

*Because HIV prevalence is so low in Mexico, few young Mexicans have first-hand knowledge of AIDS.*



ARMANDO WAAK/PAHO

## REDUCING HIV INFECTION AMONG YOUTH: WHAT CAN SCHOOLS DO?

*Baseline data from Mexico, South Africa, and Thailand reveal complex picture of attitudes and behavior among students*

In a classroom north of Bangkok, students use syringes to trade drops of clear fluid from the plastic cups each one holds. A moment later, laughing as they turn to friends throughout the room, they repeat the exchange.

What looks like a science experiment is actually a creative exercise to demonstrate how HIV infection spreads through a population. Most of the cups contain water, but one holds colorless sodium hydroxide—to represent HIV infection. No one

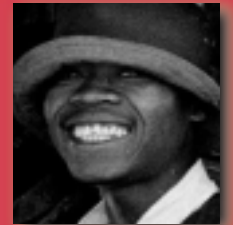
can tell which of the students holds the “infected” cup. Trading fluid with others symbolizes unprotected sex with multiple partners.

When the exchange ends, the teacher treats each student’s cup with a chemical that reacts with sodium hydroxide; “infected” water immediately turns red, with darker hues indicating multiple “infections.” More than a third of the cups are now a tell-tale red. When the students see how quickly “HIV” has spread through the class, the mood in the classroom becomes more serious.

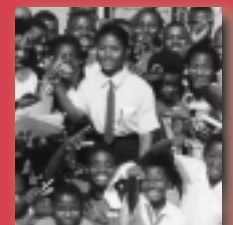
This exercise is just one of many

## Young People and HIV/AIDS

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The Population Council implements the Horizons Program in collaboration with the International Center for Research on Women, the International HIV/AIDS Alliance, the Program for Appropriate Technology in Health, Tulane University, the University of Alabama at Birmingham, Family Health International, and Johns Hopkins University.

participatory learning activities that engage these young Thai students. In addition to basic information about HIV, they also learn how to assess their own risk, negotiate safe sex, and support people who are infected with HIV.

### **How Effective Are Programs in Schools?**

School-based programs have long been considered an effective way to reach large captive audiences of young people with information and skills development. Research shows that students in sex education programs in different parts of the world have increased their knowledge and developed positive attitudes about reproductive health (Cáceres et al. 1994; Fitzgerald et al. 1999; Kirby 1997).

How effective are such programs in actually reducing high-risk behaviors among youth? Studies of several U.S. school-based prevention programs have demonstrated success (Kirby 1999), but such data have not been available from the developing world. To close this gap, Horizons is supporting operations research at schools in Mexico, South Africa, and Thailand that provide HIV/AIDS prevention programs to their students. The curriculum in each country is designed to enhance knowledge and affect attitudes about sexuality by using interactive approaches—role-playing, drama, and participatory discussions—to strengthen such life skills as negotiation in relationships that can have an impact on behavior.

“Two key features of the curriculums being studied—the use of interactive teaching methods and the provision of accurate information about sexual matters—have led to the adoption of safe sex practices in the U.S., including abstinence and condom use,” said Dr. Ann McCauley of Horizons/International Center for Research on Women (ICRW). “The Horizons studies provide important data about the extent to which school-based programs can influence behavior in countries with different sociocultural contexts and levels of HIV infection.”

In Mexico, which has a low adult prevalence rate of less than 1 percent, researchers from the Instituto Mexicano de Investigación de Familia y Población (IMIFAP) are studying



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the outcomes of a program reaching 11th graders in two urban secondary schools. In South Africa—where adult HIV prevalence is nearly 20 percent—a research team from the Medical Research Council (MRC) is measuring the impact of a program for 9th graders in 11 schools in KwaZulu Natal. Under the auspices of the Thai Ministry of Education, the Thai study examines a program for second-year students at three colleges in central Thailand. With adult HIV prevalence at 2.15 percent, Thailand has long had a proactive national campaign against AIDS that has fostered a high level of public awareness. (All prevalence data are estimated: UNAIDS 2000.) The goal at all three sites is to eventually scale-up the program nationwide.

At each site, study teams are collecting quantitative and qualitative data from students

*Thai students learn about HIV transmission during a water-exchange exercise.*

**The curriculum in each country is designed to enhance knowledge and affect attitudes about sexuality by using interactive approaches.**

and teachers in a minimum of three waves, including initial baseline research. These data will show whether and how the programs have improved students' knowledge, attitudes, and behavior over time.

