Seminar on Potential and Actual Contributions of Behavioural Change to Curbing the Spread of HIV

Windsor Lake Victoria Hotel, Entebbe, Uganda

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Organized by the IUSSP Scientific Panel on Sexual Behaviour and HIV/AIDS and the Population Council, Nairobi, Kenya

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Close to 40 million people world wide are now estimated to be HIV positive, two-thirds of these being in sub-Saharan Africa where transmission is largely through heterosexual sex. In the absence of a vaccine, a microbicide, or a cure, the key to reducing the spread of HIV/AIDS lies with behavioural change. While interventions to promote behaviour change have significantly increased in some countries and have shown that prevention programmes do work, such efforts are reaching only a small minority of those in need, and a number of prevention targets including young people who account for over 40 per cent of all new infections are not being reached in several countries. Further, it appears that in many countries, behaviour change interventions have not been adapted to changes in infection patterns or the stage of the epidemic. For example even in countries with generalized epidemics, condom promotion efforts continue to focus on increasing condom access for vulnerable populations rather than on encouraging condom use for all sexually active persons. Moreover, there is emerging evidence that support for HIV prevention in some regions may be diminishing. Hence, a renewed emphasis on HIV prevention is critically needed to prevent millions of new infections occurring each year.

In this context, the IUSSP Scientific Panel on Sexual Behaviour and HIV/AIDS in partnership with the Population Council, Nairobi held a seminar, 'Potential and Actual Contributions of Behavioural Change to Curbing the Spread of HIV", in Entebbe, Uganda, on 18-20 February 2008. The seminar was supported by the Wellcome Trust, the Population Council, Nairobi, and UNFPA.

The seminar brought together 26 demographers, social scientists, epidemiologists, statisticians, and programme managers. Nearly half of the participants were from Africa (12), about one-third from Europe (8) and the remainder from Australia, India and North America. Over two-fifths of seminar participants were women.

The overall objective of the seminar was to stimulate and advance research on potential and actual contributions of behavioural change to curbing the spread of HIV. Based on twelve papers that were accepted for presentation at the seminar, the sessions dealt with statistical modelling to predict the effects of behavioural responses to AIDS epidemic; behavioural change in settings characterized by high prevalence of HIV, in response to HIV/AIDS awareness and following VCT; formative and intervention research on behavioural change among young people; and on interventions to change men's behaviour.

Most papers were pre-distributed, and each presentation had 30 minutes for presentation of findings and 15 minutes for discussion. The final session of the seminar was devoted to discussion of the implications of the seminar papers for interventions and for further research.

The Sessions

Modelling the effects of behavioural responses to AIDS epidemics

Measures of the potential magnitude and direction of the effects of behaviour change in stemming or reversing the HIV epidemic would greatly assist policy and programme managers in the field of sexual and reproductive health. A microsimulation model that assessed the potential effects of a range of behaviour changes among both women and men from an entire population demonstrated that realistic modifications in sexual behaviours of men and women can lead to profound declines in HIV incidence and therefore prevalence (Bracher and Santow). Moreover, in certain situations, the benefits accruing from behaviour modifications are likely to be more pronounced for women than for men. The discussion focussed on the need for bringing in such behaviour changes as delays in age at marriage and condom use into models that attempt to measure the potential contributions of behaviour changes to reducing the spread of the epidemic.

HIV/AIDS awareness and behavioural change

A number of papers presented at the seminar focussed on exploring whether or not individuals in settings characterised by wide-spread awareness of HIV/AIDS are changing their behaviours in response to HIV/AIDS awareness, and if so, in what ways. Drawing on data from two waves of the Malawi Diffusion and Ideational Change project, Obare and Poulin observed that reductions in multiple sexual partnerships and increases in condom use were evident over time in rural Malawi. The authors also noted that the subjective experience of HIV epidemic, as indirectly measured by the number of funerals attended by the study participants, appeared to have a significant effect in bringing about change in behaviours, including reductions in multiple sexual partners and increasingly favourable attitudes toward condom use within marriage.

Santow, Bracher and Watkins cautioned that the widely held belief in the inevitability of mutual infection if one member of a couple is HIV-positive might prevent many from adopting safe practices. Hence, they argued that behaviour change communication programmes must provide correct information about transmission probabilities and dispel the belief in the inevitability of mutual infection.

Exploring the role of AIDS awareness on behaviour change to reduce HIV risk in the context of new sexual relationships in Uganda, Wolff et al noted that concerns about HIV risk influence the process of partner selection and the negotiation of condom use in new partnerships. For example, HIV risk perception has resulted in deliberate screening of potential sexual partners before agreeing to sex. Likewise, condom use has become normative at the beginning of casual sexual relationships. While women were as likely as men to insist on condom use at the start of relationships, men appeared to control the decision to stop using condoms. The paper also notes that non-use of condoms as relationships progress toward more stable unions, such as marriage, remains a challenge, and that sustaining consistent condom use in any relationship for a long period is fraught with difficulties.

The discussion that followed this session highlighted the importance of recognising that condoms are not suitable for everybody. The need for modifications in condom promotion messages was also highlighted; for example, messages like ‘use condoms until you want to get pregnant; when you do want to get pregnant, have a test; if positive continue condom use after child birth’ could be tried. The issue of knowledge of discordance and couple counselling was discussed. Disseminating correct information about transmission probabilities may have the impact of reducing worry and possibly changing behaviour. Finally, the fact that negative partners of people who are positive are an obvious group to target was also raised during the discussion.

