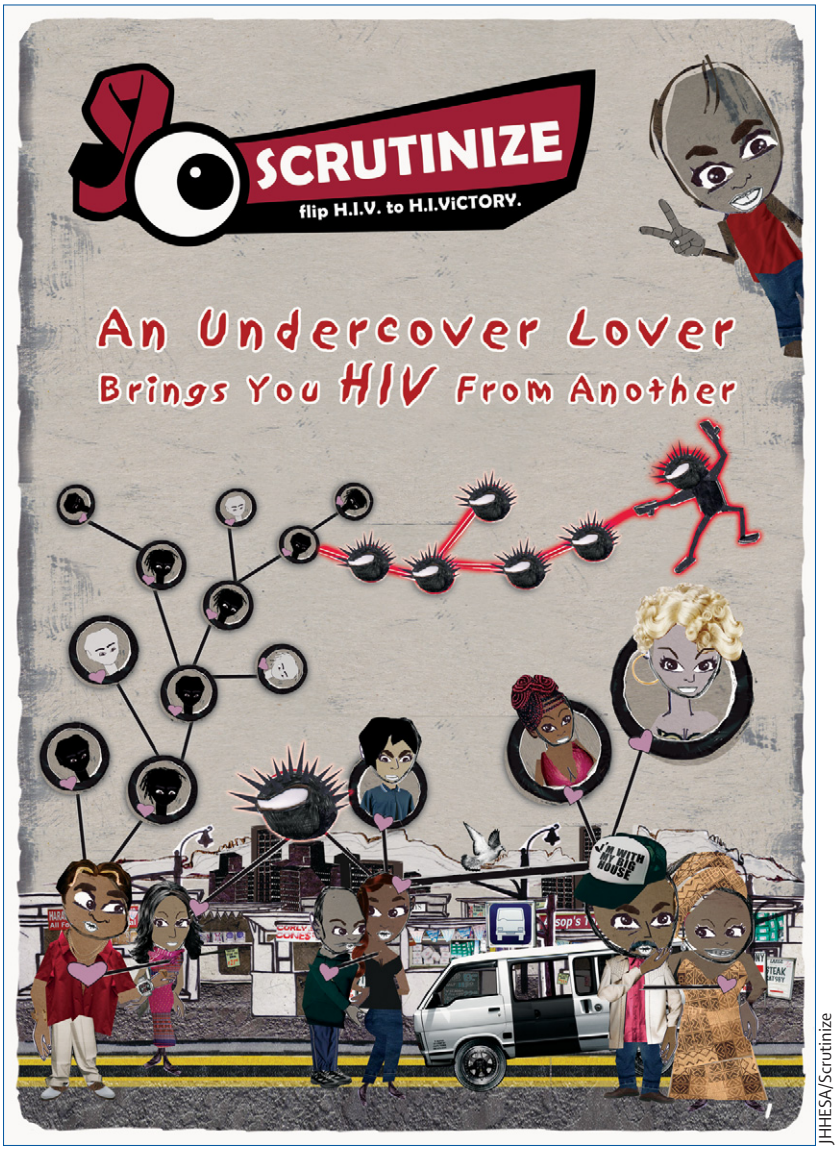
8 Parnas J, Handest P. Phenomenology of anomalous self-experience in early schizophrenia. *Compr Psychiatry* 2003; **44:** 121–34.
9 Meyer SE, Bearden CE, Lux SR, et al. The psychosis prodrome in adolescent patients viewed through the lens of DSM-IV. *J Child Adolesc Psychopharmacol* 2005; **15:** 434–51.
10 Svirskis T, Korkeila J, Heinimaa M, et al. Quality of life and functioning ability in subjects vulnerable to psychosis. *Compr Psychiatry* 2007; **48:** 155–60.
11 Boonstra N, Wunderink L, Sytema S, et al. Detection of psychosis by mental health care services; a naturalistic cohort study. *Clin Pract Epidemiol Ment Health* 2008; **4:** 29.S0140-6736(09)61379-9

Why multiple sexual partners?

Multiple sexual partnerships—particularly overlapping or concurrent partnerships—by both men and women lie at the root of the generalised epidemic of HIV in southern and eastern Africa.[1] Accordingly, earlier this year the UNAIDS regional office for eastern and southern Africa, along with the World Bank and Harvard University, held a technical meeting and issued recommendations about communication interventions to address multiple sexual partnerships.[2] Understanding why people have multiple partnerships is key to efforts to change behaviour, with the realisation that behaviours range from polygamy itself, to longer-term quasi-polygamy (sometimes described as having a "small house"), to sporadic sexual encounters. A superficial view is that men are driven by uncontrollable sexual urges and the cultural legacy of polygamy, while women are trapped by economic necessity and male domination—a daunting prospect for behavioural change. Although this picture undoubtedly reflects some truth, an emerging and rich sexual ethnographic literature,[3–10] notably including a ten-country study from South Africa's The Soul City Institute for Health and Development Communication,[3] reveals considerable individual autonomy and basis for interventions to change behaviour.