## Mean age and ever had sex (by sex and country)

	Mean age of cohort	Ever had sex		P value (chi <sup>2</sup> )
		Male	Female	
Mexico	16 yrs	25% (248/982)	7% (71/1,029)	.000
South Africa	15 yrs 8 mths	66% (356/543)	37% (218/583)	.000
Thailand	20 years	61% (534/878)	29% (459/1,576)	.000

Analysis of baseline data from all three studies reveals some similarities among the sites. For example, male students in all three countries were significantly more likely to report ever having sex than females (see table). In addition, a sizeable proportion of males and females report having their first sexual experience at a very young age (less than 13 years). Moreover, many youth have sex intermittently rather than on a regular basis.

method, only 6 percent use condoms—and of those, only 20 percent used condoms at last sex. However, two other studies also report a trend of increasing condom use among South African youth (Richter and Swart-Kruger 1995; Rutenberg et al. 2001).

Despite the good news about condom use, many students—both sexually experienced and inexperienced—reported that they do not feel confident that they know how to use a condom. Less than half of all students in both the Mexican and South African studies reported not knowing how to use a condom correctly, with females more likely than males to feel lack of confidence. HIV/AIDS school-based interventions in all three countries clearly need to increase youth confidence in condom use.

“South Africa’s vigorous prevention campaigns for young people raised awareness and promoted condom use but did not focus on skills development, which is probably why youth report a lack of confidence in using condoms,” said Dr. Priscilla Reddy of MRC. “That young people are attempting to use them anyway may reflect their interest in protecting themselves and their partners, an essential prerequisite to behavior change that school-based interventions must address.”

Concern about contraception may also influence condom use rates. Youth reported that they are more concerned about contraception than protection against sexually transmitted infections. Low condom use rates among students in Thailand may therefore be a sign of easier access to and preference for contraceptive pills.

Further investigation of these data and the

## Sexually experienced youth do not appear to see themselves at higher risk than sexually inactive youth.

### Surprising Condom Data

The baseline data reveal fairly high levels of condom use among sexually experienced youth in Mexico and South Africa. For example, 65 percent of Mexican males and 49 percent of Mexican females said they used a condom at last sex. In South Africa, slightly more than half of males and females reported always using a condom during the last six months. In contrast, condom use at last sex among sexually experienced Thai youth was low at 27 percent, despite the fact that 81 percent of the entire sample reported confidence in how to procure condoms.

The findings from South Africa are encouraging, if somewhat surprising: The 1998 South African Demographic and Health Survey reports that while 66 percent of 15- to 19-year-old females use a contraceptive

two post-intervention evaluations will look at how condom use relates to access to condoms and other determinants. After the courses end, all students should be more confident that they can procure condoms and use them correctly, and condom use prevalence should be higher among the sexually active youth.

### Assessing Personal Risk

In all three study cohorts, sexually experienced youth do not appear to see themselves at higher risk than sexually inactive youth. Although sexual activity is the primary risk behavior among these students, sexually experienced students in Mexico and Thailand do not rate themselves as being at higher risk than students who are not sexually experienced.

For example, 88 percent of the Thai group—both sexually experienced and inexperienced—perceive themselves to be at no to low risk for HIV. In Mexico—an even lower-prevalence country—41 percent cannot gauge their risk level, no matter whether they are sexually experienced or not. Even in South Africa, where adult HIV prevalence is among the highest in the world, sexually experienced students do not differ much in their self-assessment of risk from sexually inexperienced students.

“In all three cohorts, there is little difference in the trend of risk perception between students who are and are not having sex,” said Dr. McCauley. “In these cases, risk perception may be more affected by a public perception of risk than by an accurate assessment of the students’ own behavior.”

In all cases, these findings highlight the need to personalize the process of risk assessment in educational interventions targeted to youth, both sexually experienced and inexperienced.

### Uneven Knowledge About HIV

Students’ HIV knowledge is uneven, no matter whether the country has had a long or short history of the epidemic, low or high HIV prevalence, or a strong national HIV risk-reduction campaign. For example, 98 percent of the Thai cohort knew that they could do something to avoid HIV, but 19 percent also believed that they could

get HIV by sharing food with an HIV-positive person. In Mexico, 94 percent of the students knew that HIV infection can be avoided, but fewer knew that an HIV-positive person could look healthy.

“In Mexico, where prevalence is so low, few people have had any personal contact with HIV infection and thus aren’t aware that people who look and feel healthy may nonetheless be infected with the virus,” said Martha Givaudan of IMIFAP. “This may soon change because a popular soap opera has introduced a young, beautiful, and seem-

Students’ HIV knowledge is uneven, no matter whether the country has had a long or short history of the epidemic, low or high HIV prevalence, or a strong national HIV risk-reduction campaign.

ingly healthy female character who is HIV-positive.”

More than a quarter of the South African students were not sure that they could do anything to avoid HIV, and more than a third didn’t know whether an HIV-positive person could look healthy. This suggests that students have a superficial understanding of HIV that could prevent them from acting effectively to prevent infection.

Misinformation about HIV may also contribute to potentially stigmatizing attitudes about people living with HIV. Although many students agreed that HIV-positive students should be permitted to continue in school, more than a quarter of the students in Mexico and South Africa were not sure. Many Thai students said they would not buy food from an HIV-positive person.

