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Title: Cut to the Chase: Quickly Achieving High Coverage Male Circumcision
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Three randomized control trials on male circumcision in South Africa (November 2005) and in Uganda & Kenya (December 2006) have now confirmed what a growing body of evidence has indicated for more than fifteen years: male circumcision reduces HIV infection by around 50%. [1-3] In 1999 Halperin and Bailey published an article, "Male Circumcision and HIV infection: 10 years and counting." [4] Over the preceding decade considerable evidence had accumulated that male circumcision reduces risk of HIV acquisition in previously uninfected men. In the eight years since that article, additional studies have only underscored this relationship. However, no large scale, systematic effort has yet taken up the challenge to translate this science into preventive strategies.

Are there barriers to roll out male circumcision? Male circumcision is cost effective. Kahn and colleagues estimate that in a South African adult population MC costs \$181 per HIV infection averted which compares favourably to STI treatment for HIV prevention and voluntary counselling and testing services [5].

Predictably, male circumcision arouses strong emotions. As with condoms to protect against HIV or oral contraceptives to prevent unwanted pregnancy, the accusation is always made that the introduction of a new method of protection will lead to increased sexual licence. The evidence suggests otherwise. Agot and colleagues conducted a study among 324 recently circumcised men and 324 uncircumcised men in Kenya to determine the effect of circumcision on sexual behaviour [2]. The researchers found that during the first month following circumcision, men were 63% less likely to report having 0 to 0.5 risky sexual acts weekly than uncircumcised men. The differences in sexual risk disappeared during the remainder of the follow-up period and the researchers concluded that during the first year, circumcised men did not report an increased number of risky sexual acts as compared with uncircumcised men.

While the world waits to act, patients from Uganda to Swaziland who can afford the operation are seeking this biological "vaccine" [6, 7]. The result is that men who can afford it are already protecting themselves while the poor either cannot access MC or are going to unsafe and untrained providers.

We think an efficient and socially equitable way to make this intervention available across large geographical areas, while ensuring that the poorest men could participate, would be to use an output-based aid (OBA) voucher program.

The OBA approach contracts providers at agreed prices for clearly stipulated outputs, and then sells vouchers to clients for, in this case, high quality MC services. The voucher is marketed at a nominal price and entitles the client to treatment at no additional from approved providers. The provider is paid according to the number of clients served. The payment represents a realistic unit cost for the procedure covering staff fees and the costs of drugs and materials [8, 9].

An independent Voucher Management Agency is appointed to run the system and its activities include identifying, training and approving service providers, marketing and distributing the vouchers, claims processing and payments and maintaining the quality of the service as well as monitoring and evaluating the system.

An entirely new cadre of MC specialists may not be needed. Given the simple surgical procedures, it is reasonable to assume that a variety of paramedical and even non-medical operators may be able to provide safe male circumcision under OBA. In many parts of the world male circumcisions are not done by highly trained physicians but by religious and traditional leaders. Serious consideration could be given to include those paramedical, religious, and traditional providers who meet the quality standards in a well controlled OBA contract scheme.

Voucher schemes are already functioning for STI treatment in Uganda and for Safe Motherhood and family planning in Kenya. In both these programmes, vouchers for male circumcision could be added and the appropriate providers contracted and trained within a few months.

With the results of the RCTs, it is now high time to make MC available to the poor in high HIV prevalence countries. A voucher scheme is one efficient way to do this quickly.

WHAT THIS PAPER ADDS: This commentary advocates for a large scale-up of male circumcision for HIV prevention using an innovative healthcare finance strategy. Output-based aid is a validated means to achieve population health by reimbursing private and public healthcare providers for verified services.

POLICY IMPLICATIONS: Private donors, aid agencies, and low-income governments should consider strategies for health care delivery that reward providers for high quality output and outcomes where reasonably measured.

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