Interestingly, both women and men prominently cite dissatisfaction with their primary partnerships, sexually and otherwise.[3–9] Such relationship dissatisfaction is ascribed to lack of communication and romance, partner's lack of skill in lovemaking, monotony, domestic discord, and desire for variety in partners and sexual practices.

Clearly, economics is important for women. But the role of economics is complicated and calls for understanding transactional sex, which arguably reflects the norm for sexual relationships in the region.[7,8] Rather than a specific fee-for-service, transactional sex describes a social norm of expectation of gifts and economic support from men as part of a sexual relationship, in part expressing value, commitment, love, and respect. Such economic support might be vital to survival in many cases, but often seems mainly related to social status and economic advancement more broadly. In younger



JHHESA/Scrutinize

Figure: **Poster from Scrutinize campaign[14]**
Figure depicts risk from sexual networks, including the virus in red and black on the centre right.

women, relationships with older men seem particularly often to be related to luxury goods and status.[3,8,11]

Other reasons described for multiple partnerships include: insurance against loss of one's main partner;[3,5,7] a multipronged strategy to find the "right" life partner;[3] physical separation especially because of work;[3-5] peer pressure;[3,5] revenge in response to partner's infidelity;[3,7] and, for women ironically, the perception that modernity allows freedom to behave more like men by having multiple partners.[6] Culture also contributes, including the backdrop of polygamy,[3,6] belief that men's sexual drives are poorly controllable and reflect prowess,[3,5,8] women's traditional passive role in sex,[3] and general reluctance to talk about sex. Alcohol clearly facilitates risky sex.[3,5,9]

Nevertheless, generally, people seem not completely compelled by economics, culture, or circumstance to have multiple sexual partners.[6,9] Indeed, many people realise that having multiple partners (though not necessarily concurrent partners) is risky, and, faced with the dire prospect of AIDS, sometimes take deliberate action.[4,6,9] Thus in Malawi, couples have adopted a specific communication strategy to discourage outside sexual relationships. Rather than accusing the partner of infidelity, they invoke the importance of protecting the family against HIV so as not to leave children parentless.[12] Similarly, people from several highly affected countries report substantial decreases in numbers of partners, often associated with declines in HIV incidence.[13]

But specific knowledge about the role of concurrent partners remains low. Part of the pernicious nature of concurrent partnerships is that they are often long-standing, familiar, comfortable, and not perceived as risky, although they entail entrée to risky sexual networks.

What is the best way to address multiple sexual partnerships? For too long, any such efforts have been uncoordinated, too indirect, too diluted by other messages, and have failed to address sexual networks head on. What is needed are high-quality multilevel (mass media, community, clinical setting, individual) approaches to reinforce behavioural change on the basis of sound intensive research with the audience.

Fortunately, serious efforts are now beginning. Among them are Soul City's nine-country communication initiative called One Love and Johns Hopkins University's effort in South Africa called Scrutinize (figure).[14] Another prominent national example is the recently launched O Icheke—Break the Chain—campaign in Botswana led by the National AIDS Coordinating Agency with help from Population Services International and other partners.[15]

On the basis of sound epidemiology and audience research, the targets of O Icheke (which means "check yourself" or "think about it", and which was also the title of a popular song about multiple partners) include mobile men typically aged 25–34 years and younger women. Initial efforts emphasise knowledge about the risks of multiple concurrent partners. Visual portrayal of sexual networks with the potential for the virus to spread through them (figure) and testimonials from people living with HIV seem particularly effective approaches for heightening the perception of personal risk. Changing social norms is also key, including presenting positive models of men and masculinity, promoting better communication about sex and cultivating more sexually satisfying primary relationships. Mass-media approaches encompass billboards, printed advertisements, and television and radio, including call-in shows. Community-level discussions, by various partners including non-governmental and faith-based organisations, also allow for consistent but much richer messaging and influence on social norms. Additional arenas planned are one-on-one discussions in HIV clinical sites (eg, treatment, counselling, and testing centres), and integration into school-based life-skills curricula. The entire effort is reinforced through common O Icheke branding.

Empirically, in some countries many people have reduced partners even in the absence of state-of-the-art programmes for behavioural change, but it is too early to tell if these new campaigns will be successful. Yet in concert with promotion of male circumcision and use of condoms, especially for high-risk sex, it appears we are finally embarking on the right road to prevent hyperepidemic HIV transmission.

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USAID supports the Johns Hopkins University Scrutinize campaign.