### Strengthening School Programs

These baseline data from Mexico, South Africa, and Thailand reveal specific areas where school-based prevention programs need to focus if they aim to improve youth behavior as well as knowledge, attitudes, and risk perception. They also highlight the need for programs to take into account the



*In South Africa, slightly more than half of youth reported always using a condom during the last six months.*



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differences and similarities between the sexual experiences of young women and young men.

- ***Programmers and teachers need to be aware that some students have sex at early ages.*** Teachers need to be prepared to offer immediate information and support in adopting safe behaviors. Program designers and teachers also need to take into account the possibility that very young youth—both females and males—are victims of coercive sex so that, where possible, referral systems to counselors and social workers can be created.

- ***Strategies for negotiating or refusing sex should take into account the intermittent nature of adolescent sex.*** Classroom discussions and exercises can identify the situations in which youth have sex, as well as barriers to and strategies for preparing for and negotiating sexual encounters.

- ***Students may feel peer pressure based on their misperceptions about the behavior of others.*** An examination of assumptions about sex—including norms about masculinity, femininity, and self-esteem—can help students decide for themselves when to have sex. Specific exercises and activities help students identify and resist peer pressure.

- ***Programs need to teach students to accurately assess their own personal risk of HIV***


*infection.* Teachers and counselors need to teach students to assess their own risk by being able to identify the behaviors or circumstances that put them at risk.

- ***Teachers and curriculum planners need to know that student knowledge about HIV and prevention is uneven.*** Teachers often mistakenly say that students already know everything about HIV and sex, and many students think so as well.

- ***Programs need to talk about stigma and discrimination against people living with HIV/AIDS.*** Interactive teaching methods can help students face some of the situations in which they are unsure how to act with people who have HIV.

- ***Programs need to address condom use.*** To be able to practice safe sex, young people must feel confident about how to use a condom correctly. Because this is a difficult subject to address in a classroom, teachers need special preparation to help them discuss condom use and other intimate matters with students.

All three studies will conclude in 2002. In Thailand, program planners are already working with the national Ministry of Education to expand the program into more schools. In Mexico, the program will be introduced into the educational system of one of the federal states. The intervention in South Africa will be introduced into all of the country's secondary schools during the next two years.

For more information, contact Dr. Ann McCauley at [amccauley@pcdc.org](mailto:amccauley@pcdc.org). A report on the baseline findings study is available on the web at [www.popcouncil.org/pdfs/horizons/schoolsbsln.pdf](http://www.popcouncil.org/pdfs/horizons/schoolsbsln.pdf). 

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## TEACHING THE TEACHERS: BUILDING CONFIDENCE AND SUPPORT TO TACKLE DIFFICULT SUBJECTS

Teachers assigned to teach courses on sexuality, HIV/AIDS, and relationship skills clearly need special training to increase their knowledge and comfort levels. In Thailand, prior to training, many teachers in the study reported that they found it difficult to lead a discussion on sexual health and anatomy and expressed discomfort with the idea of demonstrating condom use to students. Some were also concerned that students might know more about condoms than they do and ask difficult questions. Hands-on condom use demonstrations seemed too embarrassing, and one teacher rejected such teaching duties outright: "I believe that it is not necessary for students to touch condoms; they can learn from the media...[and] practice later."

But after attending a four-day training session, Thai teachers said they felt more comfortable discussing such sensitive topics as sexual intercourse, negotiation skills, condom use, and male genitalia with students. A questionnaire administered to teachers in Mexico after their training course also reveals

higher levels of confidence and self-esteem. Like the Thai teachers, Mexican teachers perceived greater advantages to condom use after training than before.

In addition to intensive training courses, teachers need ongoing support as they teach the course so that they are able to handle such situations as student embarrassment or parental objections. In Mexico, the teacher trainer visited the teachers during the weeks that the course was taught. In Thailand, the trainers observed the teaching in some classes and then held after-class sessions for all the teachers to discuss ways to strengthen the lessons. In both countries, the trainers were also available by telephone to answer questions whenever needed.

Teachers also need to know they have school and community support for teaching the course and that they will not be criticized for doing so. In each country, the implementing organizations held meetings with the principal, teachers, and community to explain the course and build support for the teachers.

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Principal investigators for these studies include, in Mexico, Susan Pick and Martha Givaudan of IMIFAP; in South Africa, Priscilla Reddy of MRC-Cape Town and Shegs James of MRC-Durban (based at the University of Natal); in Thailand, Simon Baker of Horizons/PATH, Usasinee Rewthong of PATH, and Patchara Rumakom of Horizons/Population Council; and Ann McCauley of Horizons/ICRW. Holley Stewart of Horizons/Population Council wrote this article in conjunction with members of the research teams.

*Feeling a sense of connection to family and community may help South African youth practice safer behaviors.*

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## ARE MORE YOUNG PEOPLE IN SOUTH AFRICA USING CONDOMS?

