



Medicines: Effectiveness or cost

To the Editor: Regarding the article by Chris Bateman,¹ I was horrified to see that I am readily identifiable as the journalist's 'source', as I had officially withdrawn and dissociated myself from all aspects of the article. The article is flawed and does not reflect the collegial nature of the discussions at provincial and national levels. It is ironic that the article attempts to debate the ethics of breast cancer drug allocation – but there has been a lack of ethical due-process in its publication. The lack of peer review is highlighted by the spelling of one of the prominent agents involved (i.e. the taxanes), which are spelt 'texanes' throughout the article.

This letter, however, allows me the opportunity to highlight the need for a formal review process for medicines in a resource-constrained health care sector, such as our own.

The way in which medicines are usually evaluated in the various sectors in South Africa is based on two criteria: effectiveness and cost. However, in reality, decisions are invariably based on expert opinion. Unfortunately, the emphasis is usually on either effectiveness or cost, and hardly ever on a systematic analysis that incorporates both considerations. There are a number of reasons for this behaviour: (i) lack of appreciation of the role of cost-effectiveness analysis in decision making; (ii) scarcity or absence of individuals with the necessary critical appraisal skills; and (iii) a short-term view of the consequences of health care decisions.

It is imperative that this kind of independent systematic analysis takes place for all medicines, so ensuring access, an equitable distribution of resources, and justice in the health care industry. Such a process will go a long way towards establishing an appropriate standard of clinical excellence, open to scrutiny. This is a critical ethical imperative in a resource-constrained health care system such as South Africa's, and for societal trust in the process.

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1. Bateman C. Vital breast cancer drugs highlight funding ethics. *S Afr Med J* 2008; 98: 833-836.

Unhygienic male circumcision procedures and HIV transmission

To the Editor: Connolly and colleagues report one of the most detailed observational investigations of the association between male circumcision and HIV infection in sub-Saharan Africa to date.¹ They found no overall association between circumcision and prevalent HIV infection in South Africans. Connolly and

colleagues also suspect that the often unhygienic circumcision procedures among black South Africans may facilitate HIV transmission.

Evidence from Kenya, Lesotho and Tanzania is consistent with this hypothesis.² Circumcised males in these countries are typically circumcised in adolescence or early adulthood. In each country, circumcised virgins were substantially more likely to be HIV infected than sexually experienced males. Similarly, circumcised adolescent males were more likely to be infected than their uncircumcised counterparts. (In Lesothoan young men circumcision was also associated with HIV infection, perhaps reflecting an older age at circumcision for Lesothoans than for Kenyans and Tanzanians.) However, in older age groups circumcised men were less likely to be infected than uncircumcised men. This pattern could partially be explained by increased mortality among circumcised adolescents and young adults (due to circumcision-related HIV infection), thus reducing HIV prevalence (or slowing its growth) relative to uncircumcised men in older age groups.² A delayed protective effect of circumcision, HIV-specific immunity acquired from circumcision-related exposures, and other factors might also account for this pattern.

For decades, substantial fractions of youth throughout southern and eastern Africa have identified circumcision as a risk for HIV transmission.²⁻¹⁰ It is therefore crucial that more rigorous investigations beyond analyses of cross-sectional data be conducted to resolve the matter with confidence.² Future work might include detailed observations of circumcision procedures in different settings combined with prospective studies of adolescent and young adult males in communities where circumcision is common. Intervention trials of safer circumcision (compared with existing procedures) might also provide critical evidence, as might sequencing of infected youths' HIV DNA in both observational and intervention studies that focus on circumcision in specific communities.

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1. Connolly C, Simbayi LC, Shanmugam R, Nqeketo A. Male circumcision and its relationship to HIV infection in South Africa: results of a national survey in 2002. *S Afr Med J* 2008; 98: 789-794.



