Male circumcision lowers prevalence of penile precancerous lesions among African men

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A University of North Carolina-led international study shows that among Kenyan men, circumcision is associated with a lower prevalence of human papillomavirus-associated precancerous lesions of the penis. Human papillomavirus - HPV - is a sexually transmitted virus that plays an important role in genital cancers in men and women, including cancers of the penis and cervix.

Jennifer Smith, PhD, senior author, says, "Our data are the first to show that male circumcision may reduce HPV-associated penile precancerous lesions. This represents an additional public health benefit of male circumcision."

Smith is associate professor of epidemiology in the UNC Gillings School of Global Public Health and a member of UNC Lineberger Comprehensive Cancer Center.

The study was published as an online manuscript in May 2011 in the International Journal of Cancer.

Smith explains, "The percentage of men with HPV-associated precancerous penile lesions was substantially higher among those who were not circumcised - 26 percent- compared to those who were circumcised - .7 percent."
She adds, "Interventions that reduce HPV-associated penile lesions could be important to both men and women, because such lesions may increase HPV transmission from men to their sexual partners.

"Circumcision may also provide a useful intervention to prevent HPV-associated penile lesions and ultimately invasive cervical cancers in less developed countries, since prophylactic HPV vaccines may not be readily available to men, and current HPV vaccines do not include protection against all high-risk HPV types."

The study was part of a larger trial undertaken to determine the effectiveness of male circumcision in reducing HIV incidence conducted by Robert Bailey, PhD with the University of Illinois at Chicago. In the UNC-led study, 275 men participated: 151 who were circumcised and 124 who were not. The protocol included a visual inspection of the penis to identify lesions and photographs that were read independently by two observers as well as a sample of penile exfoliated cells that were tested for HPV infection.

Provided by University of North Carolina School of Medicine


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