*Study of adolescent life transitions finds “connectedness” may be a factor*

Seventeen-year-old Sipho (not his real name), a resident of Durban, South Africa, never has to worry about running out of condoms. He knows that the pockets of his favorite jacket will always contain a supply, thanks to his mother.

“She never told me that she was going to put condoms in my jacket, [but] I knew that it was my mother who put them in,” he told a focus group of young men from his community. “I learned the lesson that day that whenever I go I should have condoms with me.”

Apparently Sipho’s mother is not the

only parent who wants to be sure her son has condoms available when he needs them. Other young men in the focus group also revealed that their parents approve of their use of condoms.

“They love us too much to lose us,” agreed another focus group participant.

The degree to which parents involve themselves in their children’s lives and sexual health is one of many issues explored in an ongoing study, “Transitions to Adulthood in the Context of AIDS in South Africa,” a prospective examination of the reproductive and sexual behavior of South African adolescents. The researchers are also looking at the education and

employment experiences, family and environmental conditions, and other factors in adolescents' lives that may influence their sexual behavior and choices. The goal of the study is to contribute to the design and refinement of policies and programs to help young people make healthy transitions from adolescence to adulthood.

As in the Horizons school-based study (see page 1), initial results from the Transitions research appear to confirm a trend toward greater condom use, an important development in the country with the highest number of HIV-infected people in the world. One factor that may help these young people choose to use condoms is whether they experience "connectedness"—stable, supportive, and consistent family and community relationships—in their lives.

### **Changing Attitudes About Condoms**

Past studies found that South African youth generally regarded condoms in an unfavorable light as implying mistrust and infidelity (Varga 1997; Lurie et al. 1997). In the Transitions study, based in KwaZulu Natal, the majority of participants *disagree* that condoms denote mistrust, are unnecessary in serious relationships, are difficult to carry because they show intention of having sex, cause females to lose the respect of their partners, or are embarrassing to request or buy. Researchers asked about these and related issues during the first wave of the study, in which they surveyed 3,097 young people, ages 14 to 22, both in and out of school.

In fact, most of the youth surveyed think condoms are easy to obtain. Knowledge of a source of condoms is nearly universal (96 percent). Most significantly, one-half of adolescents who had a partner in the past year used a condom the last time they had sex. Males are slightly more likely to use condoms than females (54 versus 47 percent), and in-school adolescents are more likely to have used condoms than out-of-school youth (57 versus 44 percent). Use is not associated with age; sexually active 14- to 15-year-olds are as likely to use a condom as 20- to 22-year-olds.

"During focus group discussions with the adolescents, fear of HIV/AIDS was foremost among a number of reasons why condom use

may be on the rise," said Dr. Naomi Rutenberg, research director for Horizons. "Other important factors included the proliferation of messages promoting condom use and encouragement and advice from peers."

### **What About Connectedness?**

Researchers have traditionally sought explanations for patterns of adolescent sexual behavior—including condom use—by examining the characteristics of adolescent lives as well as the service delivery environment. Increasingly, researchers are focusing on the protective role of youth's "connectedness" to family, school, and community.

Connectedness is defined as consistent, stable, positive emotional relationships with such significant others as parents, friends, teachers, and others who can provide children with important social skills and a sense that the world is safe and secure. Stability and a sense of connectedness or cohesion among family and community members foster positive relationships that can help to buffer the impact of stressful, negative influences and situations and influence the behavior of young people. Studies in the United States suggest that connectedness to family, school, and community is protective for many health behaviors, including smoking, drug use, and sex (Jessor, Turbin, and Costa 1998; Kirby 1999).

"Earlier research shows that high levels of community and family stability provide social controls and imply less tolerance of deviant or risky behaviors," said Dr. Rutenberg.

What connectedness to family and community means for sexual behavior and condom use is the focus of ongoing analysis. The study has revealed that condom use is significantly greater among adolescents who report that they feel close to their parents and can talk to them about sex than among adolescents who cannot discuss sex with their parents. Adolescents who live in households that have recently experienced such events as death, illness, job loss, or divorce that disrupt household cohesiveness are less likely to use condoms. The study also found that residence in a community with good infrastructure, such as improved street surfaces and major streets, an absence of abandoned buildings, and a general sense of safety among residents,





*Young South Africans stand before an anti-AIDS mural targeted to youth.*

is associated with greater condom use among many adolescents.


“The results that identify household and community risk factors have implications for counselors trying to get a better idea of where to focus their efforts,” said Dr. Kate Macintyre of Tulane University. “Kids from backgrounds with disrupted families and communities are more at risk and thus need attention immediately.”

### **What Role Do Schools Play?**

A key strategy in South Africa’s response to the HIV/AIDS epidemic is a national Life Skills Programme that begins in secondary schools and is now expanding to primary schools. The effectiveness of the Life Skills Programme—and the ways in which life skills training combines with other family or community resources to influence reproductive and sexual health outcomes—is of special concern given its prominent role in the government’s response to HIV/AIDS.

