HIV/AIDS Prevention and Youth
Changing Knowledge, Attitudes, and Behavior

BY NISTHA SINHA
AND NATSUKO KISO

ACCORDING TO ONE ESTIMATE, about 5000–6000 young people become infected with HIV every day (UNICEF, UNAIDS and WHO 2002, UNICEF and UNAIDS 2005). Although HIV prevalence varies across regions, youth are an important target group for HIV prevention. In Sub-Saharan Africa and some Caribbean countries such as Dominican Republic, where HIV infection is widespread among the general population, it has been estimated that nearly half of all new infections occur among 15-24 year olds (WHO 2006). In Europe and Central Asia, although overall HIV prevalence is low, young people account for the biggest share of the overall number of infections, and most of the infected are male (WHO 2006).

Young people’s mode of exposure to HIV—injecting drug use or unprotected sex—depends upon the type of epidemic in the country (WHO 2006). In countries where HIV is mainly concentrated among injecting drug users, sex workers or men who have sex with men, young people can acquire HIV through risky behaviors. In regions where HIV infection is more widespread among the general population (such as Sub-Saharan Africa and Caribbean), young people acquire HIV mainly through unprotected sex and sex with multiple partners. In these regions, HIV prevalence among young women is higher than among young men. In 8 countries with population based estimates of HIV prevalence, prevalence among young women is 1.75 (Dominican Republic) to 12 (Ghana) times that among young men (Figure 1).

Behavior is therefore central to why young people are so susceptible to this
disease. Experimentation and growing independence which characterizes this stage of life also increases the likelihood that young people engage in two types of behaviors widely known to be the main channels through which the HIV virus spreads—unprotected sex and injecting drug use. Some young people, however, might be exposed to the risk of HIV infection because they are coerced into unsafe behavior. Thus, providing information to youth so that they become knowledgeable about ways of avoiding HIV and learn the skills to negotiate safe behavior with their partners is central to HIV prevention programs. Data from nationally representative surveys show that in several countries, young people, especially young women, are unaware of even the basic ways of avoiding HIV. For example, in countries such as Haiti and Benin where HIV prevalence is relatively high, less than 50 percent of young women (ages 15-24) had comprehensive knowledge of HIV prevention methods (World Bank, 2006).

Information about ways to avoid HIV infections is offered to young people through school-based programs, mass media campaigns, and social marketing campaigns (World Bank 2006). Youth development programs and peer education programs also reach youth in many countries with information on reproductive health in general and on HIV prevention in particular.

Evidence from Uganda and Eastern Zimbabwe suggests that behavior change is possible. Young people there are delaying sex and this has resulted in drop in HIV prevalence (Cohen, 2004). Although the information provision is well recognized as a prevention tool, doing it well so that it is effective in changing behaviors, is not a simple task. What features of information programs make them effective in preventing HIV among youth? This is important to know if such programs are to be scaled up. While impact evaluations of a few HIV prevention programs for youth offer such lessons, there remains a dearth of well-designed evaluations in this area and the evidence base remains thin (World Bank 2006).

**Information is important**

Many youth are aware of ways to avoid HIV, but information is not always sufficient to change behavior—knowledge of ways of avoiding HIV will not necessarily result in young people adopting those safe behaviors. Demographic and Health Survey data show that even among those who know about ways of avoiding HIV, only a small percentage practice any of those behaviors. And the wide gap between knowledge and behavior may not be eliminated by education—in fact, as knowledge is more responsive to education, the gap can widen with educational attainment (Figure 2).

There could be at least three reasons why there is a gap between knowledge and behavior. First, young people might not perceive the risks of engaging in unprotected sex or sex with multiple partners or, as in other choices they make, might perceive the risk of acquiring HIV to be very low (World Bank 2006). Second, condoms might not be easily available to young people. Third, some young people might lack the power to ask partners to practice safe sex, which partly explains why HIV prevalence is higher among young women, married or unmarried, than young men. In South Africa economic disadvantage was associated with more coerced sex and more sex for exchange (National Research Council and Institute of Medicine, 2005). Forced sex exposes young women to the risks of HIV and other sexually transmitted diseases, which are heightened by injuries from physical violence (Family Health International 2005). More than 20 percent of women attending antenatal clinics in Soweto, South Africa, reported having had sex with a "non-primary" male partner in exchange for goods or money (Dunkle et al., 2004).
Lessons learnt from the few well-designed impact evaluations of youth-oriented HIV prevention programs suggest that design and content of HIV prevention programs must therefore address all these issues raised above. They must recognize the greater propensity of young people to underestimate their risks of acquiring HIV. They must provide access to condoms. A successful social marketing campaign in Cameroon (Horizon Jeunes) combined provision of information to youth about the risks of unsafe sex and with access to condoms. They must also teach them life skills, especially the skills to negotiate safe sex. Also, culturally relevant information is critical. For example, an intervention in Kenya that provided girls with information on high HIV prevalence among older men significantly reduced the incidence of intergenerational sex and pregnancies among young girls, in a setting where intergenerational sex is quite common (World Bank, 2006).

The need for well-designed evaluations

Like all prevention programs aiming to change individuals' behavior, designing an effective HIV prevention program is difficult. And because HIV prevention education addresses sexual behavior that is private, hard to verify and is the subject of strong cultural norms, the impact of programs is extremely difficult to evaluate.

Information may affect both knowledge and self-reported behavior. However, most studies of HIV information programs tend to evaluate changes in knowledge, rather than changes in behavior, even though better knowledge need not necessarily translate into changed behavior, as previous discussion has shown. Studies that do evaluate behavior tend to rely on self-reported behavior, which is also problematic—young participants might be tempted to give the "correct" response. For example, a three year evaluation of a school-based, family life education program in Jamaica found that young people in the schools that received the intervention were more likely than those in a comparison group to report their sexual activity inconsistently (Eggleston, Leitch, and Jackson, 2000).

Alford, Cheetham, and Hauser (2005) reviewed nearly 200 studies of youth-oriented health interventions, of which 10 met their criteria of success in both intervention and evaluation. Of those 10, only two showed any positive impact on objectively measured health status. A series of reviews conducted by Kirby, Lepore, and Ryan (2005) and Kirby, Laris, and Rolleri (2005) found strong evidence of program impact on knowledge, values and self-reported behavior. Of the 83 studies reviewed in Kirby, Laris, and Rolleri (2005), two-thirds found a significant positive impact on self-reported sexual behaviors or outcomes.

For the effects of HIV education programs to be reliably estimated, objective outcomes or biomarkers, such as pregnancies or prevalence of STIs, must be used. Those outcomes will be evident only with a lag, and studies must be prepared to assess behavior over a suitable length of time.

Nistha Sinha is an Economist, Gender and Development, The World Bank.

Natsuko Kiso is a Consultant, Human Development, East Asia Region, The World Bank.

References