1 Halperin D, Epstein H. Concurrent sexual partnerships help explain Africa's high HIV prevalence: implications for prevention. *Lancet* 2004; **364:** 4–6.
2 UNAID Support Team for Eastern and Southern Africa. Strategic considerations for communications on: multiple & concurrent partnerships within broader HIV prevention in Southern Africa. http://www.unaidsrstesa.org/strategic-considerations-communications-multiple-and-concurrent-partnerships (accessed June 12, 2009).

3 One Love. Multiple and concurrent sexual partnerships in Southern Africa: a ten country research report. 2008. http://www.soulcity.org.za/now-available-one-love-multiple-and-concurrent-sexual-partnerships-in-southern-africa-a-ten-country-research-report.html (accessed June 12, 2009).

4 Parker W, Makhubele B, Ntlabati P, Connolly C. Concurrent sexual partnerships amongst young adults in south Africa: challenges for HIV prevention. Jan 1, 2007. http://www.comminit.com/en/node/269915 (accessed June 12, 2009).

5 Anon. Research report: concurrent heterosexual partnerships, HIV risk, and related determinants among the general population of Zimbabwe. Feb 12, 2008. http://www.psi.org/hiv/resources/Research-report-CSP.pdf (accessed June 12, 2009).

6 Tawfik L, Watkins SC. Sex in Geneva, sex in Lilongwe, and sex in Balaka. *Soc Sci Med* 2007; **64:** 1090–101.

7 Swidler A, Watkins SC. Ties of dependence: AIDS and transactional sex in rural Malawi. *Stud Fam Plan* 2007; **38:** 147–62.

8 Leclerc-Madlala S. Transactional sex and the pursuit of modernity. *Soc Dynam* 2004; **29:** 1–21.

9 Watkins SC. Navigating the AIDS epidemic in rural Malawi. *Pop Devel Rev* 2004; **30:** 673–705.

10 Gourvenec D, Taruberekera N, Mochaka O, Kasper T, for PSI-Botswana. Multiple concurrent partnerships among men and women aged 15–34 in Botswana. Baseline Study, December 2007. http://www.psi.org/hiv/resources/MCP%20report%20final%20081208.doc (accessed June 12, 2009).

11 Moore AM, Biddlecom AE, Zulu EM. Prevalence and meanings of exchange of money or gifts for sex in unmarried adolescent sexual relationships in sub-Saharan Africa. *Afr J Reprod Health* 2007; **11:** 44–61.

12 Zulu EM, Chepngeno G. Spousal communication about the risk of contracting HIV/AIDS in rural Malawi. *Demog Res* 2003; special collection **1:** 247–77.

13 Potts M, Halperin D, Kirby D, et al. Reassessing HIV prevention. *Science* 2008; **320:** 749–50.

14 Scrutinize. http://www.scrutinize.org.za (accessed July 10, 2009).

15 National AIDS Coordinating Agency. National campaign plan: multiple and concurrent partnerships. March, 2009. http://psi.org/resources/pubs/National%20MCP%20strategy.pdf (accessed July 10, 2009).

Use of patient-reported outcomes in clinical practice

Traditionally, patient-reported outcomes (PROs), such as health-related quality of life, have been used at the aggregate level (eg, in observational studies and clinical trials). Recently, there has been interest in using PROs to aid management of individual patients. PROs can be used in clinical practice in various ways.[1] They can be used as one-time screening questionnaires for conditions such as depression, with follow-up of scores beyond a predetermined threshold. Alternatively, PROs can be ascertained serially to monitor patients' progress and facilitate identification of problems. For example, several studies have evaluated the effect of having patients with cancer complete PROs over time with feedback to their clinicians on communication, clinical management, and health-related quality of life.[2,3] Another application involves using patients' PRO data during multidisciplinary team meetings to ensure different providers receive the same feedback.[1]

Aggregated PRO data can also aid individual management of patients.[1] For example, Brundage and colleagues[4] examined the effect on treatment choice of providing data on health-related quality of life from clinical trials to patients. Aggregation of data across patients also facilitates assessment of quality of care.

In June, 2007, the International Society for Quality of Life Research held a conference in Budapest, Hungary, on PROs in clinical practice, resulting in a series of papers in *Quality of Life Research*.[1,5–11] Several themes emerge from these papers.

First, we have only begun to investigate the different ways PROs can be used to help with individual management of patients and the value PROs provide. Most research has evaluated screening and monitoring interventions.[1] Although PROs are effective in facilitating communication between patients and caregivers and problem detection, effects on patients' care and outcomes have been harder to demonstrate. A better understanding of how PROs improve communication between patients and clinicians might help to improve the intervention's effectiveness. Feldman-Stewart and Brundage[5] postulate that PRO interventions that monitor health-related quality of life over time improve patients' memory and ability to describe their problems. Further, PROs could identify problems patients might not have raised and that clinicians would therefore assume were not of concern. Completion of a PRO

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