HIV testing and behaviour change

The number of people using HIV testing and counselling services quadrupled in the past five years in several countries. Very little is known, however, about whether VCT is effective in stimulating behaviour change. A number of papers presented at the seminar focused on examining behaviour change following HIV testing. Drawing on data from Zimbabwe, Cremin et al observed significant reductions in the number of new sexual partners following VCT in the year preceding the survey among both infected and uninfected women and men. However, reductions in risky behaviours appeared to be maintained only among those who tested positive.

Exploring whether the knowledge of one's own HIV status influences the acceptability of condom use within marriage, Fleming demonstrated how the acceptability of condom use within marriage has increased over time in rural Malawi. The largest predictor for acceptability of condoms within marriage for both men and women was knowledge of one's HIV positive status.

Akinyemi et al, who examined condom use among HIV positive people in Nigeria who had been on ART for at least six months, noted that condom use increased significantly following ART. However, condom use reported in the study was relatively low compared to similar studies elsewhere. Examining sexual activity and condom use among HIV positive individuals in Swaziland, Zamberia observed that such factors as gender inequality, religious beliefs, inadequate counselling services and failure on the part of HIV infected individuals to disclose their status to their sexual partners may act to prevent behavioural change even among those who are aware of their infection status.

The discussion following this session underscored the need to be aware that it may be harder to detect behaviour change within marriage. Also highlighted during the discussion was the issue of fertility intentions among HIV infected individuals and how these might affect behaviour change. Concerns about prophylactic messages increasingly being directed primarily at HIV prevention rather than other STIs were also raised during the discussion.

Behaviour change among young people

Young people account for over 40 per cent of all new infections, but interventions to promote behaviour change have often failed to reach this vulnerable sub-population. Three papers presented at the seminar attempted to shed some light on what might be some of the entry points and promising approaches for bringing about behaviour change among young people. In one of these papers, Tenkorang and Rajulton, drawing on panel data from the Cape Area Panel Survey, noted that risk perception was a significant predictor of age at first sex, in particular for females; females who perceived themselves to be at risk of contracting HIV infection were more likely to have postponed sexual initiation, compared to those who perceived themselves at no risk. The authors concluded that enabling young people to assess their risks correctly might help in bringing about behaviour change.

Highlighting the importance of working with influential adults in young people's lives to bring about behavioural change among young people, Remes described an intervention project in rural Mwanza, Tanzania that focuses on changing and challenging community norms on adolescent sexual health through participatory training sessions with and by community opinion leaders and socially-bounded community groups. Anecdotal evidence from the process documentation and participant observation suggests that parents in these settings recognise that 'bad' parenting may have a major effect on young people's sexual and reproductive health risks and are eager to improve their parenting skills. The paper also highlighted the dearth of research on how a parenting intervention may influence behaviour changes in these settings.

In a third paper, Ross et al described the 'Mema Kwa Vijana' intervention in Uganda, which aims to improve adolescent sexual and reproductive health through community activities, teacher-led, peer assisted sex education, youth-friendly STD and family planning services, and condom social marketing through peers. It was found that the intervention had a significant impact on knowledge and sexual behaviour but this did not translate into reduced levels of STDs or pregnancy.

The discussion following this session highlighted the dearth of rigorously evaluated intervention models for bringing about behaviour changes among young people. At the same time, it was agreed that isolated interventions might not be effective in doing so.

Changing men's behaviour

Papers presented at the final session focussed on interventions that aimed to change men's behaviour. Swain discussed the effects of an intervention that targeted male power loom workers in Maharashtra, India. Large reductions in risk behaviour were reported. In the second paper, Musoke described a media campaign designed to promote and facilitate "gender equitable" behaviours among Ugandan men. Qualitative assessments of the campaign found encouraging results, such as reduced levels of violence against women in highly exposed communities, and recognition of the key messages of the campaign. It was noted that it is essential to work with women as well as men when attempting to change gender norms. Furthermore, it is relatively easy to change attitudes but much effort will be required for this to translate into behaviour change.

Building evidence: research priorities

A number of research priorities were identified. Research that explores what might trigger behaviour change within the context of marriage, that examines the role of fertility intentions before and within marriage in adopting behaviour change, and that identifies mechanisms to enable couples to disclose their HIV status to their partners is needed. Also needed is research that sheds light on why condoms are not acceptable within stable partnerships including within marriage, and that identifies ways in which condom use can be made sustainable within different partnerships. Yet another area of research interest is exploring how polygyny affects sexual networks and whether it is protective. Research that explores whether provision of HIV treatment services influences sexual behaviour in the general population is also of importance. Methodological innovations in gathering data on sensitive behaviours including use of condoms, and in better measuring community and structural variables are of particular importance. Equally important are improvements in methods to evaluate interventions that could shed light on what has worked, what hasn't, and why.

Policy and programmatic implications

Several areas that call for policy and programmatic focus have been identified, including prevention within the context of marriage, promotion of voluntary counselling and testing, and promotion of condoms for their contraceptive effect. Given that significant proportions of infections are occurring within marriage, interventions that focus on the married population are critically needed. Guidelines on prevention among married couples are needed to advance protection within marriage. Of particular note is the need for interventions that focus on discordant couples as discordance is relatively common. Mechanisms that promote uptake of VCT by providing an enabling environment and providing treatment are also clearly needed. Testing different approaches including home-based testing and counselling (HTC) is of particular importance. Equally important is to see whether innovative and better quality counselling might improve acceptance of HIV testing. There is also a need for policy guidelines that strongly support the role of condoms as contraceptives as well as for HIV prevention.