The family life, community, and school environment of adolescents and how they influence sexual behavior will be further explored through the longitudinal design of the Transitions study. These results will help advance understanding of adolescent lives and the risks and opportunities youth navigate as they experience the transition from school to adulthood, as well as improve school- and community-based life skills education and services for youth. Findings are being disseminated to program man-

agers in education, health, and youth services and to other researchers in South Africa and internationally.

A report on the first wave of data collection for this study is available on the web at [www.popcouncil.org/pdfs/horizons/tasa.pdf](http://www.popcouncil.org/pdfs/horizons/tasa.pdf). A second wave of data will be collected from the same adolescents in late 2001, two years after the first data collection. For more information, contact Julian May at [majj@mtb.und.ac.za](mailto:majj@mtb.und.ac.za) or Dr. Naomi Rutenberg at [nrutenberg@pcdc.org](mailto:nrutenberg@pcdc.org), or sign up at [www.popcouncil.org/horizons/signup.html](http://www.popcouncil.org/horizons/signup.html) to receive e-mail notification when upcoming reports about this study are published. 

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# STUDIES IN BRIEF

## LUSAKA, ZAMBIA Involving Youth in Care and Support for PLHA

The AIDS epidemic has hit Zambia hard—particularly its youth. HIV prevalence among Zambians between the ages of 15 and 20 is estimated at about 20 percent, one of the highest in the world. As in many countries, prevention education for young Zambians has raised knowledge and awareness about HIV, but behavior change to reduce risk lags behind.

One promising development, though, has been the growth of hundreds of anti-AIDS clubs for young people based in both schools and the community. These organizations—staffed by adolescent volunteers who act as role models and peer educators—are now the focus of ongoing research to determine whether the involvement of young people in HIV care and support activities can decrease risky sexual behaviors. Conducted by Care International, Family Health Trust, and Horizons, the study is simultaneously examining the potential of young people's clubs for meeting care and support needs in their communities and for reducing stigma against those with HIV/AIDS.

The project began with a series of HIV/AIDS prevention workshops. The participatory approach of these workshops encouraged the youth participants to examine their own assumptions about HIV and stigma in their communities and to speak frankly about their sexual behavior and risk of HIV infection. In addition to information about HIV/AIDS, the training included such topics as club management, activity planning, membership recruitment, gender equity, recre-

ation, and more. The workshops have proven to be extremely motivating, building enthusiasm within clubs and prompting them to organize new activities and recruit more widely, particularly in remote Mporokoso District, a region of very traditional values and beliefs.

“Young people from this area are happy with the training they received because discussing sexual matters is largely taboo in our communities,” said one young participant. “The workshop helped us understand which traditional values about sex are beneficial but also how some of these values can be challenged with facts by knowledgeable youth.”

To find out about young people's sexual behaviors and risk perceptions as well as their attitudes toward people living with HIV/AIDS (PLHA), the researchers selected 32 anti-AIDS clubs in four rural districts, about half school-based and half community-based, and collected quantitative and qualitative baseline data from 823 respondents (416 male and 407 female). Nearly four-fifths of

*Young Zambians at a care and support training workshop in Luapula Province.*



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males and 39 percent of females reported ever having sex.

To questions about attitudes toward PLHA, almost 90 percent of both males and females agreed that PLHA deserve compassion and support; a similarly high proportion reported a high level of comfort with non-sexual contact with PLHA. About two-thirds of all respondents said they would feel “fine” about providing care and support to PLHA.

“It is gratifying that negative attitudes among young people in the program have appeared to change dramatically, said Dr. Eka Esu-Williams of Horizons/Population Council. “Prior to the training, many young people were judgmental and believed that PLHA should not be cared for because they deserved what they got.”

After the survey was conducted, training-of-trainers in care and support began for some 300 young people in two districts (clubs in the other two districts are serving as controls). Trained and equipped youth caregivers have now formed care and support teams in their clubs and have worked with village heads, local clinics, and hospitals to establish contact with PLHA and gain community support for their work.

A monitoring visit in October to 20 clubs in Luapula following the care and support training workshops in August revealed that each club is caring for four to twelve PLHA, as well as some orphans and children of PLHA. The youth recognize the enormous needs and challenges in caring for PLHA and orphans and are beginning to foster partnerships with adult caregiving teams and to reach out to the Social Welfare Office to report the plight of orphans.

## **HARARE, ZIMBABWE** **Study Examines Relationship** **Between Microfinance and HIV**


**T**he 1980s saw the birth of a global microfinance movement in the developing world. Since then, this anti-poverty strategy—providing affordable loans to small-scale entrepreneurs without access to traditional credit sources—has grown and flourished as it has benefited communities around the world.

