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Future Directions for HIV Prevention in the Developing World

Several developing countries have implemented successful HIV prevention programs and policies, but the need to expand and improve HIV prevention in developing countries remains urgent. According to the World Bank, AIDS is responsible for erasing a half-century's worth of development in most affected countries. Adult and child mortality rates have risen so rapidly that in several nations, life expectancy has dropped by ten years; in Botswana and Zimbabwe, for example, AIDS will soon have shortened life expectancy by 17 years. While before AIDS one child in 50 in the developing world was an orphan, today one child in ten is orphaned. That's over 11 million children orphaned by AIDS worldwide, 10.7 million of them in Africa alone.

Any campaign to combat AIDS in the developing world must be built not only on an awareness of what has worked or failed elsewhere, but also on the unique circumstances of each developing nation.

In April 1998, the University of California San Francisco (UCSF), AIDS Research Institute brought together 171 representatives from 37 countries for three days to identify a package of evidence-based interventions that could be implemented in developing countries without delay. The themes that emerged from this international meeting offer a blueprint for planning and allocating resources that respond to the unique circumstances in each developing country.

The Essential Prevention Package

The workshop produced an essential package of HIV prevention strategies. Country-level prevention planners will inevitably give various elements of the package higher priority depending on the specific characteristics of their

epidemic through a country-level planning process. The essential package of HIV prevention strategies includes the following:

Positive policy environments

Different public policies within countries may either inhibit or promote HIV prevention interventions. The status of women and human rights protections for people infected with HIV are important to the policy environment within developing countries. So are policy decisions about the allocation of resources to address the epidemic. Other, more specific policies, e.g.,

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tariffs on condoms, criminalization of sterile needle possession, restrictions on content of school-based education on sexuality, etc., may also support or inhibit HIV prevention.

Widespread public education about HIV

Awareness of HIV and its possible modes of transmission is a necessary component of HIV prevention. Particularly with emerging epidemic patterns, public awareness of the potential threat of HIV as well as public information on how to avoid infection should be components of a comprehensive HIV prevention plan. Research has shown that a perceived threat, if coupled with the promotion of practical prevention strategies, can be a powerful motivator for positive behavior change. In most countries, an important first step is making people realize that they are at risk.

Promotion of Prevention Skills

Increasing the awareness of threat will only be effective when that message is coupled with useful information. Campaigns can be undertaken at both the state and local levels, by governmental and non-governmental agencies, to promote HIV transmission knowledge and prevention strategies. Especially in the case of a concentrated epidemic pattern, agencies must use limited resources to target those individuals and groups at greatest risk for acquiring or

transmitting HIV. Depending on the characteristics of the epidemic in specific countries, these groups may include commercial sex workers and their clients, members of the military, truckers, injection drug users and their sexual partners, and men who have sex with men.

Condom availability & social marketing

Condom availability is an essential part of preventing sexual transmission of HIV. Social marketing techniques can both increase the sale of condoms and promote understanding of the need to use condoms properly. Free condom distribution may be a priority in many countries, particularly coupled with peer education targeted to commercial sex workers and other groups at increased risk. Careful efforts may be needed to work through religious group resistance to condom promotion and distribution.

Sex education

Explicit and comprehensive school-based sex education programs, which include components of life skills and modes of preventing HIV infection, can be an important part of a comprehensive country-level HIV prevention plan. Because HIV infections are occurring at very early ages in many developing countries, school-based and youth outreach programs need to begin before young people are likely to be placed at risk of sexual transmission. Education level is often a predictor of risk for HIV infection in developing countries, particularly among girls and young women. Policies that promote education for girls and young women may themselves

be a part of a comprehensive country-level HIV prevention plan.

Sentinel surveillance

Sentinel surveillance (surveys of specific population groups) can be of assistance in monitoring the epidemic and planning an adequate response. Surveys of the prevalence of infection in groups that are believed to engage in high-risk behavior can help identify important patterns of the epidemic and are generally unlinked to a name or other identifying informa-

tion. Studies among groups thought to be at generally low risk can help determine the extent to which the epidemic has moved to the general population. Because of limited resources, sampling at sentinel sites (such as health clinics) would generally be the most practical approach in developing countries.

Voluntary HIV counseling & testing

Knowledge regarding HIV status is an important component of preventing further transmission. The availability and promotion of voluntary HIV counseling and testing affords individuals greater opportunity to learn their status and to begin taking steps to prevent transmitting the virus. Such counseling should be as “risk free” as possible and can be targeted to individuals or couples, or offered in the context of whatever health care infrastructure exists in a given country.

Treatment of STDs

Because sexually transmitted diseases (STDs) increase the biological vulnerability to infection with HIV and the potential to transmit to others, the availability of programs to diagnose and treat such diseases is an important component of international HIV prevention programs. Counseling in the context of STD treatment should focus on methods of HIV risk reduction, and may be linked to programs for condom availability and instruction in proper condom usage.

