Points for response to “Reassessing HIV Prevention” in Science

“Only” doesn’t work for HIV prevention.

UNAIDS advocates that countries implement HIV prevention programmes that will be truly effective in reducing new HIV infections. This requires a strategic combination of interventions that address populations that are at risk or vulnerable for transmission and that utilize behavioral and social change methods that are appropriate and informed by the latest evidence.

The word “only” doesn’t work for AIDS—whether it’s for treatment only, HIV prevention only, condoms only, abstinence only or male circumcision only. In reality we need it all—a truly comprehensive approach. For UNAIDS, the three pillars of a comprehensive and effective AIDS response, as we move towards universal access, are HIV prevention, treatment and care and support.

Since its establishment in 1996, UNAIDS has supported comprehensive approaches to HIV prevention, applying a combination of strategies that respond to actual needs. Countries should determine the right combination of HIV prevention interventions through an analysis of the current epidemic and the state of the national response. Part of this analysis should include an understanding of the effectiveness in the relevant populations and settings. This approach was endorsed by the member states when they adopted the UNAIDS policy position paper on intensifying HIV prevention in June 2005.

Recently in a Policy Forum article in Science, Dr. Malcolm Potts and nine colleagues call for “Reassessing HIV Prevention.” UNAIDS definitely agrees that programmes should undergo regular monitoring and evaluation of impact, but we disagree on the narrow prescriptions that these authors provide. These include their interpretations of the linkages of HIV and poverty, the effectiveness of condoms and HIV testing and counseling as HIV prevention tools, the need to prioritize male circumcision and the reduction of sexual partners, at the expense of other HIV prevention programmes. We also wish to clarify UNAIDS’ assessment of resource needs for HIV prevention in countries with generalized HIV epidemics.

AIDS is a globalized epidemic. However we are seeing many different epidemics, each with their own characteristics and contexts at the community level. HIV epidemics are diverse in their dynamics and causes, so a given HIV prevention strategy (e.g. STI treatment, or condom promotion) may be effective in one epidemic scenario or place (e.g. early, concentrated epidemics) but not in another (e.g. mature, generalized epidemics). Therefore the selection and scale up of prevention strategies should be based on evidence about the local situation, and about programme effectiveness.

Expert analysis of this information inevitably finds that a combination of HIV prevention measures is required, including not only strategies that focus on individual susceptibility and risk—such as male circumcision—but also on the societal factors that affect
individual risk and vulnerability. Primary among these are gender inequality, HIV related stigma and discrimination, and lack of respect for human rights. In the 60th anniversary year of the International Declaration of Human Rights, it would be regrettable to turn back the clock, to advocate exclusively for measures that focus on individual risk. The “UNAIDS practical guidelines on intensifying HIV prevention” provides information to help countries scale up HIV prevention programmes based on evidence and the nature of their epidemics, and taking into account the importance of acting to protect those most at risk, and also to act urgently on the social norms, policies, and other societal level causes of vulnerability and risk.

**Poverty and HIV**

Are poor people more likely to become infected with HIV than rich people? Some widespread beliefs or “assumptions” about immediate or underlying causes of HIV transmission because of poverty need to be revised. The primary rationale for considering poverty in national AIDS responses is one of equity, not due to the assumption that poverty necessarily causes AIDS.

A UNAIDS analysis of national wealth and HIV prevalence, and the analysis of DHS studies show a complex relationship between poverty and HIV risk or vulnerability. These studies do not support the simple proposition that poorer people are more likely to have HIV than wealthier people. The analyses suggest that there are multiple and countervailing associations between wealth and HIV risk and vulnerability. For example, relative wealth and peace enhance mobility and disposable income, which in turn increase access to paid sex. Poverty, especially among women and girls, can impede access to HIV and other health information and services, and can increase food insecurity. Food insecurity is associated with increased transactional sex or multiple sexual partners, which in turn increases risk of exposure to HIV. While the simplistic assumption that "poverty causes AIDS" has been overturned, economic inequality, or disparities in wealth, may still be an important factor underlying HIV vulnerability, and in some contexts poverty may drive people into transactional sex where HIV risks are manifest.