2. Brewer DD, Potterat JJ, Roberts JM, jr, Brody S. Male and female circumcision associated with prevalent HIV infection in adolescents in Kenya, Lesotho, and Tanzania. *Ann Epidemiol* 2007; 17: 217-226.
3. UNICEF, African Child Policy Forum. What children and youth think, Botswana: a statistical presentation of opinions and perceptions of children and youth in Botswana, 2006. Addis Ababa: African Child Policy Forum, 2006. <http://www.africanchildforum.org/Documents/botswana.pdf> (accessed 28 December 2006).
4. UNICEF, African Child Policy Forum. What children and youth think, Burundi: a statistical presentation of opinions and perceptions of children and youth in Burundi, 2006. Addis Ababa: African Child Policy Forum, 2006. <http://www.africanchildforum.org/Documents/Burundi.pdf> (accessed 28 December 2006).
5. UNICEF, African Child Policy Forum. What children and youth think, Ethiopia: a statistical presentation of opinions and perceptions of children and youth in Ethiopia, 2006. Addis Ababa: African Child Policy Forum, 2006. <http://www.africanchildforum.org/Documents/Ethiopia.pdf> (accessed 28 December 2006).
6. UNICEF, African Child Policy Forum. What children and youth think, Malawi: a statistical presentation of opinions and perceptions of children and youth in Malawi, 2006. Addis Ababa: African Child Policy Forum, 2006. <http://www.africanchildforum.org/Documents/malawi.pdf> (accessed 28 December 2006).
7. UNICEF, African Child Policy Forum. What children and youth think, Rwanda: a statistical presentation of opinions and perceptions of children and youth in Rwanda, 2006. Addis Ababa: African Child Policy Forum, 2006. <http://www.africanchildforum.org/Documents/Rwanda.pdf> (accessed 28 December 2006).
8. UNICEF, African Child Policy Forum. What children and youth think, Somalia: a statistical presentation of opinions and perceptions of children and youth in Somalia, 2006. Addis Ababa: African Child Policy Forum, 2006. <http://www.africanchildforum.org/Documents/somalia.pdf> (accessed 28 December 2006).
9. UNICEF, African Child Policy Forum. What children and youth think, Tanzania: a statistical presentation of opinions and perceptions of children and youth in Tanzania, 2006. Addis Ababa: African Child Policy Forum, 2006. <http://www.africanchildforum.org/Documents/Tanzania.pdf> (accessed 28 December 2006).
10. Lukobo MD, Bailey RC. Acceptability of male circumcision for prevention of HIV infection in Zambia. *AIDS Care* 2007; 19: 471-477.

Circumcision and HIV

To the Editor: Three articles in the October 2008 *SAMJ* make arguments against the use of male circumcision (MC) as a preventive measure to counter the HIV pandemic. There are, however, good arguments in favour of MC.

Approximately 40 observational studies were done in the 1990s. The majority of these showed a significant protective effect of MC against HIV acquisition in men.¹ This evidence, while compelling, was insufficient to promote circumcision programmes as health policy. Hence, three randomised controlled trials were undertaken in Africa to provide firm evidence supporting a protective effect. The study from Orange Farm (the largest informal settlement in Gauteng), which randomised over 3 000 men, showed a 60% reduction in the risk of HIV acquisition in the group circumcised at entry over the 2 years of the trial. The other two trials demonstrated similar protective effects.

The biological explanation for circumcision's protective effect is the foreskin's nine times greater absorption of HIV when compared with other genital mucosa.² Langerhans and other receptor cells mediate this susceptibility.

Modelling the impact of MC on HIV prevalence has been done for Gauteng province. Assuming full coverage of a circumcision intervention programme, with a 2005 adult male HIV prevalence of 25.6%, then 1 000 circumcisions would avert an estimated 308 infections over 20 years. The cost is \$181 per HIV infection thus averted and a net saving of \$2.4 million in treatment costs.³

In March 2007, following on from the Orange Farm trial, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) produced a paper that concludes: '... promoting male circumcision should be recognized as an additional, important strategy for the prevention of heterosexually acquired HIV infection in men'.⁴

The above conclusions do not seem to be the last word on the matter, as the WHO has recently published a position paper less categorical in its endorsement of MC.⁵ Chief among the concerns are questions of whether trial results can be extrapolated to the real world, and issues about the practicability of MC interventions in resource-poor settings. These debates are surely important and need to continue.

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1. Siegfried N, Muller M, Deeks J, *et al.* HIV and male circumcision – a systematic review with assessment of the quality of studies. *Lancet Infect Dis* 2005; 5(3): 165-173.
2. Patterson BK, Landay A, Siegel JN, *et al.* Susceptibility to human immunodeficiency virus-1 infection of human foreskin and cervical tissue grown in explant culture. *Am J Pathol* 2002; 161(3): 867-873.
3. Kahn JG, Marseille E, Auvert B, *et al.* Cost-effectiveness of male circumcision for HIV prevention in a South African setting. *PLoS Med* 2006; 3(12): e517.
4. WHO/UNAIDS Technical Consultation. Male Circumcision for HIV Prevention: Research Implications for Policy and Programming. http://www.who.int/hiv/mediacentre/MCrecommendations_en.pdf (accessed 17 November 2008).
5. Male circumcision and HIV. <http://www.circumcisionandhiv.com/2008/08/circumcision-ca.html> (accessed 17 November 2008).