Treatment of HIV

Steps must be taken to prevent mother-to-child and sexual transmission through HIV treatment, even in countries with limited resources. HIV transmission from infected mothers to their newborn babies is of particular concern in developing countries. Such transmission may occur before or during birth, or after birth through breast-feeding. Medical treatments to prevent transmission from mother to child are available in most industrialized countries, but shorter courses of treatment may be affordable in some of even the least developed countries. A renewed effort must be made to provide low-cost pharmaceuticals to resource-poor countries. Simple treatments can reduce viral load and serve as prophylaxis against infectious diseases.

Treatment of drug and alcohol abuse

Drug and alcohol abuse are significant risk factors for HIV transmission. Such abuse can be more problematic in developing nations because these countries generally do not devote re-

Three Ways to Describe HIV/AIDS Epidemics in Different Countries

Nascent

HIV prevalence is less than 5 percent in all known subpopulations presumed to practice high-risk behavior for which information is available.

Concentrated

HIV prevalence has surpassed 5 percent in one or more subpopulations presumed to practice high-risk behavior, but prevalence among women attending urban antenatal clinics is still less than 5 percent.

Generalized

HIV has spread far beyond the original subpopulations with high-risk behavior, which are now heavily infected. Prevalence among women attending urban antenatal clinics is 5 percent or more.

sources to treating the problem, at either a societal or individual level. Basic outreach,

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support, and counseling services for those suffering from drug and alcohol abuse will help to prevent HIV transmission.

Screening the blood supply

While the screening of a country's blood supply for HIV may be taken for granted in industrialized countries, funds for such blood safety efforts frequently run out during parts of the year in many of the least developed countries. Therefore, adequate funding and planning for the

mobilization. Because certain policies like requiring the screening of the blood supply are government functions, representation from the government is important. However, non-governmental organizations are central to the success of HIV prevention in most countries, and thus, their representation is essential. In addition, the success of planning efforts requires that all affected communities within any country be represented in a meaningful way. Ideally, the planning process would involve representation of all major stakeholders in the country.

Identifying characteristics of the local epidemic

In-country priorities are quite different depending on the stage of the epidemic and the extent to which the availability of resources shapes decision making. *Confronting AIDS: Public*

Country-Level Planning Process

- Ensure non-governmental participation
- Ensure governmental participation
- Commit to the planning process

Country-Level Planning Tasks

- Develop an epidemiological profile
- Assess and set priorities for targeting groups, if indicated
- Select from among a basic package of HIV prevention interventions
- Evaluate programs

Additional Resources

- Construct a budget within existing resources
- Mobilize resources to respond to unmet needs

necessary kits to screen the blood supply should be part of action plans for counties where the government cannot assure ongoing screening to protect the available blood supply. Comprehensive blood donor and blood component screening should also screen for other blood-borne pathogens. Policies should promote voluntary blood donation, self-deferral for individuals who perceive themselves to be at risk, and avoidance of indiscriminate blood transfusion, and should encourage auto-transfusion whenever possible.

In-Country HIV Prevention Planning

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Priorities in a Global Epidemic, A World Bank Policy Research Report, provides a typology for considering the level and distribution of HIV infection in developing countries. In the publication, epidemics are defined as nascent, concentrated, or generalized (see sidebar, previous page).

Prevention needs assessment and prevention planning

Conducting an HIV prevention needs assessment begins with a review of what is known about the epidemiology of the epidemic, and results in a series of questions that need further clarification. Once some consensus is reached about the problem, the planning involves setting priorities for meeting the identified needs. Groups will choose the interventions that in their view are most likely to accomplish their goals from the list of essential prevention strategies. Ultimately, decision making is both evidence based and value based. The greater the investment in a quality

planning process, the more likely the success of the country-level HIV prevention program.

AIDS is a catastrophic health crisis in many developing countries around the world, and expanded efforts to deliver effective HIV prevention are urgently needed. Implementation of participatory planning and evidence-based HIV prevention programming can have a powerful effect on controlling the spread of the epidemic.

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Acknowledgements

DISCOVERING GLOBAL SUCCESS: Future Directions for HIV Prevention in the Developing World and the Workshop were made possible by the support of a number of organizations, many of whose contributions were facilitated through a grant award by the Fogarty International Center at the National Institutes of Health (3 D43 TW00003-10S4). Financial support also came from Centers for Disease Control and Prevention, the U.S. Agency for International Development, and UNAIDS; and University of California, San Francisco, Center for AIDS Prevention Studies with support from the National Institute of Mental Health grant NIMH/MH 42459.

We also wish to express our appreciation to all of the participants in the Workshop, particularly those that traveled long distances, for their contributions and willingness to work on this project.

Editorial assistance from Progressive Health Partners
www.phpartners.com

Materials Available

The full report, *Discovering Global Success: Future Directions for HIV Prevention in the Developing World*, can be found on the AIDS Research Institute website at <http://hivinsite.ucsf.edu/fogarty>.

Information is also available by contacting:
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