**Preventing sexual transmission of HIV – no simple solutions**

In the real world, programmes normally use a variety of approaches where it is not necessarily appropriate to separate out different component elements – for example HIV testing and counselling, peer education, STI treatment and condom promotion are often delivered in an integrated fashion. Few national or sub-national programmes promote condoms alone, but, instead, promote several elements of behaviour change, making it difficult to isolate the impact of condoms by themselves.

Reducing multiple sexual partners (including commercial, concurrent, and casual sexual partners) as well as addressing stigma and discrimination has been critical to the declines in incidence and prevalence of HIV in a number of countries, such as Ethiopia, Kenya, Thailand, Uganda and Zimbabwe.

We need to better address behaviour change, especially in the context of multiple sexual partnerships. As the paper by Potts et al states, “there are few demonstrated replicable approaches to reducing multiple sexual partnerships on a large scale.” Investment is urgently needed to establish such approaches. We need to know more about how to
successfully promote behaviour change to reduce multiple sexual partnerships, and to promote safer sex within regular partnerships and among discordant couples, and to sustain these changes over time. UNAIDS has been working with governments, civil society partners and academic experts both globally and in the southern Africa region where the issue is most acute to refine and scale up HIV prevention programming responses to HIV transmission in discordant partnerships and in concurrent partnerships.

**Role of HIV testing and counseling in HIV prevention**

Does HIV testing help promote HIV prevention? UNAIDS has been monitoring the evidence on this issue. HIV testing and counseling has been proven to reduce risk behaviour in people who test HIV positive, but the evidence of risk reduction in people who test HIV negative is less convincing. Nevertheless, we believe that strategies that enable people living with HIV to prevent onward transmission are fundamental to HIV prevention. One must not ignore the leadership and contribution of people living with HIV in promoting HIV prevention. In addition HIV testing and counselling plays a pivotal role in access to treatment.

**Male circumcision**

Medical male circumcision has been proven to reduce risk of acquisition of HIV in men by at least 60%. UNAIDS, together with the World Health Organization, has been at the forefront of working with countries to act on this evidence. Many of the most affected countries are moving rapidly to conduct formative research, assess demand and service readiness, and to expand access to adult male circumcision as part of comprehensive HIV prevention programmes. However one has to be mindful of cultural and religious sensitivities and of the danger of risk compensation. Medical male circumcision is recommended by UNAIDS and WHO in settings, where HIV prevalence is high, together with other HIV prevention measures.

**Spending on HIV prevention**

Spending on HIV prevention should also match the local realities. This should happen on a country-by-country basis, and not according to any global formula. It is unfortunate Potts et al have chosen to illustrate their argument about generalized HIV epidemics by using a graphic of UNAIDS’ estimates for global resource needs, which aggregate all low and middle income countries, most of which (75%) are experiencing low and concentrated epidemics. Thus, it is not surprising that a good proportion of the HIV expenditure is focused on activities addressing the high risk populations which are the predominant feature of these epidemics.

However in countries experiencing generalized or hyper-endemic scenarios, UNAIDS estimates of resource needs are very different – with a strong emphasis on youth, community mobilization, communication, and workplace interventions, which primarily focus on delayed sexual debut, decreasing multiple partnerships and condom use in casual sex, as well as the resources needed to bring about the most rapid feasible scale up of male circumcision in young adults (estimated to be 2.5 million circumcisions per year by the year 2010 in the 12 most highly affected countries). These resource needs estimates also include provision for HIV testing and counseling, whose importance in generalized epidemics cannot be discounted now that around half of all HIV infections occur between discordant couples.
Continuous appraisal of HIV prevention programmes required

HIV prevention efforts around the globe should always be subject to continual reappraisal. The injunction to “know your epidemic and response” is the centerpiece of UNAIDS’ advice to national HIV responses. Determining the right “mix” of interventions is challenging, and should be locally driven. In one’s eagerness to promote different strategies, we should not risk promoting one overly narrow prescription with another equally limited one.