But the past two decades have also marked the emergence and spread of HIV/AIDS in many of these same communities, often with profound economic effects. Understanding the complex relationship between microfinance services and the advance of the epidemic has thus become critically important. Can the disease weaken the viability and sustainability of microfinance programs by making it harder for affected borrowers to repay? On the other hand, can microfinance programs help mitigate the financial shock of HIV on families and communities?

A newly completed exploratory study conducted in Zimbabwe by Management Systems International (MSI) and Horizons is one of the first to rigorously examine the relationship between microfinance and households coping with chronic illness and death in a country with high HIV prevalence. By analyzing extensive quantitative and qualitative data, the researchers sought to determine the extent to which HIV/AIDS affects households and if microfinance programs help households to mitigate the economic impact of chronic illness and death. A second major study question focused on the effects of HIV/AIDS on the operations of the microfinance program itself. The researchers also solicited suggestions from microentrepreneurs and loan officers on measures that might be taken to lessen the negative impact of HIV on microfinance organizations and their clients.

The study centered on Zambuko Trust, a Zimbabwe NGO that provides credit and business management training. A survey in four major urban areas in 1997 and again in 1999 gathered information about household economics from 579 Zambuko clients and non-client microentrepreneurs (three-quarters

**The participatory approach of the workshops encouraged the youth participants to examine their own assumptions about HIV and stigma in their communities.**

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of them female). Because of the sensitivity of asking about HIV/AIDS, the client and non-client households were categorized as affected or non-affected by HIV/AIDS according to proxy indicators, such as the chronic illness or death of an adult member or taking in orphans. In 1999, approximately 40 percent of both client and non-client households were thus categorized as possibly HIV-affected.

Study results suggest that these households are indeed negatively affected by chronic illness and death. In 1999, significantly fewer affected than non-affected households had moved out of poverty. The monthly income level for affected households was estimated to be Z\$521 less than for non-

affected households, with much of the difference attributable to lower microenterprise income. As expected, in 1999 the economic dependency ratio—the proportion of household members who are not economically active—was significantly greater among HIV-affected households (40 percent) than non-affected households (32 percent).

Participation in a microfinance program had some positive effects on affected clients and their households. Compared to affected non-client households, affected client households had a greater number of income sources (income “smoothing”) and practiced better financial management.

“These are small but important strategies that may help microentrepreneurs and their families reduce the negative economic impacts of HIV/AIDS,” said Dr. Carolyn Barnes of MSI, the study’s principal investigator. “In focus group discussions, clients highlighted how much they value their access to microcredit and Zambuko’s services.”


To lessen the impact of chronic illness and death on its operations, Zambuko instituted such measures as a mandatory insurance fee of 1 percent to cover the loan if the client dies. Suggestions made by microentrepreneurs and loan officers to mitigate the negative impact



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of HIV on microfinance institutions and their clients include shorter-term loans, voluntary funeral insurance, and more education on HIV-related topics.

In September 2001, representatives of microfinance programs and HIV/AIDS organizations and others met at a one-day forum in Harare to discuss study results. One valuable outcome is that the Zimbabwe Association of Microfinance Organizations agreed to facilitate further dialogue and collaboration between the microfinance and HIV/AIDS communities.

For more information, contact Dr. Carolyn Barnes at [cbarnes@msi-inc.com](mailto:cbarnes@msi-inc.com), or sign up at [www.popcouncil.org/horizons/signup.html](http://www.popcouncil.org/horizons/signup.html) to receive e-mail notification when upcoming documents about this study are available. 

**DAKAR, SENEGAL**  
**Pioneering Study Reveals High Risk, Little Support for Stigmatized MSM**

**A**round the world, it’s well known that men who have sex with men (MSM) are vulnerable to HIV infection. Yet in Africa they receive little attention in sexual

*Many microentrepreneurs in the developing world are women.*



health and HIV/AIDS programming and service delivery, largely because of a long history of stigmatization of homosexual activity across the continent. Little is known about their needs, their behaviors and attitudes, and their levels of knowledge about HIV and other STIs.

A recently completed study conducted in Dakar, Senegal, by the National AIDS Control Program, Cheikh Anta Diop University, and Horizons now throws valuable new light on this community. The research includes an ethnographic examination of the sociocultural context in which sexual behavior among men takes place as well as identification of the factors that place men at risk for contracting STIs, including HIV.

That risk is in fact dangerously high. In their survey of 250 MSM in several Dakar neighborhoods, the research team found infrequent condom use—as low as 14 percent for receptive anal intercourse—during the last sexual encounter, despite frequent sexual activity. Most respondents also reported multiple partners, including women: of the MSM who had receptive anal sex with a man during the past month, 85 percent also had vaginal sex with a woman. Many MSM are involved in sex work, with 66 percent reporting that they'd received money at the time of their last sexual encounter.

