicated.

The high infant mortality rate in the African countries hardest hit by the HIV epidemic means many childen will die before they become sexually active, further vitiating any protective effect of infant circumcision. The time, effort and money would be better spent on community health measures that would preserve their lives and those of their parents.

Because of their minority, children cannot grant consent, so any non-therapeutic circumcision of a child is a human rights violation[34] and ethically inappropriate.[35]

Discussion. Effective methods of reducing HIV infection include education and behavior change.[36] Abstinence before marriage and fidelity after marriage offer men and women the greatest protection in avoiding HIV/AIDS transmission.

Men who have been circumcised may consider themselves immune to HIV and at no risk to their female partner. That, however, is not the case. Men may still contract HIV and pass it on to their next partner.

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The authors of the RCTs have engaged in the promotion of circumcision.[37,38] Van Howe and colleagues argue that their true motivation may be the introduction of universal male circumcision, using fear of HIV as the tool with which to accomplish their goals.[37]

Social problems. The introduction of male circumcision into a non-circumcising society may present problems such as:

- adverse psychological and sexual effects caused by the diminishment and desensitization of the penis,[39]
- increased antisocial behavior,[39]
- violations of human rights,[39]
- violations of laws that protect children,[39] and
- inability to discontinue male circumcision when the need for it no longer exists.[39]

Politics. The HIV/AIDS epidemic is quite severe in several African nations. In some areas, a high percentage of the population is HIV^+. Public health organizations are under intense pressure to solve the problem. The use of male circumcision to prevent HIV infection is akin to a drowning man grasping at a straw. Although male circumcision is likely to be proposed for political reasons, it is likely to have little effect on the overall incidence of HIV infection and may cause later problems. According to Ntozi:

> **It is important that, while circumcision interventions are being planned, several points must be considered carefully. If the experiment fails, Africans are likely to feel abused and exploited by scientists who recommended the circumcision policy. In a region highly sensitive to previous colonial exploitation and suspicious of the biological warfare origin of the virus, failure of circumcision is likely to be a big issue. Those recommending it should know how to handle the political implications.**[41]

Opposing evidence. Both the public and the medical community must guard against being overwhelmed by the hyperbolic promotion of male circumcision and must receive these new studies with extreme caution. There is contradictory evidence that male circumcision is not as effective as proponents claim. One study found that male circumcision had no protective effect for women[41] and another study found that male circumcision increased risk

for women.[42] Grosskurth found more HIV infection in circumcised men.[43] Barongo *et al.* found no evidence that lack of circumcision is a risk factor for HIV infection.[44] A study from India found little difference between circumcised and non-circumcised men in the conjugal relationship.[44] A study carried out in South Africa found that male circumcision offered only a *slight* protective effect.[46] A study carried out among American naval personnel found no difference in the incidence of HIV infection between non-circumcised and circumcised men.[47]

The future. The development of a vaccine is the best hope for the solution to the HIV epidemic.[48] Several teams of scientists are working to develop vaccines that will prevent infection with HIV and other vaccines that will treat those already infected.[49] Phase II trials are now getting started.[50] The Bill & Melinda Gates Foundation has contributed $287 million to 16 research groups for development of a vaccine.[51]

Conclusion. Male circumcision is a highly emotive operation that generates strong feelings in many men,[8] especially those who have been circumcised, as have most North Americans. The trauma associated with the operation may generate a desire to repeat or reenact the trauma.[52] Other men may feel a need to justify their own circumcision by the generation of claims of health benefits.[53] The medical literature is full of protective claims for various diseases, such as sexually transmitted disease (formerly called venereal disease),[54] male and female cancers, and urinary tract infection.[55] All such claims have been disproved.

The RCTs on which the current claims are based have been carried out by men who have a previous history of promoting circumcision. DOC has little confidence in such studies, especially since contradictory evidence exists.

Although two of the studies remain unpublished, they are already being used to promote male circumcision. This is contrary to the usual protocol for publication of scientific studies, where peer review is required and the validity of such studies are determined.

Male circumcision may increase male-to-female transmission of HIV and mitigate any reduction in female-to-male transmission.

Instituting a program of male circumcision is of dubious value. It will divert resources from proven methods of epidemic control and it may generate a false sense of security in males who have been circumcised. The desensitization of the penis that frequently results from male circumcision is likely to make men less willing to use condoms. A program of male circumcision very likely may worsen the epidemic.

Calls are being heard for the circumcision of children although (assuming that male circumcision is effective at controlling female-to-male infection) this could not be helpful until the child becomes sexually active. The non-therapeutic excision of healthy body parts from non-consenting children is a violation of human rights and medically unethical. Therefore, the true motivation of the

circumcision proponents must be questioned.[32] It may be perpetuation of neonatal circumcision, not control of HIV.

DOC believes that more emphasis on education, behavior change—such as abstinence before marriage and fidelity after marriage, provision of condoms, treatment of other sexually transmitted diseases, treatment of genital ulcer disease, control of malaria, and provision of safe healthcare would be more likely to produce beneficial results. The ultimate answer is likely to be one or more of the vaccines now in development.

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