

ORIGINAL RESEARCH ARTICLE

Female Genital Mutilation: Potential for HIV Transmission in sub-Saharan Africa and Prospect for Epidemiologic Investigation and Intervention

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Abstract

Female Genital Mutilation (FGM) which involves alteration of the female genitalia for non-medical grounds is prevalent in Sub-Saharan Africa, associated with long-term genitourinary complications, and possible HIV transmission. This mini-review aims to examine FGM and the possibility of HIV transmission through this procedure. We performed an electronic search using Medline for articles published between 1966 to 2006 for evidence of FGM practice, its complications, and the nexus between this procedure and HIV sero-positivity. The results indicate ongoing FGM practice, albeit prevalence reduction, due probably to the increasing knowledge of the consequences of FGM as a result of non-sterile techniques. Secondly, the complications of FGM are well established which include Genitourinary disorders. Further, while data is limited on HIV transmission via FGM, there is biologic plausibility in suggesting that FGM may be associated with increasing prevalence of HIV in sub-Saharan Africa. This paper recommends further studies in order to assess the association between FGM and HIV transmission.

Keywords: *Female genital mutilation, HIV transmission, sub-Saharan Africa, HIV risk factors*

References

1. World Health Organization: Female Genital mutilation. An overview, Geneva WHO, 1998
2. Toubia N: Female circumcision as a public health issue. *N Engl J Med* 1994; 331: 712
3. World Health Organization: Female Genital Mutilation: Report of a WHO Technical working group, July-17-19, 1995, Geneva, WHO 1995
4. Hoskin, F P: Female genital mutilation, estimate: total number of girls and women mutilated in Africa, Lexington, MA, women international network news, 1995.
5. Toubia, N. Female genital mutilation, a call for global action, second edition, New York, RAINBO, 1995, 24-25.
6. WHO fact sheet no.241 :<http://www.who.int/mediacenter/factsheets/fs241/en/june2000> (accessed December 2006)
7. World Health Organization: Classification and Definitions of Female Genital cutting. Geneva, WHO. 1995
8. World Health Organization: Management of pregnancy, childbirth and the postpartum period in the presence of female genital mutilation: Report of a WHO technical consultation Geneva WHO, 2001.
9. Female Genital Mutilation and obstetric outcome: WHO collaborative prospective study in six African countries. *Lancet*, 2006 Jun 3; 367(9525): 1835-41.
10. Njue, C, Askew, I, Medicalization of female genital cutting among the Abuguisi in Nyanza orovince, Kenya: FRONTIERS final report, Population council. Washington 2004.
11. Sayed, GH; Abd el-Aty, M A; Fadel, KA: The practice of Female genital mutilation in upper Egypt. *Int. J. Gynaecol. Obstet.* 1996; 55: 285
12. Armstrong, S; Female circumcision: fighting a cruel tradition. *New scientist* 1991, 129; 42.
13. Program for Appropriate Technology in Health (PATH) 1998: Improving women's sexual and reproductive health: Review of Female Genital Mutilation eradication programs in Africa, Washington: PATH, 1998.
14. Mandara, MU; Female genital mutilation in Nigeria, *Int J Gynaecol Obstet* 2004; 84: 291-98.
15. Shell-Dubcan B The medicalization of "female circumcision": harm reduction or promotion of a dangerous practice? *Soc Sci Med* 2001; 52: 1013-1028
16. Dirie M.A, Lindmark G. The risk of medical complications after female circumcision. *East Afr Med. J.* 1992; 62: 479-482.
17. Egwatu, V Agusa N, Complications of female circumcision in Nigerian Igbos. *Br J Obstet Gynecol* 1981; 88: 1090-1093
18. Odoi A, Brody SP, Elkins RE. Female genital mutilation in rural Ghana, West Africa. *Intern J Gynaecol Obstet* 1997; 56: 179-180.

19. Nour, N W, Female Genital Cutting: Clinical and Cultural Guidelines, Obstetrical and Gynaecological Survey, 2004; 59(4): 272-79. (Note: tables, 2a and 2b, have been adapted and modified prior to inclusion in this paper.)
20. Dorkenoo, E. Combating female genital mutilation: an agenda for the next decade, World health Stat,Q ;1996; 49: 142-47
21. Larsen.U, Okonofua FE, Female circumcision and obstetric complications. Int. J. Gynaecol. Obstet. 2002 Jun; 77(3): 255-65.
22. Eke N, Nkanginieme KE, Female genital mutilation and obstetric outcome. Lancet, 2006 Jun 3; 367(9525): 1799-800.
23. Okonofua,FE, U. Larsen, F. Oronsaye, et al. The Association between Female Genital Cutting and Correlates of Sexual and Gynaecological Morbidity in Edo State, Nigeria. Bjog-an International journal of Obstetric and Gynaecology, 2002, 109(10): 1089-96.
24. WHO/UNAIDS: AIDS epidemic update on world AIDS DAY, Dec 2005(fact sheet) (accessed Dec 2005)
25. Etokidem A J. HIV/AIDS transmission through Female Genital Cutting: a case report. Int Conf AIDS 2004 Jul 11-16; 15 (abstract no. D 10677)
26. Mutenbei I B,Mwesiga MK. The impact of obsolete traditions on HIV/AIDS rapid transmission inAfrica: The case of compulsory circumcision on young girls in Tanzania. Int Conf on AIDS 1998; 12: 436(abstract 23473)
27. Hrdy DB. Cultural practices contributing to the transmission of HIV in Africa. Rev Infect Dis 1987; 9(6): 1109-1117
28. Linke U. AIDS in Africa. Science 1986; 231:203
29. Kun KE. Female genital mutilation: the potential for increased risk of HIV infection. Int J Gynecol Obstetr 1997; 15: 153-155.
30. Brady M. Female genital mutilation: complications and risk of HIV transmission. Aids Patient care STD 1999; 13(12): 709-16.