Such risk factors are compounded by low levels of knowledge about STIs, despite high gen-


notions about sexuality, working through prejudices and taboos, consulting with MSM leaders, and discussing the importance of maintaining the confidentiality of informants.

“Taking all of these steps enabled us to better understand the needs and perspectives of this population and thus helped us successfully contact and interview our informants,” said Dr. Cheikh Niang of Cheikh Anta Diop University.

The research revealed an absence of prevention education, counseling, treatment programs, care and support, or other services in Dakar targeted to the needs of these men. Deeply entrenched discrimination and constant harassment keep most MSM hidden, leading to low levels of self-esteem and little community advocacy. Such stigmatization exposes many of these men to the ongoing threat of violence, from stone throwing to beatings. Of the 250 MSM surveyed, 43 percent reported being victims of rape at some time in their lives—13 percent by policemen.

“The levels of violence and forced sex found among these men were quite disturbing,” said Dr. Placide Tapsoba of Horizons/Population Council, who worked closely with the study's investigators. “These findings highlight the need for broader interventions, not just information alone.”

Release of the report—which outlines next steps to address unmet sexual health needs and priorities—has broken down apprehension about creating services for MSM. A consortium of NGOs and donors have formed a task force to develop practical and necessary interventions for MSM that include behavior change communication, capacity building of community leaders and peer educators, identification of service providers sensitive to the health needs of MSM, and creation of centers that are safe and comfortable where MSM can gather to exchange information. Researchers and others also plan to use study results to educate program managers and policymakers about the needs of MSM and the importance of reaching them with non-stigmatizing interventions.

For more information, write to Dr. Cheikh Niang at [ciniang@telecomplus.sn](mailto:ciniang@telecomplus.sn), or sign up at [www.popcouncil.org/horizons/signup.html](http://www.popcouncil.org/horizons/signup.html) to receive e-mail notification when upcoming reports about this study are published. 

## Deeply entrenched discrimination and constant harassment keep most MSM in Dakar hidden.

eral awareness of the existence of HIV. Few MSM respondents were able to recognize the major STIs and identify them as causes of the high prevalence of STI symptoms reported within the sample. Treatment is frequently delayed, self-administered, or neglected altogether, especially for STI symptoms in the anal area, which MSM fear will reveal their participation in highly stigmatized homosexual activity.

Conducting this research was not a straightforward process. The research team spent a lot of time examining their own preconceived

## WASHINGTON, DC International Workshop Examines Access to Antiretroviral Treatment

Over the past two years, considerable international pressure has been put upon pharmaceutical companies to make antiretroviral drugs (ARVs) for HIV more affordable for those in developing countries. Prices are dropping, but the gap in availability of national treatment programs remains wide between the developing world and industrialized countries. Even where negotiations to lower prices put ARVs within financial reach, there is little guidance for designing and instituting effective treatment programs.

While much of the focus has been on the costs of ARVs, there has been little attention paid to the operational issues surrounding large-scale ARV treatment where resources are limited. To address these concerns, Horizons convened a workshop of international experts in Washington last June to discuss access to ARV treatment and examine the experiences of developing nations that have made progress in implementing ARV programs.

The aim of the meeting was to provide input into the development of Horizons' research agenda, which will soon include studies on access to ARV treatment. Presenters and participants reported on efforts in Brazil, which has implemented a national ARV treatment program for people living with HIV/AIDS (PLHA), and Thailand, which now provides ARVs to pregnant women, as well as in Senegal, Chile, Vietnam, Côte d'Ivoire, and Uganda. The broad-ranging and often passionate discussion covered many of the issues surrounding ARV treatment programming.

An early point of agreement was that access to treatment involves far more than the availability and affordability of ARVs. Other pressing concerns include the capacity of the health system to deliver the range of services associated with ARV treatment, including HIV testing and counseling; training health care personnel to improve not only their skills and knowledge but also their motivation and attitudes toward PLHA; fostering meaningful community and PLHA involvement; and



KETAN JOSHI

ensuring and monitoring client access and adherence to ARV therapy.

By the end of the meeting, participants had identified several key operations research questions that can be explored in different resource and epidemiological settings. These include:

- What is the most effective way to respond to the differential needs for ARV treatment and care of different groups (by age, sex, geographical location, and so on)?
- What are the characteristics of existing service delivery models—both centralized and decentralized—that make for successful programs?
- Which approaches contribute to adherence to treatment, both for opportunistic infections (OIs) and ARV therapy?

*In Durban, South Africa, demonstrators call for access to AIDS treatment.*

**There has been little attention paid to the operational issues surrounding large-scale ARV treatment where resources are limited.**

- What is the effect of ARV treatment on clients' risky and protective behaviors?
- How equitable is the provision of OI and ARV treatment and what criteria should be used to select whom will receive ARV? How are these criteria developed, applied, and enforced?

For more information, contact Dr. Johannes van Dam at [jvandam@pcdc.org](mailto:jvandam@pcdc.org), or sign up at [www.popcouncil.org/horizons/signup.html](http://www.popcouncil.org/horizons/signup.html) to receive e-mail notification when the report of this workshop is available.

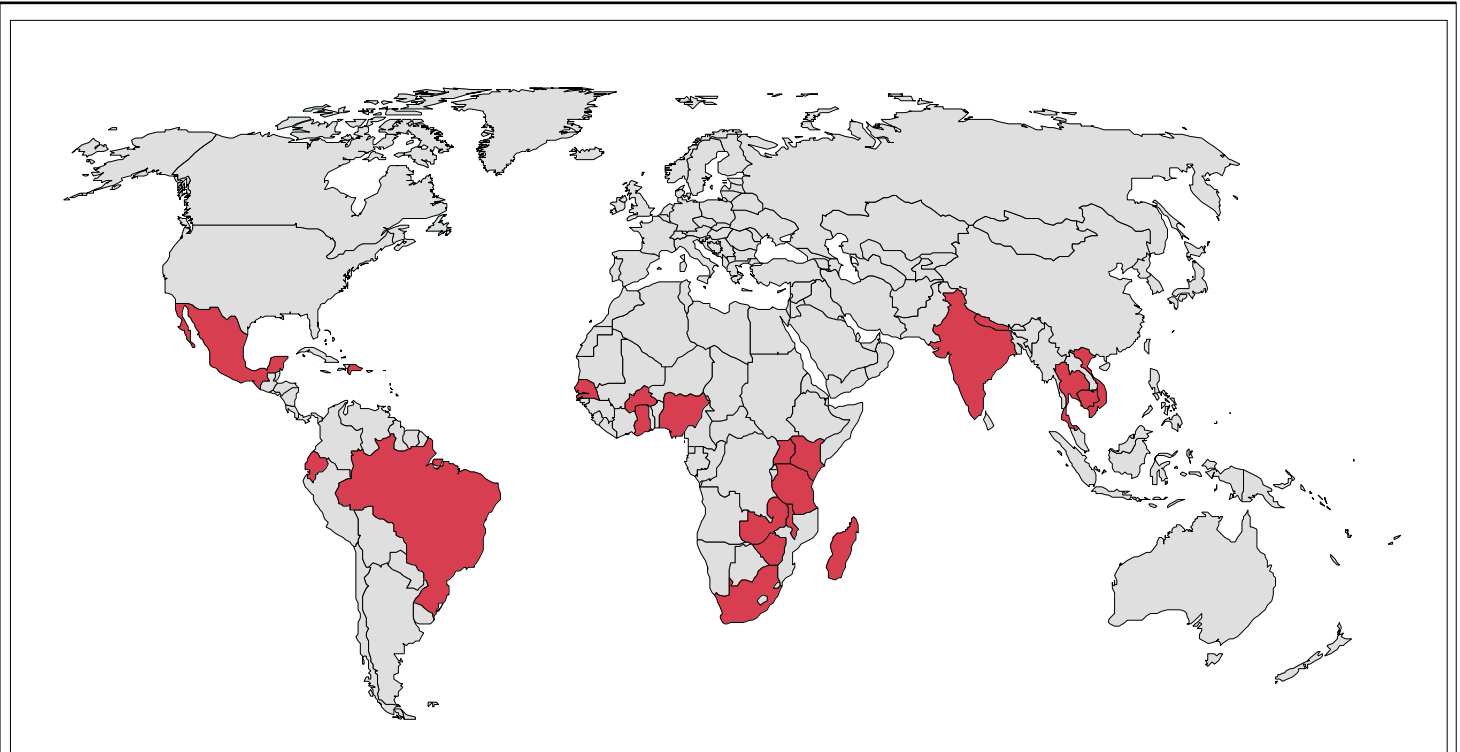
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Examines the patterns and dynamics of female condom use in Zimbabwe as a result of a social marketing program. *Research Summary, Full Report*
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Includes surveys and other data collection tools from international and local organizations and from the published literature.
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Community Mobilization and Support	Sexually Transmitted Infections	Youth and HIV/AIDS

# THE HORIZONS PROGRAM

*HIV/AIDS Operations Research in 21 Countries*



## Horizons Report

The *Horizons Report* is a biannual newsletter produced by the Horizons Program, which is dedicated to global operations research on HIV/AIDS prevention, care, and support.

Published in November 2001

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Design: *The Magazine Group*

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## Population Council

The Population Council is an international, nonprofit, nongovernmental institution that seeks to improve the wellbeing and reproductive health of current and future generations around the world and to help achieve a humane, equitable, and sustainable balance between people and resources. The Council conducts biomedical, social science, and public health research and helps build research capacities in developing countries. Established in 1952, the Council is governed by an international board of trustees.

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This publication was made possible through support provided by the Division of HIV/AIDS, Bureau for Global Health, U.S. Agency for International Development, under the terms of HRN-A-00-97-00012-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

